A STUDY OF THE DECISION-MAKING APPROACHES USED BY MANAGERS WHEN RESPONDING TO REQUESTS FOR TRAINING

BY

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DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Human Resource Education
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2019

Urbana, Illinois

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ABSTRACT

Decision-making is a core competency of managers. According to the Society of Human Resource Management (SHRM, 2008), decision-making is the most critical and common competency that managers utilize for managing teams, departments, or organizations. Managers receive requests for problem solving and adopt important roles during the decision-making process. They make decisions and solve problems in three contextual areas. These contexts include environment, organization, and team.

In the field of human resource development (HRD), decision-making is also an essential component of almost all activities. It is involved in training professionals' day-to-day practice. The decisions made by managers who are responsible for responding to training requests have three distinctive characteristics. First, decisions related to training are not a single decision, but rather usually consist of a series of decisions that affect each other interdependently. Training decisions rarely lead to a single outcome but a set of outputs. Second, decisions made regarding current training activities bear significant impacts on future decisions. Finally, training decisions made by managers result in changes within the organizations. Moreover, organizational changes affect how training decisions are made.

Reviewing the literature that focused on investigating managerial decision-making, many decision models used in organizations reflect a rational and strategic process. Supported by rationality and system theory, rational and strategic decision-making processes rely on reasoning, information gathering, and system thinking. Decisions made from a rational process are often assumed to be reliable, because this type of process leads to gain maximum results. Yet, not all decisions made by managers in organizations are developed from a rational process. Rational decision-making process might not represent the most frequent occurrence in everyday practice.

In reality, individuals make decisions based on more informal principles, rather than on rational considerations. Simon (1955, 1979) argued that managers are not rational, and they often utilize heuristics in practice to make decisions. Further, studies discussed many non-rational decision-making processes used by managers to form an immediate response, such as intuitive decision-making, adaptive decision-making, and heuristic decision-making. However, little is known regarding how managers make decisions in practice when they respond to internal clients' training requests.

Therefore, the purpose of this study is to describe approaches used by those managers responsible for responding to requests for training. These approaches were adopted when managers made training-related decisions. Critical incident technique (CIT) and semi-structured interviews served as the two methods for gathering responses to answer the four research questions of the study.

Nine interviews and 41 critical incidents were collected to draw conclusions and implications. The results of analyzing 41 critical incidents suggested that managers received five types of training requests. Clients requested technical training programs for obtaining knowledge and skills, awareness training programs to explain on-going changes in the organization, managerial training programs to support current and prospective managers and supervisors, compliance or safety training programs to be scheduled as required by laws and regulations, and customized training programs based on perceived performance issues. The analysis of the semi-structured interview data revealed that managers made different decisions in responses to clients' training requests and six reasons supported such decisions.

Four decision-making approaches emerged from analyzing the data of the study. Managers used Expedited approach, Value-added approach, Consensus-based approach and

Experience-based approach to make decisions in response to training requests from clients. Managers who used Expedited approach made decisions to ensure clients' training requests were fulfilled without delay. Managers who used Value-added approach made decisions based on the perception of gain from the requested training, and they focused on examining the perceived value to making decisions in response to clients' training requests. With Consensus-based approach, managers made decisions based on stakeholders' consensus on the need for the requested training, and they strived to engage stakeholders in the decision-making process. Finally, managers used Experience-based approach and referred to past practice or professional literature to make decisions.

ACKNOWLEDGEMENTS

I would like to thank several individuals for supporting me to complete this dissertation research. First, I would like to thank Dr. Ronald Jacobs, my academic advisor and the chair of my dissertation committee, along with the other three committee members, Dr. Jessica Li, Dr. Grace Oh, and Dr. Norma Scagnoli, for their advice and guidance that helped me continuously improve this study.

Second, I am truly grateful for my parents. They have been supporting me to continue my education at University of Illinois at Urbana-Champaign since the first day I told them I decided to go to graduate school in the U.S., where I was lucky enough to find a home far away from home.

Furthermore, the unconditional love and caring that my partner, Jordan Shifflett, and his family have given me was another source of power that kept me chasing my dream fearlessly. Special thanks go to Mr. Al Shifflett for all his help and support during the data collection stage of the study.

In addition, I would also like to thank all my friends at Illinois who have been with me on this journey. These individuals include Debbie and Tom Hrubec, Maggie Huang, my graduate student colleagues at the Illinois Leadership Center, and many more.

I am very blessed to have the opportunity to pursue an advanced degree in HRD at Illinois, a place that taught me to always challenge myself, to bravely follow my true heart, and to become confident while still remain modest. My experience at Illinois has been truly life changing and eye opening, and I am thankful for myself for never giving up.

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CHAPTER 1: INTRODUCTION

Global business environments have changed the requirements of managers in organizations. Globalization and diverse organizational work environments require managers to acquire high-level managerial competencies (Barkema, Baum & Mannix*.*, 2002; Gentry & Sparks, 2012). Studies show that managers' transferable skills have become more valuable than traditional technical knowledge and skills nowadays (Gentry & Sparks, 2012). Conceptual competencies, such as decision-making, is commonly required and practiced by managers in organizations (Conrad, 1999; Sandwith, 1993).

Managers make decisions in day-to-day practice (Coetzer, Redmond & Sharafizad, 2012; Matlay, 1999; Walton, 1999). Research that explores managers' roles as decision makers begins as early as the 1940s and 1950s (Barnard, 1938; Simon, 1947; Russ, McNeilly & Comer, 1996). Many studies have shown a positive correlation between managers' ability to make effective decisions and overall job performance, for example Kesselman *et al.* (1982), Russ *et al.* (1996), and Weber *et al.* (2009). Managers who are more capable of making correct and effective decisions have better overall job performance as organizational leaders. In their study, Dierdorff and Rubin (2006) reported a significantly higher mean of managing decision-making processes, compared to other behavioral competencies. This means that decision-making maintains greater saliency than other behavioral competencies.

Traditionally, decisions made from long deliberative processes are usually perceived as more reliable than those are not (Raissi & Hakeem, 2017; Stein, 1981). The theory of rationality states that managers should complete a systematic and comprehensive process to make strategic decisions. In this process, managers collect information and select optimal courses of action among possible alternatives, so that maximum utility can be achieved (Franklin, 2013; Simon, 1955; 1979; Stein, 1981). Managers make unbiased judgements by analyzing all-around information on markets and trends in societal environments (Citroen, 2011). Rational decision-making process has been viewed as the normative standard to follow universally. Decisions generated from a rational process are believed to result in promising outcomes of organizational growth and prosperity (Dror, 1968; Janis & Mann, 1977).

Although making rational decisions sometimes provide promising outcomes, it is not always realistic to carry out such process in practice. The reason is that the requirements to achieve rationality do not hold in many situations (Etzioni, 1968; Stein, 1981). Challenges arise from a variety of sources, including external volatility and complexity. Reasonably, managers remain challenged by a wide range of difficulties when making decisions. Sometimes, there is a short timeframe in which decisions must be made and actions need to be taken place. Insufficient information is a barrier to achieving full deliberation and developing a decision based on well-around analysis. Other times, an environment is fraught with uncertainty; there is no normative benchmark (such as logic and statistics) available (Artinger *et al.*, 2015). Moreover, when the environment is very well-known and familiarized, it becomes unnecessary for managers to repeat a long-term process to form decisions. In these cases, a more spontaneous and immediate decision can be possibly made based on previous experiences and intuition. These aspects feature in addition to the constrain of time and available resources to support a lengthy application of rumination and consideration (Ellis *et al.*, 2010; Kaufmann, Wagner & Carter, 2017; Mantel, Tatikonda & Liao, 2006).

Thus, it becomes more and more common that managers make decisions in a non-rational fashion. Less rational and well-planned processes might produce managerial decisions that are nearly as accurate as those from long-term planning are. For example, Gigerenzer *et al.* (1999)

found that heuristic decision-making under certain circumstances can be a preferable strategy to rational decision-making. It is relatively fast and frugal, without requiring a deliberative and rigid process of proving and consideration. Making non-rational decisions creates less-is-more consequences, meaning that after certain point, the more complicated the process and the steps required to make decisions, less improvement performance would be observed (Gigerenzer & Brighton, 2009; Gigerenzer *et al.*, 1999). Increases in information searches and computations beyond certain stages might lead to decreased performance (Artinger *et al.*, 2015).

Problem Statement

In the field of HRD, decisions are often the products of a series of complex factors. These decisions can be very situational in nature (Korte, 2003; Mintzberg, Raisinghani, & Theoret, 1976). Managers responsible for training are expected to decide how to respond to training requests effectively and efficiently (Akdere, 2011; McFadzean, 1999). In order to do so, managers apply different approaches to making decisions under different circumstances.

However, little is known regarding the decision-making approaches used by managers responsible for responding to training requests from internal clients. The traditional view of decision-making states that decisions made from rational process are perceived as effective by organization. These processes typically consist of multiple steps from which analytical and logical decisions should be generated (Cabantous & Gond, 2011; Korte, 2003). Other researchers challenged this point of view, finding that managers utilize, only to a limited extent, a logical model to form decisions. Commonly, managers alter their decision-making practice in an adaptive and heuristic way (Korte, 2003; Simon, 1955). Studies showed that decisions made from immediate or less lengthy discussions can be nearly as accurate as those made from extensive deliberations (Bauer *et al.,* 2013; Bettman *et al.*, 1998; Creyer, Bettman & Payne, 1990; Payne & Bettman, 2004). Indeed, making decisions in organizations often involves simple heuristics, especially when the conditions for complete rationality are not guaranteed (Gigerenzer & Gaissmaier, 2011).

Making training and HRD-related decisions remains a not-yet understood or explored scholarly focus of inquiry (Brehmer, 1990; Chermack, 2003; Swanson, 2003). Few research studies investigated the decision-making approaches used by managers who are responsible for responding to training requests. Managers might use both rational and intuitive decision-making approaches to reach optimal decisions (Calabretta, Gemser & Wijnberg, 2017; Elbanna, 2006; Elbanna & Child, 2007; Hitt & Tyler, 1991; Langley *et al.*, 1995). Non-rational approaches would often be used when the conditions of making rational and logical decisions do not hold. The insufficiency of information and time usually do not allow managers to make deliberative and time-consuming consideration. In other situations, the selection of decision-making approach is determined often by personal biases and presumptions of decision-making, instead of performing a step-by-step model (Korte, 2003).

Previous HRD studies used self-reported survey data from managers' opinions to investigate the barriers to achieve training access. Limited efforts explored the actual decision-making process that managers used (Coetzer *et al.*, 2012). Competency studies of HRD managers revealed that these individuals often undertake lengthy decision processes to fulfill their mission in the organization. At the same time, training managers also make immediate decisions often when planning training projects with clients. A shortage of literature has answered the research questions related to how those managers make decisions (Bauer *et al.*, 2013). Likewise, studies do not adequately describe the decision practices of managers. Most articles of managerial decision-making in organizations remain primarily conceptual. Further inquiries of decision-making in training using a rigorous qualitative method are needed. More research studies are needed to enhance understandings of managerial decision-making in training and HRD activities (Coetzer *et al.,* 2012).

Purpose of the Study

The purpose of this study is to describe the decision-making approaches used by managers who are responsible for responding to requests for training. This study aims to fully understand the decision-making processes of individuals who carry out training responsibilities in organizations.

Research Questions

The research questions that guide this study are as follows:

1. What was the nature of the requests that managers received from their clients?
2. What were the decisions that managers made in response to clients' training requests?
3. What were the reasons for the decisions made by managers in response to clients' training requests?
4. What decision-making approaches emerged from managers' responses to clients' training requests?

Definition of Terms

The key terms of this study are defined as follows:

Clients. In this study, clients are those who request for training programs. They can be any individual or any department from the same organizations that the managers are employed within.

Competency. Competency is "an underlying characteristic of a person in that it may be a motive, trait, and skill, aspect of one's self-image or social role, or a body of knowledge which he or she uses" (Boyatzis, 1982, p.21). Five essential areas of competencies that managers must have include the following: specialized knowledge, intellectual maturity, entrepreneurial maturity, interpersonal maturity, and on-the-job maturity (Rothwell & Lindholm, 1999). Additionally, in this study, competency refers to the underlying characteristics that managers must possess to make effective decisions.

Decision-making Approach. In this study, a decision-making approach refers to the primary basis for proposing actions that individuals should take within a specific context.

Decision Theory. This term refers to a cross-disciplinary study of models, techniques, approaches and other body of knowledge that explains the reasoning and analysis of an individual's choice selected from a variety of alternatives.

Managers. In this study, managers are individuals who carry out responsibilities in their respective departments or functions to respond to training requests. They can be from either HRD or non-HRD departments. Aspects regard designing and implementing training, improving employees' work performances, developing employees, and any other demands for solutions to training problems. These individuals are managers of a work team and training is a major component of their job responsibilities. Other than providing training programs and solutions, managers also make decisions for approving individual employees to access to various training opportunities.

Significance and Limitations of the Study

As a critical component of daily practice and desired competencies, managers usually make decisions that respond to training requests. These requests are from employees within the same organization. Requests type may vary, from demanding certain training programs, to consulting services that offer solutions to performance problems. Management literature provided many frameworks and models for rational and logical decision-making approaches. Nevertheless, these models may not be applicable in practice, due to a variety of reasons. It is important to comprehend how managers make decisions to fulfill their managerial role. Such consideration provided insights to performing the best practice. It was a great opportunity to trace prevalent deviations between theories and practice in the field of HRD. This study intended to offer initial investigations of the requests that managers received and the decision-making approaches they used in practice. It aimed to provide insights for scholars and practitioners, who shared interests in understanding the processes and rationales behind training and HRD decisions made in organizations.

Further, this study offered unique contributions to expand the knowledge of training practitioners' practice. This study explored possibilities for incorporating a different research method, the critical incident technique, with a traditional semi-structured interview method. It described the phenomenon that had not yet received great attention in the field of HRD. The study aimed to answer research questions that were not previously answered in extant literature. This coverage presented a deeper understanding of HRD practice.

The primary research method applied to answer research questions in this study was qualitative research method. The sample size was nine managers whose daily practice consists of making decisions in the design and implementation of employee training in organizations and solving performance problems for internal clients. Although interviews were designed and conducted in depth, respondents were also encouraged to answer interview questions as much detailed as possible. The small sample size might raise concerns about bias and generalizability. This study might have a limited ability to present comprehensively on general managerial decision-making practices in different fields and organizations.

In addition, the information gathered from this study relied heavily on respondents' experiences. It is reasonable to predict the possibility of recollection errors. These might affect data accuracy. During the interview process, respondents were asked to elaborate on their experiences with making training decisions in the past. An example was provided during the interview. However, there were variations in interpretations and understandings of the concept critical incidents, as well as variance in managers' abilities and willingness to articulate the process of making decisions.

Finally, this study focused on senior or higher-level managers in different departments who have training responsibilities. This particular group was expected to possess more working experiences and knowledge in HRD and management. Thus, their abilities to make fast yet appropriate decisions may be higher than subordinates in the training function at a lower level. Therefore, the findings of this study might not be representative of all level of managers or practitioners in training.

CHAPTER 2: LITERATURE REVIEW

This chapter reviews the literature that supports the study. The first section introduces the concept of strategic HRD. The second section discusses managerial decision-making. The third section reviews the studies of decision-making in the field of HRD. The fourth section explores different decision theories and processes proposed in the reviewed literature. Finally, the fifth section provides a conceptual framework of the current study. The conceptual framework serves as the guidance for conducting this study.

Strategic HRD

This section reviews the studies of strategic HRD in three parts. The first part examines definitions of HRD that were proposed by different scholars. The second part provides a discussion about understanding HRD from a system theory perspective. Lastly, the third part introduces the definition of strategic HRD and the concept of performance analysis.

Human Resource Development (HRD)

HRD is an important business process in organizations. Today, many organizations carry out HRD activities, such as training and development and organizational development activities. Although the definitions of HRD might differ from each other due to different understandings elicited by scholars and practitioners, many of them share commonalities. They reflect the nature of HRD as a business process. For example, Swanson (1995) defined HRD as “a process of developing and unleashing human expertise through organization development and personal training and development for the purpose of improving performance” (pp.207). McLean and McLean (2001) described HRD as a process that develops employees and the organization.

Yorks (2005) stated that HRD is “both an organizational role and a field of professional practice. The fundamental purpose of HRD is to contribute to both long- term strategic performance and more immediate performance improvement through ensuring that organizational members have access to resources for developing their capacity for performance and for making meaning of their experience in the context of the organization’s strategic needs and the requirements of their jobs” (pp.16).

Garavan (1991) defined HRD as the strategic management of training and development as well as other professional development and education efforts. The objectives of the organizations would be achieved through successful implementations of HRD activities. It also assists individual employees to obtain and fully utilize job-related knowledge and skills. It shall be an organizational function that is incorporated in the business strategies.

Jacobs (2014) defined HRD as “the process of improving organizational performance and enhancing individual capacities through the accomplishments that result from employee development, organization development and career development programs” (pp.8).

All definitions listed above stress that HRD involves managing training and other HRD activities. HRD professionals must be able to determine the optimized methods to develop human resources and the organization in a holistic manner. According to the definitions of HRD, it is clear that making decision is an important practice in the field and a must-have competency for HRD managers.

HRD from a System Theory Perspective

System theory is the foundational theory of many applied fields including HRD (Hatcher, 2000; Jacobs, 1990, 2014; McGoldrick, Stewart & Watson, 2001; Ruona, 1998; Swanson & Holton, 2008; Weinberger, 1998). System theory is not one single theory, but rather a series of theory, principles and models. To gain a thorough understanding of system theory, the first step is to understand the term system (Jacobs, 2014). A system can be understood as the relationship between a variety of interactive components within a clearly defined boundary. In each system, there is a unique dynamic flow throughout the system, and the components of the system interact with the external environment outside of the system (Laszlo & Krippner, 1998; Jacobs, 2014; Pearman, 1978; Straussfogel & Schilling, 2009; von Bertalanffy, 1968, 1975). Simply put, everything can be viewed as a system.

Organization is a complex system where many studies has investigated. In organizations, the performance of one component in the system affect the performance of other components, and vice versa (Ruona, 1998; seen in Swanson & Holton, 2008, pp. 117). From this perspective, system theory becomes helpful in identifying and determining the relationship between different organizational elements—departments, work teams, functions, individual employees and many others. Analyzing an organization as a system, it is also easier to locate problems, and understand how to make changes to solve the problems, after the elements of organizations are identified and their interrelation and outcomes are defined.

Figure 2.1 represents the structure of a typical system. Inputs, process, outputs and feedback are the four elements in a system (Jacobs, 2014). Inputs are the components and factors that support the entire system to function and operate. Some examples of system inputs are organizational goals, capital, materials, facilities, technology, employees' competencies, organizational design, etc. (Fleetwood & Hesketh, 2008; Jackson & Schuler, 1995; Jacobs, 2014; Iwu *et al.*, 2016). All components of inputs are interactive with each other as well as with the components in other parts of the system and the surrounding environment of the system. This interactive relationship results in the process of the system, and further, produces outputs of the system. Outputs of a system range from products and services of a company to the financial gain of an organization. Finally, feedback of the system provides information to determine whether the system is operating effectively. Feedback is also generated from the interaction and evaluation from the internal and external environment of the system. The main purpose of feedback is to maintain stability of the system (Kast & Rosenzweig, 1972).

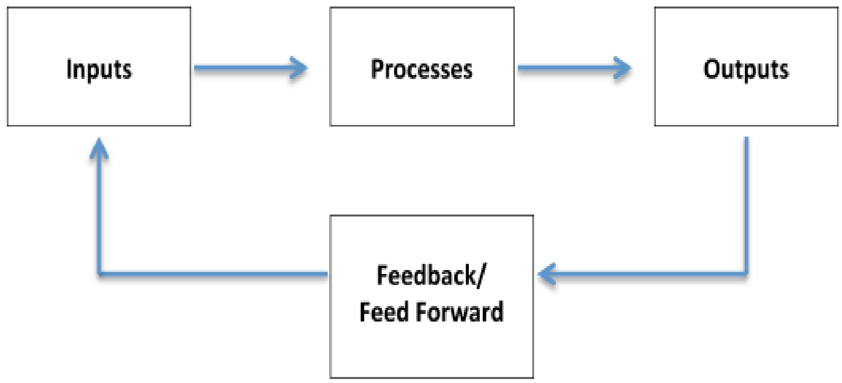

Figure 2.1: Basic Structure of a System (Jacobs, 2014)

As introduced above, everything in this planet can be viewed as a system. In an open system, every part is interdependent and interrelated. Many systems are also adaptive, since they utilize changes or actions of change as a strategy to respond to changes in their surrounding environment (Shakun, 2001). In this way, even subtle changes from one component in the system can result in changes in another component (Broedling, 1999). Furthermore, changes in the external environment outside of the system can also cause changes in each input, process and output element of the system. Therefore, it is critical to monitor and detect these changes, and provide quick responses to the changes internally and externally occurred. Being able to adjust the components of input and process will lead to healthy and desirable outputs. In the meantime, feedback serves as the source to modify components in input, process and output part of the system. These components can be goals, mission statement, resources, or other types of organizational improvements (Jacobs, 2003; 2014).

Jacobs (2014) proposed a triangle model to further illustrate the understanding of HRD from a system theory perspective as Figure 2.2 shows. The model brings HRD programs, HRD process and organizational systems together. The integration of these three composes the HRD system in an organization. HRD process represent the input and process, while viewing organizations as systems provides information about the context and environment. HRD programs are the outputs of the system. In this HRD system, things that facilitate the understanding of the three components come from three fundamental activities of the field—research, theory-building and practice.

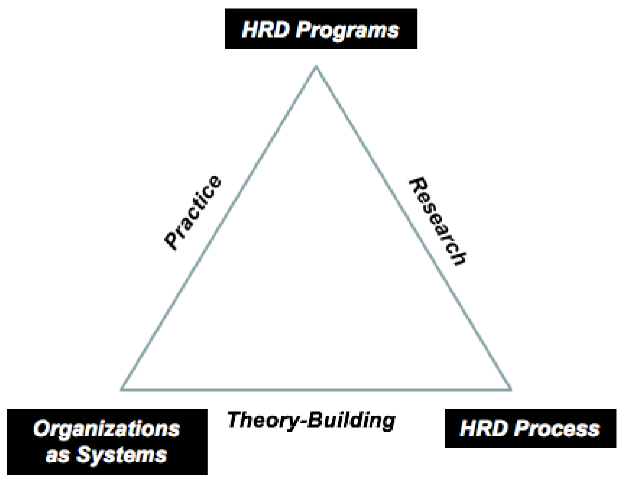

Figure 2.2: HRD from a System Theory Perspective (Jacobs, 2014)

Strategic HRD and Performance Analysis

Organizations become more successful if they have more competitive advantages than their competitors. According to human capital theory and the resource-based view of HRD, an organization's competitive advantages in the market are determined by the unique competencies and skills that its employees possess (Garavan, 2007; Hendry & Pettigrew, 1990; Leonard-Barton, 1995; Lepak & Snell, 1999). This is why more and more organizations strive for developing their employees, because the unique competencies and skills their employee have will lead to improved organizational performance. Moreover, it becomes less likely that the competitors would imitate the core organizational competencies (Rainbird, 1995). In order to help organizations to achieve maximum competitive advantages, HRD must adopt a strategic position (Garavan, 2007; O'Donnell & Garavan, 1997; Torraco & Swanson, 1995).

Strategic HRD (SHRD) is the strategic management of HRD activities. It aligns the objectives of HRD with the long-term organizational goals (Garavan, 1991). SHRD has several distinctive characteristics (Garavan, 2007). First, it emphasizes the development of firm-specific competencies as well as new competencies in response to changes in the internal and external environment. Second, SHRD focus on the alignment between organizational missions, strategies, and the HRD systems in the organization. SHRD will be achieved through collective and well-planned collaboration among stakeholders. The supports gained from top management as well as line management are critical for implementing SHRD (McCracken & Wallace, 2000). The desirable outcomes of HRD will be established based on the performance problems that the organization has and the long-term vision that the organization tries to achieve. HRD policies and plans must be integrated with the organizational policies and plans (Garavan, 1991). Another characteristic of SHRD lays in the changing role of HRD professionals. SHRD professionals should take on responsibilities as innovators and consultants (McCracken & Wallace, 2000). Finally, SHRD also emphasizes the importance of evaluation and performance analysis.

SHRD stems from careful performance analysis. As what has been mentioned before, an organization should be viewed as a system. It contains a variety of parts, including inputs, process, and outputs, and it is situated in both internal and external environment. When there is a performance problem, whether it is at individual employee level or at the organizational level, it indicates that there is a problem in the system. To locate the problem, one needs to identify the disconnections between the parts of the organizational system. In some cases, the problems are not currently existing in the organizational system, rather, they are something being foreseen. For example, performance problems are anticipated when there is advancement in technology. It will be equally important to identify those future problems and solve those problems, so that organizational performance can be optimal.

Performance analysis is a critical component of strategic HRD process. It helps HRD professionals to identify both existing and anticipated problem situations. Further, through performance analysis, HRD professionals will be able to analyze the causes of the problem, and therefore, determine the solutions to solve the problem and improve performance. Jacobs (2003; 2014) discussed the principles of the performance analysis process. The purpose of conducting performance analysis is to understand to what degree the desired performance outcomes have been achieved. The outcome of performance analysis is a report that identifies performance issues, explains probable causes to the issues, and proposes HRD solutions (Jacobs, 2014). Rummler and Brache (2013) presented a Three Level System Approach that HRD professionals can use to respond to requests for training. The causes to the performance problems must be examined at organizational level, process level and job/performance level for HRD professionals to get to the real issues behind the request.

Managerial Decision-Making

This section discusses the critical managerial competencies that managers in organizations are expected, and sometimes required, to have. It contains three parts. The first part introduces the concept of managerial competencies. The second part specifically discusses decision-making, which is one of the most critical competencies that managers must have. The third part examines three contexts in which managers make decisions in organizations.

Managerial Competencies

There are several essential competencies required for managers in organizations to master (Gentry & Sparks, 2012). The ongoing competitions in the global market also drive organizations to hire competent managers (Laguna, Wiechetek & Talik, 2012). Managers with desired competencies will not only fully fulfill their roles in managing teams and departments in the organizations (Kraut *et al.*, 1989), but will also contribute to improve the overall organizational performance.

For this reason, research has dedicated to defining and comprehending competencies that managers must have. Different definitions of competency have been discussed in the literature. For example, in some studies, competency refers to the possession of job-related knowledge, skills and abilities (Bird, 2002; Man, Lau & Chan, 2002; Wagener, Gorgievski & Rijsdijk, 2010; Kyndt & Beart, 2015; Volery, Mueller & von Siemens, 2015; Sparks & Gentry, 2008). Managerial competencies are the skills, knowledge and abilities that should be possessed and mastered by an individual who takes on the management role in their organizations (El Asame & Wakrim, 2018; Brannick, Levine, & Morgeson, 2007; Rutledge *et al.*, 2016; Schippmann *et al.*, 2000). Laguna *et al.* (2012) defined managerial competencies as knowledge, skills and behaviors that individuals need in order to perform managerial tasks (Laguna *et al.*, 2012; Markman, 2007; Mitchelmore & Rowley, 2010; Talik *et al.*, 2012). Boyatzis (1982) defined managerial competencies as the characteristics of individuals who manage an organization or at least a group of workers.

In this study, competency is defined as the underlying characteristics that effective and efficient managers must possess. Many studies have investigated the relationship between managerial competencies and organizational performance (Laguna *et al.*, 2012; Mitchelmore &

Rowley, 2010). In their study, Cardona and Lombardía (2005) proposed a three-dimensional measurement model to evaluate managerial competencies. The measurement has three categories— external competencies, interpersonal competencies and personal competencies. External competencies refer to the abilities to implement strategies for improving the organizational outcomes. The interpersonal competencies are the abilities to establish effective work relationship with peers and subordinates. Personal competencies focus on the capabilities of building trust between and among collaborators. Lara and Salas-Vallina (2017) adapted this three-dimensional measurement of managerial competencies and redefined several constructs of the measurement. Competencies at the external level pertain to the skills and abilities leading to actions that directly affect organization's financial well-being. Among these three sub-categories of external managerial competencies, business vision competencies refer to the ability to identify and seize the opportunities to improve the competitiveness of the organization. This aligns with the study of Van der Laan and Erwee (2012), where they stated that managerial competencies should contain the strategic vision of the organization.

Another way to deconstruct managerial competencies is to look at it through two lenses—technical and leadership competencies. Technical competencies include the technical knowledge and skills that are critical for the area of performance. For managers, they should have advanced technical competencies to supervise, evaluate and coach their subordinates. Leadership competencies have also been widely discussed in management literature. For example, Boyatzis (1982) developed a list of leadership competencies for managers. According to this list of competencies, the key skills and abilities of managers were identified and defined. Further, using this comprehensive list of managerial competencies, managers with divergent levels of performance—superior, average and poor can be differentiated. The list of managerial competencies can be grouped into six categories, including goal and action management, leadership, human resource management, directing subordinates, focus on others, and specialized knowledge. Sparks and Gentry (2008) discussed how four leadership competencies—resourcefulness, change management, building and mending relationship as well as balancing work and personal life contributed to individuals' success in organizations. Weber *et al.* (2009) also established four categories of critical managerial competencies, including leadership competencies, communication competencies, management and organization competencies as well as cognitive skills and knowledge.

Decision-Making as a Critical Managerial Competency

Among the various leadership and managerial competencies, decision-making is a critical one that managers need to have, because all managers serve as decision makers in their organizations (Vroom, 1973). Society of Human Resource Management (SHRM, 2008) proposed a competency-based approach for developing leaders in organizations and shed light on describing desirable competencies for managers. That is, for whoever taking the leadership role in an organization, he/she needs to develop competencies in three a variety of areas—leading the organization, leading the self and leading others. Under the category of leading the organization, problem-solving and decision-making are the skills that organizations look for when hiring managers and other leaders. What is more, individuals with high potentials of becoming future organizational leaders are required to have effective decision-making skills.

In their study, Rubin and Dierdorff (2009) proposed a management competency model. In this model, six categories of managerial competency are identified and further explored. Among these six categories of competencies, managing decision-making process is the first and foremost competency for managers to successfully perform on their job. Further, in a study that analyzed data form 8633 incumbents within 52 managerial occupations, researchers found a significant higher mean importance than other behavioral management competencies identified in the same study (Dierdorff & Rubin, 2006; Rubin & Dierdorff, 2009). Thus, decision-making is perceived as a critical competency that managers must have regardless which professions they are in.

Having strong skills and competency in decision-making makes managers successful in leading organizations, therefore, organizations prefer candidates with previous academic and professional training experience in decision-making when recruiting managers. Current employees might also seek for opportunities to develop their decision-making skills if they want to be promoted to a higher-level leadership position in their companies. One way to provide training and education for future managers is through MBA degree's programs in higher education institutions. Studies have shown that employers demand more job candidates with a MBA degree who possess outstanding leadership and managerial competencies (Costigan & Brink, 2015; GMAC, 2012; Rynes & Bartunek, 2013). MBA programs are graduate level academic programs designed to prepare future managers with knowledge and skills in business management and administration. The goals and learning outcomes of these academic programs must be designed to align with the commonly required managerial competencies across industries and organizations. Alumni from different MBA programs have reported that decision-making is one of the most important and frequently used skills in their current job. Directors, faculties and administrators of MBA programs in different universities also agree on the idea that decision=making, along with human capital management, is a principal and salient competency that future managers should obtain and develop during their time in the MBA program (Dierdorff

& Rubin, 2006). Thus, courses and non-classroom experiences to learn about decision-making should become an important component of MBA curriculum.

Most companies rely on managers to make effective decisions that improve the company's financial performance (Singh, 1986). Even in some situations, managers assist with the owner of capital to make investment decisions (Heckerman, 1975). The correlation between the quality of decisions made by managers and the success of the organizations has been found positive. As a result, managers are expected to be competent in making correct decisions when there is a call for decisions. The level of ability to make decisions often differentiate performances of good and poor managers.

In the decision-making process, managers can play multiple roles. They are usually at the frontline to receive the request of solving problems from either their clients or their colleagues. They are often responsible for coordinating and allocating resources in their department, including financial resources, human resources, technology, and other relevant resources, in order to gather information, analyze current status, generate alternative solutions and finally make a conclusion to address the issue and solve the problems. Sometimes they function as a subject matter expert in their area of work. In other situations, they also serve as a facilitator of team collaboration, a mediator of information distribution as well as a planner of organizational change.

The Contexts Where Managers Make Decisions

Decisions are made under different circumstances. Understanding the contexts of organizational processes leads to the comprehension of the nuances of making decisions in different business organizations (Berthon, Pitt & Ewing, 2001; Simons & Thompson, 1998). Research has explained various situations where decisions are generated. For example, Berthon *et al*. (2001) introduced four contexts of decision-making in organizations. Other studies stated that managers make decisions in three areas. (Papadakis, Lioukas & Chambers, 1998; Simons & Thompson, 1998; Schneider & De Meyer, 1991). These three areas are environmental context, organizational context and team context.

Environmental context. The first context is the environmental context that exists outside of the organization. Examples fall into this category include national culture, national and global economic conditions and the industrial environment. In many situations, decisions made within the organizations are for responding to unexpected and complex changes in the external environment. If an organization fails to do so, they will lose their competitive position in the market due to their incompetency and reluctance to keep up with the movement in the industry or the shift of customers' preferences. Organizations will eventually no longer have the chance to survive in a long run if their products and the customers' demands are mismatched, especially in today's market environment, in which is full of advancement and uncertainty (Simons & Thompson, 1998).

Organizational context. The second context where managers need to make decisions is the organizational context, which is usually located inside of the organization. Examples of internal contextual environment include organizational structure, organizational culture, structure of leadership and decision-making teams, involvement of employees, and many more (Simons & Thompson, 1998). The decisions made in this context are tend to be strategic and future-oriented, and often for the purpose of the organization's long-term well-being. In addition, studies have pointed out that the management decisions made in organizational context would not be a single, one-time event. Mostly, the decisions are progressive and interrelated, and are time and effort consuming (Berthon *et al.*, 2001; Kimberly & Rottman, 1987). Both characteristics of organizational context make the organization become a learning agent through activities of decision-making to define and implement strategic goals and missions (Goll & Sambharya, 1990; Simon, 1971).

Team context. The third context where managerial decision-making takes place is within the team context, including work teams, departments and functions in the organization. Managers are responsible to coordinate human resources and budgets to ensure the daily operation of the department or function. In most cases, managers are expected to be aware of their employees' skills and attributes in order to appropriately and strategically delegate duties and tasks. They must be able to prioritize tasks with limited budget to fulfill the expectations from higher-level management of the organization and clients.

Decision-Making in Training and HRD

This section aims to provide an understanding of decision-making in training and HRD-related fields. The first part reviews HRD studies that focused on decision-making. The second part discusses the characteristics of decisions about training and HRD. Finally, the last part discusses the role of managers in making decisions to respond to clients' training requests.

Decision-Making in HRD Research

Swanson (2003) proposed a decision-making process incorporating with system theory (see Figure 2.3). In this model, decision makers are the mediators who are responsible to identify decision needs, form the decision and evaluate the outcomes resulted from the decision. In HRD, the context of decision-making is within the organization. The roles of training managers vary between hired decision makers, the facilitators of the organizational decision-making and implementation process (Chermack, 2003), and a learning architect that develops employees' decision-making competencies (Tyson & Fell, 1986).

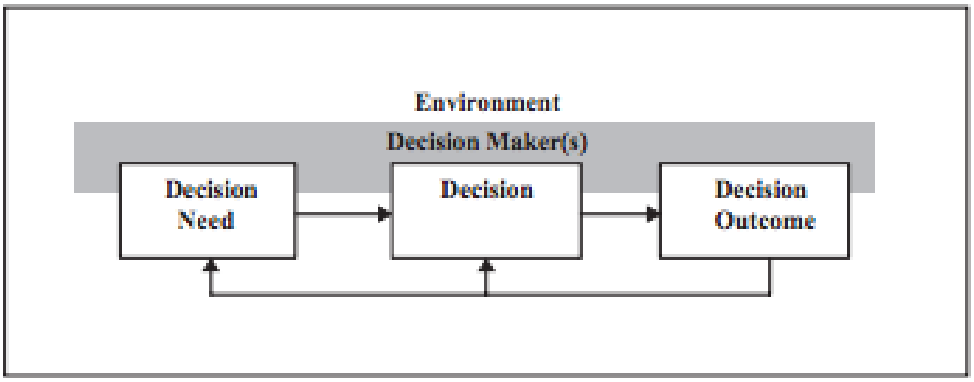

Figure 2.3: Decision Maker(s) as the Mediator of the Decision-Making Process

Note. Adapted from Decision premises and their implications for developing decision-making expertise (pp. 381), by R.A. Swanson, 2013, Advances in Developing Human Resources, 5(4). Copyright (2013) by R.A. Swanson.

Practitioners make decisions on daily basis regardless their positions or titles in the organization. Sometimes, they are even not aware of this daily practice (Chermack, 2003). The HRD literature also acknowledges the complexity of organizational changes, which is the most difficult tasks HRD practitioners need to respond to (Johnson & Fredian, 1986). The type of organizational changes that HRD professionals often face are the changes that affect how the majority of employees work and how the entire organization operate. In the context of training, decision-making is also a critical element in the day-to-day practice. Chermack (2003) gave an example to illustrate how decision-making exists in each of the five steps of ADDIE model—the fundamental model that many HRD and training professionals follow in their daily practice. Decisions made in the initial analysis step have residual effects to the rest of the process. The expertise of decision-making is considered as the core to the training as a field. It is believed that gaining understanding about managerial decision-making will help advance the knowledge and theory in the field of HRD.

According to Coscarelli, Burk & Cotter (1995), training managers assess how individual employee think, feel and make decisions to identify the needs for training and developing these employees. Upon understanding the distinctive decision-making styles individuals have, training managers can better determine how to help employees to gain self-awareness and knowledge of others. They stated that training managers and trainers should know the perspectives, traditions and theoretical origins of different decision styles that are related to individuals' learning experience, personal traits and managerial styles. They also provided an extensive review of literature of decision-making in different fields of study.

From business management perspective, there are many ways to understand managerial decisions. McKenney and Keen (1974) proposed four different decision styles—perceptive, receptive, systematic, and intuitive styles. Rowe and Mason (1987) divided decision-making styles into four categories—directive, analytical, conceptual, and behavioral decision-making. Driver, Brousseau and Hunsaker (1990) categorized managers' decision-making styles into five categories based on how managers use information when they make decisions. The five managerial decision-making styles are decisive, flexible, hierarchic, integrative, and systemic. According to Merrill and Reid (1981), managers have amiable, analytical, driver and expressive decision-making styles. Managers with different decision-making styles might have different ways to perceive the same organizational problem, which might lead to divergent decisions. Different decision-making styles also result in variations in information collection and decision implementation (Nutt, 1989).

In the field of HRD, the discussions in decision-making are often tied together with evaluating training activities in organizations. The core output of evaluating HRD activities is decision-making (Holton & Naquin, 2005; Russ-Eft & Preskill, 2001; Swanson & Holton, 1999).

In practice, training managers decide on the value of training through conducting a rigorous evaluation of the training program (Holton & Naquin, 2005). From evaluating training activities, managers make decisions on the degree of contribution of training to the organization, as well as on the potential strategies to maximize the value of human resources in organizations continuously. Researchers are encouraged to conduct more naturalistic decision research to explore how decisions are made naturally in training (Beach, 1997; Holton & Naquin, 2005).

Characteristics of Decision-Making in HRD

In HRD, decision-making yields different characteristics than traditional human cognitive activities (Brehmer, 1990, 1992; Chermack, 2003).

First of all, the decisions made in training in an organization are serial, not single. Decision-making in training is a continuous process. Unlike a single decision, training decisions rarely lead to one outcome, but a set of results. Thus, it will be incorrect if training decision makers pursue a solo output from a decision-making approach.

Second, the decisions on current training activities are interrelated with the future decisions. Changes in organizational environment, either internally or externally, are ongoing, thus resulting in continuous demands for decisions. Decision-making in HRD is proactive rather than passive in nature. Senge (1994) argued that if training managers were waiting for the emergence of problems in order to make decisions on solutions, it automatically implied the reactive role of training managers. This would not be suitable with the continuous changing organizational environment.

Third, the decision made in the training department causes environmental changes. In the meanwhile, the environment training activities situate within changes autonomously. Lastly, decisions regarding training practice must be made at precise time. Effective training decisions increase the value of organizational human capital. Understanding the decision-making approaches and process for training activities is critical for training managers and scholars to form effective training decisions (Holton & Naquin, 2005).

There has also been research that links bounded rationality theory with HRD (Herling, 2003). One connection between HRD theory and bounded rationality is that they both evolve from same theoretical bases—psychological, economic and systems theory (Herling, 2003; Swanson & Holton, 2001). Training as a function makes its distinctive contributions to supporting the organization. Simon (1982) pointed out that it was common that people could not keep up with considering all alternatives at the sometimes. Training professionals can utilize different strategies to assist the organization to examine all alternatives and identify unintended consequences. Training practitioners must fulfill its strategic role in terms of effectively promoting all potential options as well as helping organizations to identify the unknown consequences of actions (Herling, 2003). Bounded rationality also has implications for training managers when they make decisions regarding implementing and evaluating training (Holton & Naquin, 2005). In reality, HRD managers most likely are not able to fully perform rational decision-making process, because the rational decision-making approach often requires complex cognitive exercises and adequate information and resources.

In addition, many HRD scholars stated that HRD as a field is guided by the best practice for many years (Hamlin & Stewart, 2011; Jacobs, 1990; McGoldrick, Stewart & Watson, 2003; Swanson & Holton, 2008). Making decisions regarding training activities is fundamentally heuristic, because training managers or other decision makers constantly refer back to the successful past practice in the field to make decisions in their own organizations.

One typical circumstance of decision-making emerges when training managers are judging the value of training. The traditional standpoint is that formal evaluation and calculating the impacts of training on performance are the best decision model for training practice, therefore people believe the lack of successful rational decisions in HRD is due to inadequate formal evaluation practice (Holton & Naquin, 2005). Russ-Eft and Preskill (2001) viewed evaluation as a decision-making process in HRD. In almost every evaluation model, decision-making is one of the core outputs in the evaluation system, which means the significance of training evaluation in organizations lays in the generation of better decisions about training investment (Russ-Eft & Preskill, 2011; Holton & Naquin, 2005; Swanson & Holton, 1999).

In many cases, training managers have to foresee the value of training before they decide how, when, what and where to conduct training. Therefore, evaluation, especially formal evaluation becomes an effective way to help them forecast the value of training. For example, Swanson and Gradous (1988) studied how to use the financial analysis approach to forecast the financial impact of HRD programs. Jacobs, Jones & Neil (1992) conducted case studies to demonstrate how evaluation can be used to predict the value of structured-on-the-job training. The popular Kirkpatrick four-level evaluation framework (1994; 1996) has been applied in many situations to help training professionals determine the value of training from different angles. On the other hand, evaluation and decision-making go hand in hand. Effective decisions in training investment lead to the increased value of human resources in organizations (Holton & Naquin, 2005). The results from previous evaluation serve as a critical reference for training managers to determine their actions in the current situation.

The Role of Managers Who Are Responsible for Responding to Training Requests

In organizations, work process and functions are led and managed by managers. Training process is managed by managers who are responsible for such process. To ensure the success of the training process, it is important to have people with sufficient competency and expertise to fulfill their distinguished roles and responsibilities in the process (Swanson & Holton, 2001). Thus, identifying the roles of managers who are responsible for responding to training requests is critical to further understand how managers make decisions in response to clients' training requests.

According to Swanson & Holton (2001), several stakeholders involve in the training process in organizations. Among them, line managers and training managers play a critical role in training activities. They carry responsibilities such as managing training programs, producing outcomes of the programs, evaluating the outcomes to ensure they meet quality standards, getting information about a specific training program, etc. Upon receiving the request for a training program from clients, the manager who is responsible for responding to such request collects information regarding the request, such as the performance issues and clients' expectations and needs for the training program, analyzes the information they collect, and provide a response or solution to the clients. They also work with other stakeholders in the process, including but not limited to upper management, training specialist, subject-matter expert, external provider, so on and so forth.

In organizations, training and HRD managers perform decision-making in four different ways (Chermack, 2003). They can serve as the hired decision makers, the developers of individual employee and organizational decision-making competencies, the facilitators of the organizational decision-making process as well as the contributors to the strategic implementation of decisions. Training managers need to utilize their expertise to facilitate and assist with the organizational decision-making strategies.

When serving as an internal consultant, HRD managers aim to provide clients insights about the status quo of the perceived problems, so that HRD managers can help their clients identify potential solutions based on the diagnosis of the problems (Walton, 1999). HRD practitioners may also serve as the performance consultant in the organizations. Robinson and Robinson (1998) defined performance consultant as "partnering with clients for purposes of enhancing human performance in support of business needs and goals. The outputs from this role are strong relationships with clients, identification of potential opportunities for working together, and achievement of human performance improvement" (pp. 329). HRD managers rely on decision-making skills to recognize opportunities to support and achieve business goals. Besides training and development, HRD department in organizations also has a major function of organizational development (OD). The essential OD role includes internal consulting service provider. HRD professionals offer OD activities and services that lead to changes within the organization or a client system (Walton, 1999). Therefore, HRD practitioners perform decision-making practice to fulfill the role as an internal OD consultant.

The association of practitioners of HRD— the Association of Talent Development (ATD, formerly known as the American Society of Training and Development, ASTD) has published key roles of HRD practitioners. According to the 15 key roles of HRD practitioners published by ATD, HRD professionals are the managers of training and development, program administrators, program designers and strategists in organizations (ATD, 1983, also seen in Walton, 1999). In order to manage training and development activities, HRD professionals, especially HRD managers, must be able to plan and monitor training projects. Thus, they need to decide objectives, define content, and develop long-term strategy of the direction, structure, practice of training and development as a department. Besides training and development, HRD department in organizations also has a major function of organizational development (OD).

Tyson and Fell (1986) defined HRD manager's role as a learning architect in the organization. The purpose of being a learning architect is to understand and align departmental mission statement with business-oriented and organizational strategic outcomes. As a learning architect, training managers take on responsibilities to design and select learning process to accommodate individual and organizational goals of development. The learning process designed and implemented by training must result in a strategic approach to HRD and have organization-wide influences. The definition as a learning architect reflects the requirement of high-level decision-making competencies for training managers, as they are expected to decide on appropriate process that assist organizations to reach their strategic goals and meet individual and organizational developmental intentions.

Decision Theory and Process in the Literature

This section synthesizes the decision-making theories and models that were discussed in the literature. It has two parts. The first part introduces four decision theories. The second part examines the decision-making processes that have been presented in previous studies.

Decision Theory

There are four decision theories discussed in the following part. They are normative decision theory, behavioral decision theory, rationality, and bounded rationality.

Normative decision theory. Normative decision-making theory falls into rational decision-making models. The ultimate objective of normative decision theory is to provide a set of decision process that is perceived as the most effective ones, and therefore to advise decision makers (Holton & Naquin, 2005). The reason that normative decision theory is also rational decision-making theory is that decision makers are assumed to have full access to well-around information and they will follow a logical and rational process to select the optimal alternative. Similar to rational decision-making theory, there is a definite promise of the conceptualization of the problems, and the way to solve the problems. Decisions shall be made through a linear process, and the goal of the decision is to enlarge and optimize the final results derived from the decisions.

In the field of HRD, six evaluation models that help HRD professionals to make decisions are seen as normative decision models (Holton & Naquin, 2005). These six models are Kirkpatrick (1998), Hamblin (1974), Brinkerhoff (1989), Phillips (1997), Swanson and Holton (1999) and Cascio (1999). The first five models mentioned above either focus on the different levels of training, or a modification of the famous Kirkpatrick's four-level evaluation framework, whereas the last model embraces the approach of utility analysis. The systematic designs of the models reflect the nature of rationality.

Behavioral decision theory. Behavioral decision theory embraces a more descriptive way in making decisions. The purpose of behavioral decision theory is to describe and explain how decisions are made in reality. In many cases, decision makers can not or do not necessarily follow a strict rational thought process, and decision makers use their personal judgments to form a decision. Thus, the decisions they made seem irrational. Behavioral decision theory explains how the "irrational" decisions are produced taking human cognitive limitations and preferences into account (Simon & Houghton, 2003).

When it comes to make decisions in organizations, decisions might be made based on the optimal utility for a work-team, or a department, but not necessarily for an entire organization.

This is called suboptimization (Klein, 2001). This type of decisions is not irrational—from a departmental or local standpoint, they might bring the best results for the work team or the department, but considering the entire organization, these decisions are not the best alternatives. In additional, some researchers believe that the concept of optimization might not be only constrained in profits. When organizational decisions are made, the decision makers will aim to maximize other factors (McCain, 1981).

Rationality. A number of studies have contributed to expounding rationality across disciplines such as psychology, economics, organizational behavior and statistics (Dean & Sharfman, 1993; Goll & Rasheed, 2005). Gigerenzer (2006) discussed different types of human rationality. According to his argument, people with unbounded rationality will most likely pursue optimization, which is defined as the best strategy to solve a problem. He emphasizes the point that optimization is the strategy to get solutions, but not the outcomes. To obtain this optimal strategy, one needs to find exhaustively other possible alternative strategies and prove that none of these alternative strategies is better than the optimal strategy. Following this logic, rationality is the pathway to find one solution that defeats all other alternative solutions.

Researchers do not share an agreement on the definition and meaning of rationality, but positive relationship between rationality and performance has been discussed (Goll & Rasheed, 2005). In their study, Frederickson (1984) and Fredrickson and Mitchell (1984) provided empirical evidences to prove that rationality positively related to better performance when the environment was stable. Similarly, Papadakis and Barwise (2002) interchangeably used rationality and comprehensiveness to represent their conceptualization of rationality. This has also been seen in other researchers' work (e.g. Fredrickson, 1984; Fredrickson & Mitchell, 1984; Priem, Rasheed & Kotulic, 1995; Goll & Rasheed, 1997; Papadakis & Barwise, 2002). Other scholars, such as Miller and Friesen (1983) and Priem *et al.* (1995) portrayed rationality as a process of scanning, analysis and planning.

The context used by scholars to discuss rationality differ in different research. For example, Eisenhardt (1989) and Judge and Miller (1991) used individual decisions as the channel to study rationality. In studies by Miller and Friesen (1983), Priem *et al.* (1995), and Goll and Rasheed (1997), rationality was viewed as a characteristic that organizations possess. Kaufmann *et al.* (2017) adopted the conceptualization that Simon (1978) proposed and defined rationality as procedural rationality, in a way that processes of determining criteria of good decisions, collecting and analyzing information, and making decisions that are evidence-based are major components of rationality. From what have been discussed, although the terminology varies, the overall understanding of rationality still shares some similarities.

In their study, Goll and Rasheed (2005) described rationality as an organizational characteristic that can be measured by a matrix of six constructs. The six constructs summarize the similarities across many studies of rationality. According to their proposal, rationality can be measured through systematic consideration for opportunities, problems, cost and benefits during the planning phase of any organizational activity. Managers also use rationality to make strategic and long-term participative decisions. Application of operations, open communication channels and the explanation of proposed changes also show the usage of rationality. Finally, rationality can be achieved via participative agreement-seeking process and other processes for actively searching for feedback.

Bounded rationality. It will be ideal if a decision produces maximized outcomes, however, given the time and efforts needed to reach to a perfect rational decision, many managers at their real job might pursue decisions pertaining satisfying outcomes instead.

Therefore, practitioners in management positions practice approaches of non-rational decision-making. Simon (1955, 1979) claimed his argument that was contrary to the classical rationality theory. He argued that managers who made decisions in organizations were bounded rational, and they often made decisions that gave rise to satisficing outcomes rather than outcomes with maximized utility (Simon, 1986; Gigerenzer & Goldstein, 1996). Instead of focusing on rational theory, the ecological interpretations of the bounds of rationality was proposed by Simon. Those factors included limited time, information, knowledge, evaluation criteria and computational capabilities (Barros, 2010; Certo, Connelly, & Tihanyi, 2008; Gigerenzer & Goldstein, 1996).

According to Simon (1957), "the capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behavior in the real world — or even for a reasonable approximation to such objective rationality" (p. 198, p. 202, also seen in Barros, 2010, p. 459). This psychological principle of bounded rationality also reflects the phenomenon in the real world. In many situations, intentional and deliberate processes for making rational decisions are rarely possible, if not completely impossible, especially when the pace in the organizational environment is incredibly fast.

Simon (1955, 1956) hypothesized that decision makers strived for simplifying the decision processes within the power of human cognitive capabilities. The reasonable way to realize the simplification is to switch the goal of obtaining maximum results to the goal of achieving satisficing results. Therefore, managers will have some pre-determined criteria prior to making choices. During their time of deciding, they seek for alternatives that fulfill these pre-determined criteria. Moreover, if they choose the optimal alternative eventually, they accomplish rational decision making. However, they also have the option to choose alternatives that are potentially not the best, but meet or exceed the set of pre-determined and minimal acceptable criteria. In this way, they practice bounded rationality given the fact that they select an alternative with satisficing outcomes.

Due to cognitive limitations and resources unavailability, managers in organizations as bounded rational decision makers will most likely search for solutions that are conceptualized by managers' understanding of the surrounding environment (Cyert & March, 1963; March & Simon, 1958; Simon, 1947). In spite of the increasing number of studies underlying the assumptions of rationality, research has shown that decisions made by managers with rationality are not coherent when bounded rationality, cognitive constrains and bias are taken into consideration (Aharoni, Tihanyi & Connolly, 2011; Kuhn, 2012).

Decision-Making Process

An overview of the literature in management, organizational psychology and other disciplines shows that five decision-making processes are commonly discussed and practiced by scholars and practitioners. They are rational decision-making process, strategic decision-making process, heuristic decision-making process, intuitive decision-making process, and adaptive decision-making process. The following part provides a discussion of the five decision-making processes.

Rational decision-making process. The underlying assumption of rational decision-making is that human have certain purposes when they perform their daily activities (Eisenhardt & Zbaracki, 1992). The expected results from rational decision-making process are that the decisions will help organizations to achieve maximized outcomes financially and non-financially. Studies from different fields have made an effort to map managers' rational decision process and proposed various analytical models to facilitate rational decision-making (Borrero & Henao, 2017).

A rational decision-making process in business organizations yields several characteristics. First, managers as decision makers need to have a clear idea of objectives and goals before they step into the decision situation. They will later on use these objectives to judge and evaluate the value of an action caused by the decision. In addition, managers will need to have strong skills in gathering and analyzing information. Further, they must be able to develop a few alternative options as a result of the analysis. Finally, managers will select the optimal option as the final result of the rational decision-making process. Researchers in the field of management also suggest that it is important to evaluate the quality of decisions, as well as to follow up with the implementation process of decisions, so that updated and modified decisions can be made for next time when similar decision situations arise.

Given the large body of literature that discussed rational decision-making process in business organizations, there have been many models proposed overtime. Simon (1961) concluded that identifying situations for making decisions, searching for possible alternatives and choosing among the alternatives were three major components in obtaining rational decisions. Schrenk (1969) also suggested three similar elements of rational decision-making—problem recognition, diagnosis and decision selection. Witte, Joost & Thimm (1972) proposed a model evolved from Simon's model: 1, gather information; 2, develop alternatives; 3, evaluate alternatives and 4, choices. Nutt (1989) proposed a slightly advanced five-step decision making process, including defining the challenge, accepting the challenge, finding a choice to overcome the challenge, committing to the choice and adhere to the choice they made.

In recent years, Franklin (2013) specified a six-step process to illustrate rational process in decision-making literature. The first step of the process is recognizing and defining decision situation, followed by identify alternatives and evaluating alternatives. Based on the results from alternatives evaluation, the best option will be selected and implemented. In his study, Bazerman (1994) proposed another six-step rational decision-making process: 1, determine the problem; 2, define the criteria; 3, weigh the criteria; 4, generate alternatives; 5, judge each alternative using the defined criteria and 6, select the optimal alternatives among all.

Strategic decision-making process. Another type of rational approach of decision-making that is frequently introduced and discussed in the literature is strategic decision-making. In the field of management, strategic decision-making is rational in nature. It follows analytical, linear and step-by-step processes that are similar to other rational decision-making processes (Calabretta *et al.,* 2017; Cabantous & Gond, 2011). Appropriately using and implementing strategic decisions will give organizations a long-term competitive edge in the market (Calabretta *et al.,* 2017; Gavetti *et al.,* 2007).

However, modeling the process of making strategic decisions in organization is a complex and difficult task, mainly because strategic decisions are unstructured (Cabantous & Gond, 2011; Schwenk, 1995). Mintzberg *et al.* (1976) identified three major stages to map the process of making a strategic decision. In their study, a strategic decision will not be formed until decision makers go through identification phase, development phase and selection phase. This is homogeneous to the rational decision-making process discussed earlier. In this model, the identification phase of strategic decision is critical, as it will serve as the foundation of proposing and selecting alternatives.

Diagnosing strategic issues occurs during the early stage of making strategic decisions. It is important to know how to assess the characteristics of the issues (Dutton & Ashford, 1993; Dutton & Duncan, 1987; Dutton, Fahey & Narayanan, 1983; Schwenk, 1995). Other scholars such as Hart (1992) studied five different styles of making organizational strategic decisions. The first one is command model, where top management in the organization leads the process. The second type is symbolic model, where the decision-making process highly relies on the organizational mission and vision statement. The third type is rational model. Characteristics of this type of strategic decision-making include formal structuring and systematic planning. The fourth type is transactive model. In this type of decision-making strategy, decisions are formed gradually through internal processes and mutual improvement. Finally, generative model discusses strategies driven by the organizational actor's initiatives.

Although many studies have discussed strategic decision-making in organizations and proposed theoretical models to identify key characteristics of strategic decisions to guide practice, there are some problems and issues associated with this particular decision-making process. In the first place, there are not enough empirical studies to validate the models proposed (Schwenk, 1995). In their study, Hitt and Tyler (1991) found that the executive managers perceived rational strategic decision-making model as less valid but more politically to apply in daily practice.

Secondly, bias is always a serious concern of making strategic decisions in organizations. Research has identified several biases resulted from using strategic decision-making process by managers. Casual attribution, escalating commitment and biases in recollection are the three major types of biases (Bateman & Zeithaml, 1989; Finkelstein & Hambrick, 1990; Golden, 1992; Hambrick, Geletkanycz & Fredrickson, 1993; Huber & Power, 1985; Salancik & Meindl, 1984;

Schwenk & Tang, 1989; Staw, McKechnie & Puffer, 1983). Those biases arise when managers perform their day-to-day practice, and also come from deviations of individual characteristics. For example, some managers tend to attribute positive results in the organization or department to their own contributions and poor outcomes to other external influencers such as changes in environment. Escalating commitment happens when there is an observable increased commitment to an action of failure. Sometimes, managers tend to stay with the existing strategies even when the strategies are not the optimal solutions.

Finally, when studies are conducted to understand how managers make strategic decisions, it is understandable that managers are not always able to remember all the details to articulate their decision process. Because of the different levels of knowledge and competencies managers have, they often cannot identify and describe all the influential factors that affected their decision-making process.

Heuristic decision-making process. Despite the prevalence of rational decision models in the management literature, some researchers have proposed opposite views of point to the classic rational decision-making process. Mousavi & Gigerenzer (2014) and Simon (1955) discussed about the mismatching reality between theory and practice, and they disagreed with the idea that managers usually used rational decision-making processes in the real world. According to the theories in social psychology and organizational behavior, human tend to make heuristic decisions and choose an accelerated way of reasoning to analyze information within the context, instead of taking sequential, systematic and rigorous mental activities (Borrero & Henao, 2017; Denes-Raj & Epstein, 1994; Gigerenzer & Gaissmaier, 2011; Kahneman, 2011; Kahneman & Tversky,1979; Tversky & Kahneman, 1974, 1981, 1986). The Management environment where most business organizations situate in is full of uncertainty and risk. There is an increasing demand of adaptive responses. Heuristics is one of the ways that allow adaptive responses to the environmental changes (Artinger *et al.*, 2015; Robert Baum & Wally, 2003; Khatri & Ng, 2000), and it often leads to a more efficient decision process under complex circumstances (Borrero & Henao, 2017; Frederick, 2005; Witteman *et al.*, 2009).

In recent years, there have been studies to show that managers often focus on heuristics, rather than rationality, to make decisions, largely because they often do not have enough information and resources to carry out a long-term and well-planed decision-making procedure. Heuristics is understood as the strategies that solve problems without using rational and logical theory (Artinger *et al.*, 2015; Groner, Groner, & Bischof, 1983; Polya, 1954). Heuristics are defined by Pearl (1984) as follows,

> Heuristics are criteria, methods, or principles for deciding which among several alternative courses of action promises to be the most effective in order to achieve some goal. They represent compromises between two requirements: the need to make such criteria simple, and at the same time, the desire to see them discriminate correctly between good and bad choices (p.3).

In addition to Pearl's (1984) definition, Mousavi and Gigerenzer (2014) delineated heuristics as a conscious and unconscious decision-making strategy to represent the adaptation of changes in environmental structure changes. Gigerenzer *et al.* (1999) described heuristic as a strategy that relied only partially on the available information. It is a fast and frugal approach because it generates adaptive alternatives upon utilizing a small amount of time, knowledge and deliberation.

Heuristics are referred as shortcuts or rules of thumb in many research studies (e.g. Dietrich, 2010). As mental shortcuts, using heuristics eases the complex situation of problem solving as well as provide quick and more immediate responses to the problems (Elstein, 1999; Tversky & Kahneman, 1974). However, the trade-off of using heuristics is the reduction in accuracy in diagnosis of problems and forming decisions (Mousavi & Gigerenzer, 2014). In other studies, scholars have challenged the statement that equaled heuristics with shortcuts and supported the idea of positive benefits associated with heuristics. For example, Maitland & Sammartino (2015) summarized the characteristics of heuristics in decision-making, including focus, speed, frugality and accuracy. Therefore, researchers believe that while heuristics can be used when people want to assess the environment quickly and to make decisions with uncertainties, it can also cause bias as well as systematic and judgmental errors (Dane & Pratt, 2007; Tversky & Kahneman, 1974).

From the heuristic decision-making perspective, decisions are complex, context-oriented and value-driven (Coscarelli *et al.*, 1995). Managers who embrace strategic management are most likely to utilize different heuristics to examine the environmental information when decisions need to be reached under complex circumstances. Gigerenzer and Gaissmaier (2011) introduced the adaptive toolbox framework, which becomes a representative conceptual model in heuristic decision-making. They identified three building blocks of heuristic decision-making. These common building blocks can further advance theory in heuristics. The three building blocks are search-stopping-decision rules. The search rules direct the process of searching information and resource. Stopping rules tell when the search phase needs to finish. Decision rules how the final decision is made.

There are different kinds of heuristics existing in the literature and research. Tversky & Kahneman (1974) introduced the two types of heuristic—availability heuristic and representativeness heuristic. The availability heuristic is common in material activities, especially when there is a call for decisions. It is an abbreviated mental process where human quickly retrieve examples in their mind to form and evaluate a decision. Experienced managers are easily to extract their previous experiences and rely on these experiences to make a decision. Representativeness heuristic is another commonly used decision-making strategy (Hogarth, 1987). It is also a mental shortcut where situations are compared to form decisions. Managers tend to refer back to the known best practice in the field, or their successful antecedent experiences when they need to make a decision for a given situation and based on a few pieces of information that are available to them (Busenitz & Barney, 1997). It is also used to make decisions or judgments on how possible certain events or consequences will happen especially under uncertainty and risk.

Intuitive decision-making process. Many researchers and practitioners in management have attempted to develop methods to make good quality decisions in a brief timeframe (Eisenhardt, 1989; Dane & Pratt, 2007; Hitt, Keats, & DeMarie, 1998; Perlow, Okhuysen, & Repenning, 2002). To achieve this, practitioners have used intuition in making critical decisions in organizations (Dane & Pratt, 2007). Studies have demonstrated how intuition can help practitioners to resolve complex issues and accomplish tasks (Hayashi, 2001; Isenberg, 1984; Shirley & Langan-Fox, 1996). Although there have been some disagreements among a group of scholars who challenged the usage of intuition in making critical decisions, many researchers and practitioners believe that intuition can be helpful in making strategic decisions, such as organizational planning, stock analysis, performance evaluation and capital investment (Agor, 1986; Hayashi, 2001; Isenberg, 1984; Shirley & Langan-Fox, 1996). In the literature in organizational development, intuition has been frequently discussed and explored (Barnard, 1938; Behling & Eckel, 1991; Isaack, 1978; Peters, Hammond, & Summers, 1974; Prietula &

Simon, 1989; Sadler-Smith, 2016; Simon, 1987). The capability of using intuition to make effective decisions is also one of the critical managerial competencies that top management should possess. Successful top executives and board members are more likely to use intuition in a different yet more efficient way than low-level managers and ill-functional boards (Agor, 1986; Barnard, 1938; Harper, 1989).

In their study, Dane and Pratt (2007) emphasized the importance of defining intuition homogeneously, however, there always have been a large extent of confusion and vagueness existing in the discussions of defining intuition (Hammond *et al.,* 1987; Sinclair & Ashkanasy, 2005). The variation in defining intuition is due to a few reasons. Philosophically, cultural and religious beliefs and values is one of these reasons (Dane & Pratt, 2007; Osbeck, 2001; Wild, 1938). In academia, scholars in the field of management and psychology hold a variety of perspectives in understanding and explaining intuition. Some of them explain intuition as heuristics, expertise or nonconscious information processing (Blattberg & Hoch, 1990; Denes-Raj & Epstein, 1994; Epstein, 1998; Kahneman, 2003; Lieberman, 2000; Prietula & Simon, 1989; Tversky & Kahneman, 1983).

Previous studies have referred intuition as gut feelings (Hayashi, 2001), hunches (Rowan, 1989) and mystical insights (Vaughan, 1979; Wild, 1938). Some researchers believe that intuition represents the intertwined effects of affection and sensory (Bastick, 1982; Epstein, 1998; Parikh, Neubauer & Lank, 1994; Petitmengin-Peugeot, 1999), while others consider that intuition comes from accumulated tacit knowledge from work experiences overtime (Behling & Eckel, 1991; Brockman & Anthony, 1998; Isenberg, 1984; Klein, 1998; Simon, 1987). Sinclair and Ashkanasy (2005) defined intuition as “a non-sequential information processing mode, which comprises both cognitive and affective elements and results in direct knowing without any use of conscious reasoning" (pp.357). In Wild's (1938) definition, intuition is "an immediate awareness by the subject, of some particular entity, without such aid from the senses or from reason as would account for that awareness" (pp. 226). Shapiro and Spence (1997) defined intuition as "A nonconscious, holistic processing mode in which judgments are made with no awareness of the rules of knowledge used for inference and which can feel right, despite one's inability to articulate the reason" (pp.64).

Based on the three definitions listed above, intuition is viewed as a type of information processing activity where awareness and consciousness of using reasoning and other rational cognitive process are lacking. There is also a temporal difference between intuition and rationality. That is, intuition must happen prior to the achievement of rational thinking process. What is more, using intuition does not require a winding process of logical analysis and deliberation.

Using intuition in making decisions will not be suitable for all conditions. Behling and Eckel (1991) stated that intuition would be more appropriate and effective in solving unstructured problems. Other studies confirmed this argument. For example, Parikh *et al*. (1994) suggested that managers inclined to make intuitive decisions to solve ill-defined problems, and Agor (1984) embraced the idea that managers used intuition to make decisions in most situations where there was a lack of sufficient information for analytical reasoning. Another factor that often leads to using intuition in decisions is time pressure. Studies have discussed that managers were more likely to use intuition when they did not have enough time to make decisions (De Dreu, 2003; Edland & Svenson, 1993; Kaplan, Wanshula, & Zanna, 1993; Kruglanski & Freund, 1983; Maule, Hockey, & Bdzola, 2000; Suri & Monroe, 2003).

Meanwhile, the usage of intuition to make decisions also varies by job categories, culture and individual traits (Sinclair & Ashkanasy, 2005). Individuals like firefighters, military leaders (Kaempf *et al.*, 1996), emergency room surgeons (Abernathy & Hamm, 1995), and business executives (Agor, 1986; Burke & Miller, 1999; Dane & Pratt, 2007; Hayashi, 2001; Klein, 1998) are those who significantly use intuition to make decisions in their practice when they are under severe time pressures.

Adaptive decision-making process. Inspired by bounded rationality, adaptive decision making becomes another framework that explains the decision-making process some managers use (Bauer *et al.*, 2013). Research has discussed the various situations where people make adaptive decisions (Bauer *et al.*, 2013; Biggs, 1985; Sundström, 1987). Based on adaptive decision-making, managers choose different strategies that tailor to the characteristics of the task and context to make decisions (Payne, Johnson & Bettman, 1993).

The variation factors in adaptive decision-making concern the decision makers and the characteristics of the perceived problems. Simply put, different managers choose different strategies to make their decisions, and the same manager uses different strategies based on the situations at different times as well (Bauer *et al.*, 2013). Factors that influence the selection of strategies to make decisions include: how many alternatives are available (Johnson & Meyer, 1984), how many attributes (Sundström, 1987), the level of limitation on time (Payne, Bettman & Luce, 1996) and how similar the alternatives are with each other (Bettman *et al.*, 1993). In their study, Baghbanian *et al.* (2012) explored how decision-making was practiced in the field of healthcare industry. They pointed out that decision-making practice concerned many interwoven factors that collectively impacted the process, and decision-making practice varied accordingly with the changes in operational contexts of time, space and purpose.

Studies have also shown the relationship between decision strategies, cognitive effort, and decision accuracy (Bauer *et al.*, 2013). Researchers have showed that selecting certain strategies to adapt to the particular situation will lead to results with high level of decision accuracy but with less cognitive effort (Bettman *et al.*, 1998; Creyer *et al.*, 1990; Payne & Bettman, 2004). In a study of reviewing decision-making practice in international business for the recent 45 years (Aharoni *et al.*, 2011), researchers found that managers' personal characteristics such as personal experiences, knowledge and tolerance for uncertainty and risk were highly correlated with their decision-making exercises. Furthermore, culture serves as another factor that influences managers' selection of decision strategy in global business organization. Thus, when taking all these factors into account, it is unreasonable to assume that decisions made by different managers would be similar (Aharoni *et al.*, 2011; Kahneman & Tversky, 1984).

Conceptual Framework

This study aims to provide descriptions of decision-making approaches used by managers who are responsible to respond to requests for training. A conceptual framework that guided the current study is presented in Figure 2.4. The flow represented in the framework reflects the structure of the study.

The boundary of this study is set to be inside of the organization, thus the clients in this study are employees across the same organization who request training. The focus of the study is on the managers' decision-making process when they respond to requests for training. This study first examined the nature of the requests that managers receive. Further, it aimed to understand the responses that managers made to reply to training requests. The descriptions of decisions made by managers were collected, and the reasons of making such decisions were investigated.

Finally, the descriptions of decision-making approaches used by managers were derived as a result of analyzing all data holistically.

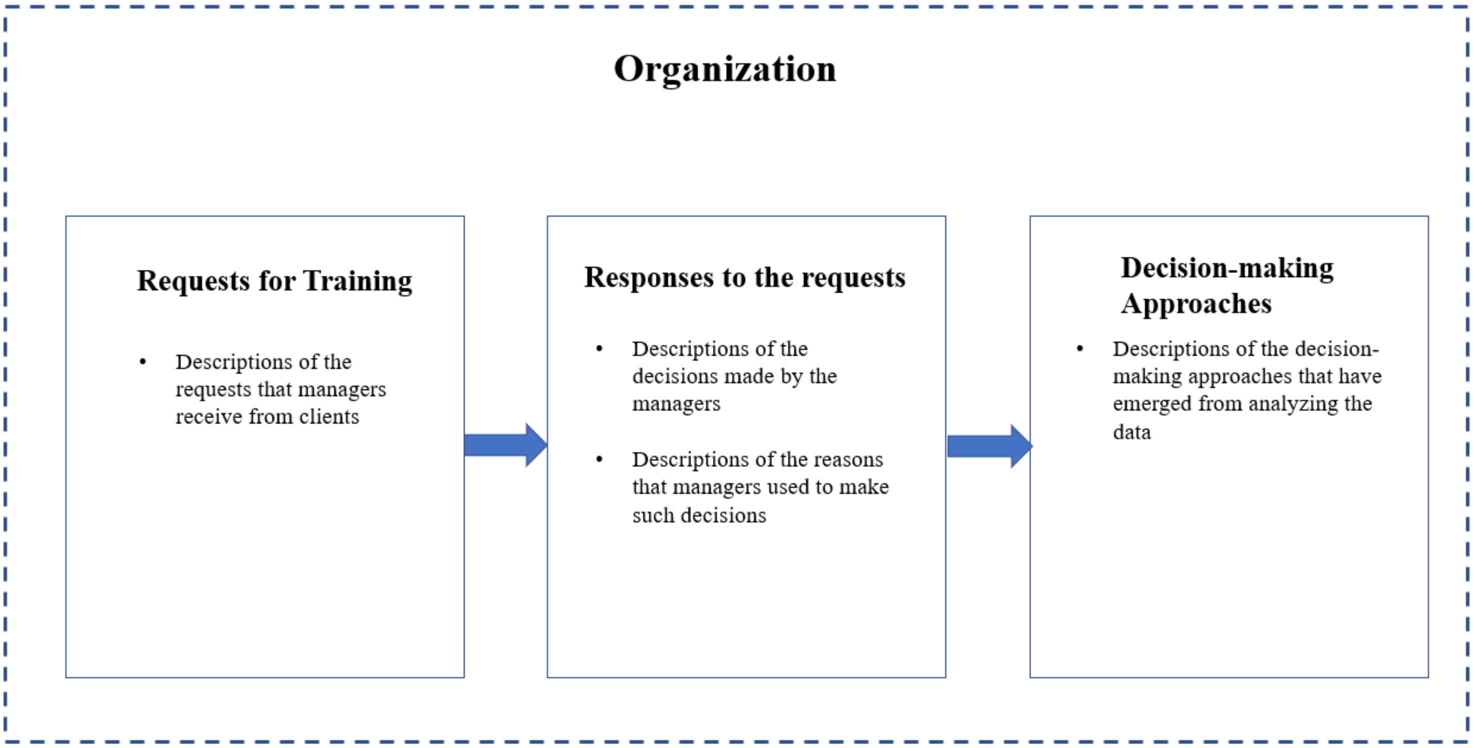

Figure 2.4: The Conceptual Framework of the Study

CHAPTER 3: METHODS

This chapter includes three sections to discuss the research method of the study. The first section provides an overview of qualitative research. The second section introduces critical incident technique and semi-structured interview as two methods for gathering qualitative responses. The last section presents the research process of the study.

Qualitative Research

This section reviews qualitative research, the type of research that was conducted in the study. The first part introduces qualitative methodology and the second part briefly introduces phenomenology.

Qualitative Methodology

Denzin and Lincoln (2011) defined qualitative research as follows:

> Qualitative research is a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretative, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretative, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (p.3).

This well-accepted definition to qualitative research explains the impacts of qualitative research in conveying researchers' understanding about incidents and phenomena, as well as the abilities of qualitative research to transform the world (Creswell, 2013). According to this definition, there are various means to develop a research qualitatively, for example through field notes, interviews, conversations, or other types of human interactions. These means engage researchers, respondents of the research, and stakeholders into the entire research process. Qualitative research is powerful to probe deep meanings of phenomena and occurrences in the world.

Qualitative research method is an appropriate method for this study due to several reasons. In a qualitative research, data is collected in the natural setting and directly by researchers (Creswell, 2013). This study aimed to collect retrospective data that reflected respondents' experiences at the place where these experiences occurred. Instead of relying on pre-existing questionnaires or surveys, the researcher developed a list of interview questions to collect data. The questions were designed to tailor to this study only, and subject to unexpected changes as the research developed. The research asked follow-up questions to probe more detailed information during the interviews. Therefore, using qualitative research design gave the researcher of this study flexibility to find a particular way to derive the best answers to the research questions. Face to face interactions between the researcher and the respondents not only increased the response rate and guarantee the richness of the responses received, but also allowed the researcher to obtain detailed information of common practices in training.

In addition, qualitative inquiry in social science is inductive in nature (Creswell, 2013; Guest, Namey & Mitchell, 2013). According to Patton (1990), qualitative research explores what people do, know, think and feel about something. It is appropriate to use qualitative research when the focus of study on how things happen, instead of the outcomes of certain events. Qualitative researchers organize and make sense of data via finding patterns, developing categories and building themes within the data. The research questions of this study focus on understanding how managers make decisions when they respond to training requests, and this issue has not been known in training with the support of informative literature. The nature of the circumstances under studied was complex and highly process-oriented and concentrated on training managers' experiences with receiving training requests, how they approached the issues of decision-making, and how they made decisions in practice. Thus, using qualitative research design could help the researcher understand and interpret a rarely-known phenomenon based on the meaning given by the practitioners in the field to contribute to building the knowledge and theory in HRD.

Phenomenology

Phenomenology is the type of study that describes individuals' perceptions, feelings and experiences (Guest *et al.*, 2013). Smith, Flowers and Larkin (2009) define phenomenology as a philosophical approach that studies human's experiences, delineates what the experience of being human is like regarding the things that matter to most of us and the constitution of the world. Creswell (2013) introduced a phenomenological study as a research approach to describe common meanings of individuals' experiences of a phenomenon. The purpose of phenomenology is to identify phenomenon of human experiences and further to develop a description of a phenomenon that applies universally. Based on these definitions, much qualitative research is phenomenological as "it attempts to understand individuals' lived experiences and the behavioral, emotive, and social meanings that these experiences have for them" (Guest *et al.*, 2013, p. 11).

This study is essentially a phenomenological research study. The goal of this study is to understand how managers make decisions to respond to a request for training. The qualitative data was collected from people who have experiences with decision making as part of their daily practice. The underlying anticipation of the study was to scrutinize what the respondents had experienced with making training decisions, so that a description of this type of experience for all the training managers could be developed (Guest *et al.*, 2013; Moustakas, 1994).

Methods of Gathering Responses

This section discusses two qualitative research methods that were used to conduct this study. The first part provides an overview on critical incident technique, and the second part focuses on semi-structured interviews.

Critical Incident Technique

Critical incident technique (CIT) was used to collect descriptions of requests that received by those managers responsible for training. The findings generated from analyzing the critical incidents answered the first research question *"What was the nature of the requests that managers received from their clients?"*, and the fourth research question "*What decision-making approaches emerged from the managers' responses to clients' training requests*?"

Definition of CIT. CIT is defined by Flanagan (1954) as a technique that "consists of a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles. The critical incident technique outlines procedures for collecting observed incidents having special significance and meeting systematically defined criteria" (pp.327). Other researchers agreed and cited this definition in their own work, e.g. Coetzer *et al.* (2012). Flanagan embraces the idea that CIT method contains a series of procedures to collect, analyze and categorize data from observing activities of human behaviors (Butterfield *et al.*, 2005; Gremler, 2004). This technique will not be fully effective unless the results are from careful observations along with other qualitative data collecting strategies, such as interviews and questionnaires.

From this definition, the CIT method was initially developed to understand human work behaviors (Coetzer *et al.*, 2012). Flanagan also specifies an incident as any form or type of human activity completed by task performers. This human activity must be observed by other individuals, and the effectiveness of the task performers is judged by the observers (Flanagan, 1954; Bitner, Booms, & Tetreault, 1990). An incident will be considered critical if "the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects" (Flanagan, 1954, pp. 327). A critical incident makes its contributions in the formation of an activity or phenomenon (Bitner *et al.*, 1990; Gremler, 2004; Grove & Fisk 1997). From this perspective, if a research uses CIT method as its primary methodology to investigate problems, the purpose of the research, especially the purposes of using the CIT method must be clearly pre-defined. In the meantime, the consequences of the critical incidents also have to be known by the observers, to ensure the objectivity of using this method.

Throughout the 60 years of development, other scholars and researchers have broadened the scope of the definition and objectives of CIT. For instance, Chell (1998) defines CIT as "a qualitative interview procedure which facilitates the investigation of significant occurrences (events, incidents, processes, or issues) identified by the respondent, the way they are managed, and the outcomes in terms of perceived effects. The objective is to gain understanding of the incident from the perspective of the individual, taking into account cognitive, affective, and behavioral elements" (p. 56). In his definition, the prime means to implement CIT has shifted from observations to interviews. That is, the data no longer comes from observers, but from the task performers themselves. This was supported by Kluender (1987) in his study, where he pointed out that there were rarely CIT studies that recorded incidents when it occurred.

Therefore, CIT relies on self-reported and retrospective data to classify human behaviors. The objective of using CIT is to gain understanding of the incidents from the lens of the task performers, instead of an outside observer (Coetzer *et al.*, 2012). Interviews, either one on one or within a group, provide a channel for individuals to commemorate and reflect on incidents that happened in the past or are constantly ongoing, in order to dig into the activity. Reviews of the CIT studies have confirmed that interviews and retrospective self-reports are the two common sources of CIT data (Butterfield *et al.*, 2005; Gremler, 2004; Coetzer *et al.*, 2012). Flanagan (1954) also stated that retrospective self-reported information could be a valid information collection strategy, if the information provided by the interviewees is full of details and less of vagueness to comprehend and interpret.

The CIT procedure. In his classic article, Flanagan (1954) identified and described the five major steps of the proposed CIT method. He confirmed that the nature of CIT was a procedure that guided facts and information gathering in certain situations. The technique does not represent fix rules of data collection, but rather a flexible of principles that can be amended and changed to adapt particular situation.

The first step of CIT method is to define the general aims of the activities being studied (Butterfield *et al.*, 2005), which has been seen as the prerequisite of forming the description of an activity. Determining objectives of an activity is the basic condition before any study of the activity could continue (Butterfield *et al.*, 2005). This is due to the needs of understanding intentions and goals of the person who performs the task. Flanagan also recommended an easy way to understand the general aims of a study—to ask supervisors or experts in the area, or ask the task performers directly. Supervisors are usually the one who set the job descriptions and task instructions to the task performers, therefore, they should have better knowledge of the expectations of the end products or the desired behavior. They also tend to be the evaluators of the performance, which means they have a set of criteria of expected behaviors.

One issue that needs to be addressed is that people might have different understanding and interpretations toward the aims of the activity. In reality, there will be rarely one set of general aims where everyone agrees upon. Thus, Flanagan gave his own clarification in his article. He proposed that the statement of aims needed only to be a few simple words. These words should catch the functional descriptions of the activity so that slogan-like descriptions of aims could be created. Once the key words are decided, they will be passed on to the field expert to evaluate. This will ensure the objectivity of the CIT method and interpretations are grounded in the data collected.

The second step of CIT is to set plans and specifications. Note that in Flanagan's original work, he commented observations as the primary way to collect data for analysis. In this way, observers need to receive a precise and specific instructions on crucial aspects of an activity that needs to be observed. These aspects of activity are believed to be important to formulate the functional description. The instructions given to the observers also ensure the objectivity of using the CIT method when every observer follows the same instruction. Except for the instructions, observers will also need to agree on four specifications. These four specifications are: 1) what situations and who are being observed at what places; 2) since the general aims of an activity have been clearly defined in the last step, the observers should decide whether the behaviors being observed are relevant to the general aims of the activity; 3) what are the effects of the observed behaviors or incidents on the general aims; 4) who are the observers. In general, the observers should be the ones who are familiar with the activity, such as supervisors, consumers of the products, subject matter experts, and the task performers. Since all of the observers are following the same instruction of observations, and they agree upon the four specifications prior to data collection, the consistency of the observations will hold (Butterfield *et al.*, 2005). In this study, and many other CIT studies nowadays, interviews, instead of observation, become the primary strategy to collect data, but the interviewers still need to set concrete research plans prior to proceed to the data collection phase.

Then the procedure proceeds to the third step—data collecting. Flanagan (1954) believed that the best way to collect data was on-site, meaning observations should be held when the behavior was performed, or the incidents took place, so observers could check and record all of the requisite and crucial facts related to describe the activity. However, he also acknowledged that the CIT method was also widely used to collect data based on memory, so more detailed information would be reported regarding incidents that happened recently.

It might be impossible to always have the observers on the scene when the incidents were happening, so Flanagan also proposed four ways to collect retrospective and self-reported data—individual interviews, group interviews, questionnaires and record forms in either narrative format or check-list format. In terms of the sample size of the study using the CIT method, Flanagan stated that it did not concern the number of respondents or interviewees, but rather the number of incidents reported. An appropriate sample size for a CIT study should be enough incidents that represent every aspect of an activity. The collection of information on these incidents will be sufficient to form the functional definition of the activity. There will not be one defined statistic rules to tell how many incidents will be sufficient to draw conclusions of a CIT study. The bottom line is the full coverage of the activity to guarantee every domain of the activity under study can be captured, analyzed and described. If interviews are used to collect recalled data, several factors must be addressed before and during interviews, including the sponsorship of the study, purpose of the study, the group being interviewed, the anonymity of the data, the interview questions and the principles interviewers should comply when they have conversations with the interviewees.

The fourth step is analyzing the data. This has been seen as the most difficult yet critical step in the CIT procedure (Butterfield *et al.,* 2005; Flanagan, 1954; Woolsey, 1986). During interviews, there could be hundreds of critical incidents gathered, so the intensity of work to classify, categorize and interpret these incidents will be high. The objective of this step is to establish the classification scheme that can best describe the activity under study based on the data collected. As the units of the sample size in CIT study, if the incidents are representative of the activity, and the data is carefully examined, then one can expect valid results generated from the CIT study. Unfortunately, there is no one correct way to describe an activity, so the researchers who conduct CIT study have to create their own way to analyze the data and reach to a conclusion that can be rigorously justified. Generally, three major issues deserve extra attention to when analyzing the data. First, the frame of reference should be carefully and wisely selected. The reference will guide through the process of classification and categorization as well as the process of reaching a description of the incident. Second, establishing the categories requires an inductive process. Finally, the level of generality-specificity of the behaviors described must be appropriate for reporting the data.

The last step of the CIT method is interpreting and reporting data. After the four steps, bias could be introduced by the procedural errors, therefore, researchers must thoroughly examine the four steps before moving to interpretation of the data. The true interpretation must be reported in the final report. For example, if the results from data analysis step do not show the general aims identified in the first step, this departure must be reported in the final report. Any limitations of the study also need to be clearly stated in the final report. In addition, Flanagan also suggested that the report of the data should include the significance and contributions as well as the credibility of the study.

Research that used the CIT method. The CIT method has been proved effective to investigate significant phenomenon and answer research questions in the field of HRD. For instance, Jacobs (1986) used CIT to study the interpersonal skills that were critical to managers. He agreed with many other scholars in the definition of CIT. In his study, he acknowledged that the CIT method as a behavior-driven technique, and often relies on qualitative data collection technique, such as interviews, to gather incidents recalled by experts. The experts of the interview recollect specific incidents, including both effective and ineffective incidents on the job. Through analyzing the critical incidents, categories that describe the interviewees' job behaviors emerge and provide implications for further research and practice.

Using the CIT method, researchers can have an enriched dataset for analysis. The method allows the respondents to describe their experience in their own words and from their own perspectives (Edvardsson, 1992). The CIT method does not have an inflexible set of rules of data collection. It allows flexibility and alternation of principles to adapt to different situation to gather data (Burns, Williams & Maxham, 2000; Butterfield *et al.*, 2005; Flanagan, 1954; Hopkinson & Hogarth-Scott, 2001; Neuhaus, 1996), and it also allows respondents to provide as many details as possible under an overall research framework (Gabbott & Hogg, 1996; Gremler, 2004). The respondents will not be given a pre-determined framework or structure to follow when telling their stories, and they could also describe the incidents using their own terms and languages (de Ruyter, Perkins & Wetzels, 1995; Stauss & Weinlich, 1997). Following this logic, respondents have freedom to a large extent to provide information and stories of the incidents that they think are critical, and they can give any type of details and information that they might think is helpful for the research study in which they are involved. Researchers will have abundant information to decide the most relevant incidents of interests (Gremler, 2004).

The goal of using the CIT method is to search for a way to describe certain behaviors or phenomenon in daily life. The individuals that had direct experiences with the incidents would report this information. Therefore, the results derived from the CIT method would truly reflect the normal way the respondents think, react and behave. When giving their stories of a particular incident, the interviewees have been already familiarized with the context of the incident, as they have direct experience with the incidents that they think are critical. Therefore, the study using the CIT method provides the understanding of a behavior and phenomenon of interest closely to the real practice.

Another advantage of the CIT method lays in its nature of induction. The CIT method is especially suitable for studies that are designed to develop hypotheses or other theoretical inquiries (Gremler, 2004; Walker & Truly, 1992). It can be useful to explore and gain knowledge on a phenomenon that is little known (Gremler, 2004). With no prior hypothesis or existing understanding is needed, the CIT method can be effective when studying something new or rarely understood through forming patterns and themes that will be used in the future when researchers generate wide-applied theories (Olsen & Thomasson, 1992).

The CIT method has been recognized as one of the premier qualitative methodologies to investigate complex activities and behaviors (Butterfield *et al.*, 2005; Cope & Watts, 2000; Gremler, 2004; Sharoff, 2008). In this study, Chell's definition of CIT is adopted and followed.

Again, the purpose of this study is to understand and to describe the approaches used by managers when making decisions to respond to training requests. This particular topic has not been fully understood and investigated in previous studies. Thus, using the CIT method is appropriate and self-reported retrospective data is a suitable source of data. Here, incidents are the training requests that managers receive from their clients. Information gathered from managers' story-telling would be analyzed through interpretation and categories based on similarities and differences. The classification schemes will summarize and describe the incidents to represent frequency or patterns that exist in the descriptions of the training requests (Grove & Fisk, 1997; Neuhaus, 1996; Stauss, 1993; Gremler, 2004).

Despite the advantages discussed above, the CIT method has some flaws and drawbacks as previous studies have discussed. The first limitation of CIT is the issue of reliability and validity. Theoretically, reliability holds if the observed scores of a test are highly correlated with the true score of the test. That is, if repeating the test for infinite times, there should not be significant differences between the scores at different testing time. The reliability of a qualitative study resonates in the consistency of responses as well as the resulting interpretation and classification over time.

The potential unreliability of the CIT method might result from the responses from the interviewees and the interpretations of the researchers. As what has been discussed earlier, most of the CIT research today relies on self-reported and retrospective data through interviews. The interviews most likely take place after the incidents happened, therefore, the interviewees must recall their experience to describe details of the incidents. As a result, there could be possible recollect bias in the information and the stories told by the interviewees (Michel, 2001). If the incidents have happened long time ago in the past, it is reasonable to suspect the accuracy of the description, so there could be memory divergence or lapse (Gremler, 2004; Singh & Wilkes, 1996), or possible reinterpretation of the incidents by the interviewees (Johnston, 1995).

When the respondents are asked to provide descriptions of the incidents, it is almost impossible for them to tell every side of the story, but only report the experience from their own perspectives. This will lead to bias that weaken the reliability of data. In addition, the CIT method requires a detailed description of each incident, but usually the respondents are not research method experts nor have had sufficient knowledge of the CIT method. Thus, sometimes the respondents might not be capable or willing to make an effort to articulate all the details and the full story of every incident (Butterfield *et al*., 2005; Edvardsson & Roos, 2001; Gremler, 2004). This can result in a low response rate (Johnston, 1995). The lack of details provided in the descriptions will arise the reliability and credibility issue of the CIT method.

The CIT method also allows freedom for the respondents to give their responses as much as possible in hope to gather adequate data to analyze. However, again the respondents are not the CIT method experts. For instance, in this study, the target respondents were practitioners in organizations, so they might not yield enough knowledge of research methodology. In this case, the interviewees might provide long and elaborative descriptions of incidents that they might consider as critical, but the information they provided might depart from the research focus, and the salient aspects of their responses might not be useful enough to answer the research questions of the study.

The unreliability of the CIT method might also be due to the misinterpretation or misunderstanding of the responses (Edvardsson, 1992; Gabbott & Hogg, 1996; Gremler, 2004). Researchers who conduct CIT studies might interpret the stories wrong or interpret them with inevitable personal bias. When coding the responses and classifying them based on patterns into categories, concerns might arise because of the ambiguity and variations of the classification protocols and the coding rules associated with a particular study (Grove & Fisk, 1997; Weber, 1985).

To overcome the limitations of the CIT method, credibility and trustworthiness checks have always been emphasized in major studies where the CIT method was used (Andersson & Nelson, 1964; Butterfield *et al.*, 2005; Coetzer *et al.*, 2012; Flanagan, 1954; Gremler 2004; Ronan & Latham, 1974). Besides, Coetzer *et al.* (2012) proposed different strategies to cope with the limitations of the CIT method that this present study can adopt. First of all, respondents who agree to participate in the study should be encouraged to recall and record details of their practice and experiences before the interview is conducted. In this study, an example of a critical incident was provided at the beginning of the interview to inform the respondents regarding what incidents would be of interest in this research, as well as to how much detailed information was expected to collect. Memory-aide in a form of a list of key questions and information expecting to be collected during the interview is also a helpful strategy for helping the interviewees to recall their experience (Bradley, 1992).

Semi-structured interview. Except for the CIT method, semi-structured interviews were also used to gather responses for the study. As a method that allowed the researcher to initiate a face-to-face conversation with the respondents, using semi-structured interviews provided an opportunity for the researcher to exploring responses with details. There are four features that semi-structured has as designed practice (Wengraf, 2001). A semi-structured interview is often appropriate for conducting studies for improving knowledge. It sometimes appears as an in-person conversational interaction, but the interviews must be well-designed with a list of questions. These interview questions must be perfectly aligned with the research questions of the study. In the meantime, given the fact that the responses to these questions are unpredictable, researchers are allowed to ask follow-up questions to evoke detailed information. Indeed, a semi-structured interview is highly in-depth interview method.

In this study, semi-structured interviews were viewed as a proper means for gathering responses. Since the literature has not provided much insights or previous knowledge, asking those managers responsible for replying to training requests was a direct and efficient way to learn about the decision-making approaches that they had used in practice.

Research Process

A step-by-step research process was applied in the study. The first step was identifying research respondents. The second step was developing the interview protocol. The third step was collecting data. The fourth step was analyzing the data to find themes.

This section introduces details about each step of the research process. The first part discusses how to identify respondents, including the sampling approach, the criteria for selecting respondents and the sample size used to recruit respondents for this study. The second part explains the three stages of developing the interview protocol for the study. The third part focus on the procedure of collecting data for analysis. Finally, the last part describes how the qualitative data was analyzed for this study.

Step 1: Identify Research Respondents

The respondents of this study were senior managers who were reported to be responsible for responding to clients' training requests in U.S organizations. The respondents were individuals who have been in a senior management role for at least three years. They identified themselves as senior managers in either line departments or HRD related functions in their organizations. All respondents reported that they had experiences with approving employees' training requests, managing training programs, as well as developing and delivering training to others in the organization.

Sampling approach. The primary sampling approach used for the study was purposive sampling (in some studies, it is referred as purposeful sampling, e.g. Creswell, 2013). A list of criteria was developed to help define the sampling frame of this study. Using this list of criteria, the researcher used personal connections in a variety of organizations in the U.S. to recruit respondents for this study.

Purposive sampling is the most commonly-used non-probability sampling approach (Guest *et al.*, 2013). Non-probability sampling does not require random sampling procedure, nor to produce statistical generalizability inferences. Therefore, it is a proper sampling method for this study. The purpose of purposive sampling is to seek information-rich cases for in-depth investigations. The selection of respondents using purposive sampling depends on how the researcher want to collect information from them (Patton, 2002). Purposive sampling helped the researcher select a group of respondents who served the best for the intention of this study. The list of criteria proposed below identifies prospective individuals who might be eligible as a respondent for the study. The list was helpful with choosing the group of individuals for initial contacting, and the final sample of respondents was decided based on the willingness of the individuals contacted.

Criteria for selecting respondents. The respondents of this study were individuals who were reported to:

- Serve in a senior management role for at least three years
- Have job duties of approving internal clients' training requests and managing training programs

- Are employed in a medium-to-large-sized organization that has 250 current employees or more
- Work in the same organization described above for at least four years

Sample size. Previous studies using qualitative research have discussed the appropriate sample size for interviews (Guest *et al.*, 2013). Creswell (2006) suggested that five to 25 could be a proper range of sample size for a phenomenological study. Kuzel (1992) recommended a 12 to 20 sample size to collect data for qualitative studies. Dukes (1984) recommended three to ten respondents for a phenomenological research. Riemen (1986) recruited ten individuals for his study. Creswell (2013) also stated that a narrow range of sample size would be more suitable for phenomenological studies, but most importantly, all respondents must possess the experiences with the phenomenon of interest. Based on the recommendations among qualitative research literature, this study aimed to recruit eight to ten respondents who met the selection criteria introduced earlier in this part.

The sample size of this study was also defined by another unique aspect—the number of critical incidents collected. When using the CIT method, the sample size should also be based on the number of incidents collected (Bott & Tourish, 2016; Sharoff, 2008). Flanagan (1954) proposed that 50 incidents could be seen as a satisfactory sample size, which had been perceived as a reasonable sample size for many researchers in their CIT studies (Butterfield *et al.*, 2005). According to the reviewed literature, a range of 32 to 89 incidents has been used as a valid sample size in research that used the CIT method (e.g. Coetzer *et al.*, 2011; Cunha *et al.*, 2009; Dasborough, 2006; Ellinger & Bostrom, 2002; Kaulio, 2008; Kvarnström, 2008; Peus *et al.*, 2013).

Since this study aimed to recruit eight to ten respondents to interview, each respondent was asked to recall and describe three to five critical incidents within the research scope. Thus, in this study, an appropriate sample size of incidents was expected to be between 24 to 45 incidents. The researcher encouraged the respondents to give as many critical incidents as possible to achieve this goal.

Step 2: Develop the Interview Protocol

Respondents were encouraged to recall as much experience as possible regarding their past decision-making practice. The key to achieve this goal is to have a carefully-developed interview protocol. This required the researcher to: first, revisit the purpose and research questions of the study; second, develop a clear definition of a critical incident; design a list of semi-structured interview questions. The whole process of developing the interview protocol included three major stages: initial stage, the pilot study and the finalization of the protocol.

Initial stage of developing the interview protocol. Overall, the initial interview protocol consisted of five components: 1, introductory statement; 2, provide examples of a critical incident of receiving training requests; 3, collect critical incidents of receiving training requests; 4, collect detailed information regarding the managers' decision-making process; 5, conclusion.

Each component had their specific purpose. The introductory statement served as the opening statement to introduce the researcher, the research itself, the purpose of the study, the goal of the interview, collect consent from the respondents, and make other logistical announcements that need to be addressed before the interview. The introduction was meant to break the ice as well as build trust between the researcher and the respondents. According to Bott and Tourish (2016), in order to establish clarity during the interview and to make sure respondents understand and support the focus of the study, it is important to have a clear understanding of the definition of a critical incident that suits the purpose of the study. Clarifying the meaning of critical incidents might not be a common practice of other studies using the CIT method (Bott & Tourish, 2016). The introductory statement also served as the declaration of the general aims of the research.

The next component in the interview protocol, provided an example of critical incidents of receiving training requests, was designed to fulfill the purpose of setting up and clarifying the meaning of a critical incident. Flanagan (1954) introduced his definition of a critical incident. It refers to any observable human activity that can produce inferences and predictions about the person who completed that activity. In many previous studies that used the CIT method, respondents were asked to provide both negative and positive incidents (e.g. Bott & Tourish, 2016; Druskat & Weeler, 2003; Lapidot, Kark, & Shamir, 2007; Moss *et al.*, 2003; Wolff *et al.*, 2002). The CIT questions developed for this study followed this insight, because Dasborough (2006) found that if no particular direction was given, the respondents would tend to recall only negative incidents. To obtain all-round and commonly encountered experience from the respondents, the CIT questions were open to all kinds of previous experience with receiving training requests.

A pre-written scenario, which was adopted from Jacobs (2016), was presented to the respondents. This Ring-Ring scenario (see Attachment I) was a quick and easy presentation of a training request most professionals get at their daily work. The scenario served as a critical incident itself, and the respondents were asked how they would respond to this request. The prompt had been proven effective in many HRD workshops and consulting service sessions. Further, the researcher explained to the respondents that for the rest of the interview, they would be asked to describe the training requests they had received in the past that were similar to this Ring-Ring scenario. Each respondent was encouraged to give three to five critical incidents during the interview.

The next part of the interview protocol was collecting the critical incidents of receiving training requests from the respondents. In the initial stage of interview protocol development, the researchers outlined the key CIT questions, in hopes of getting enough critical incidents to analyze for this study. The questions are:

- *Please identify one training request you have received from the internal clients within the past 5-8 years.*
- *Please describe that training request to me.*

The next component of the interview protocol included a series of semi-structured interview questions. The purpose of designing these questions was to probe more details of respondents' decision-making process in responses to the training requests they received. Respondents were prompted to describe their decision-making process after they gave each critical incident of receiving a training request. Due to the semi-structured nature of the interview, additional probing questions were asked in order to collect more data and to help the respondents to elaborate their experiences.

Some examples of the semi-structured interview questions are listed below:

- *Upon receiving that request, did you ask your clients any additional questions or information? If yes, what questions did you ask?*
- *Did you discuss the request with your supervisors or staff members? If yes, what did you discuss with them?*
- *What were some considerations you used when deciding how to respond?*

- *What formal or informal guidelines did you use to help respond such requests?*
- *What was your final decision in response to the client's request?*
- *In retrospect, do you think the best decision was made in regards to the requests? Why or why not?*
- *What process did you use to confirm if it is the best decision or not?*
- *Is there anything else you would like to add and share with me?*

The pilot study. In addition to having a list of well-designed interview questions, it was equally important for the researcher to have advanced interview skills. In order to practice and polish the researcher's interview skills, as well as to test the reliability of the initially-designed interview questions, the researcher decided to conduct a pilot study prior to the official interviews. Two respondents were recruited and interviewed in the pilot study. The two respondents are both training professionals who have had four or more years of experience with designing and delivering training programs.

At the end of each pilot study interview session, the respondents were asked to participate in a 10-minute debrief session with the researcher. The research went over questions below and collected feedback from the pilot study participates on issues like:

- *To what degree did the pilot study respondents feel comfortable during the interview?*
- *To what degree do the pilot study respondents think the questions are clearly stated and presented?*
- *Which questions did the respondents not fully understand? How to revise them?*
- *To what degree did the pilot study respondents feel comfortable recalling and describing critical incidents of receiving training requests?*

- *How helpful do the pilot study respondents think the Ring-Ring prompt is as an example of a critical incident?*
- *To what degree do the pilot study respondents think the time allocation is appropriate?*
- *What are other comments or suggestions do the pilot study respondents have for improving the design of the interview?*

Finalizing the interview protocol. The two pilot interviews helped the researcher to validate the interview protocol. Based on the feedback received from the pilot study respondents, and the observations from the researcher, the interview protocol was believed to be valid and reliable for collecting data. The interview questions from the pilot study were kept in the finalized interview protocol with minor grammatical editing. The Ring-Ring prompt was highly praised by the two pilot study respondents and was still kept in the finalized interview protocol. The questions were asked as open-ended questions, and the researcher would be only asking, "*If you were the HRD director in this scenario, what would you do?*" instead of providing five options for the respondents to choose from. Appendix H provides the finalized interview protocol.

Step 3: Collect Data

The following section explains the procedure of data collection for the study. It contains three parts. The first part describes the interview location and schedule. The second part explain the interview process. The third part introduces the self-reflection strategy that the researcher used to improve the quality of each interview session.

Interview location and schedule. The respondents of this study were desired to be individuals who served in a senior-level management position in their organizations. Although the interviews were expected to take place in the respondents' offices of their respective organizations, or a close location that was free of distraction, the research asked the respondents' preference concerning when and where they would like to be interviewed during the recruitment phase. The location and timing of the interviews were scheduled and arranged to ensure the comfort and conveniences of the respondents, as showing respect and gratefulness for their time and valuable contributions to this study. Some interviews were conducted online, for example via Skype, if some respondents preferred that way.

Interview process. At the beginning of each interview session, the researcher introduced herself, the study, and the purpose of the interview. Consent forms were collected before the researcher asked any interview questions, if not before the interview. The researcher followed the interview protocol to ask questions and allowed enough time for the respondents to think about and answer the questions. Given the purpose of the interview, respondents were encouraged to probe in-depth responses from the respondents. Follow-up questions that were not initially listed on the interview protocol was asked for the purpose of collecting more detailed and useful information. At the conclusion of the interview session, the researcher properly thanked the respondents for their time, and a thank-you note was sent out via email one day after the interview.

All interview sessions were conducted and transcribed in English. The general interview flow began with building initial rapport (Guest *et al.*, 2013). Pre-interview interactions took place before each interview section. These interactions included but not limited to communicating via emails promptly and effectively, answering any questions that the respondents might have regarding this study, anticipating and accommodating changes in respondents' schedules and remaining a friendly and respectful attitude when interacting with the respondents. The researcher was fully prepared a few days before the scheduled interview, including getting the interview questions/protocols printed and organized, getting the recording equipment and materials ready, sending reminders of the time and location of the interview and familiarizing with information such as the respondents' name, job title, job responsibilities and their organizations. Interview questions and consent forms were sent via email to give the respondents enough time to review the questions and the content on the consent form.

Audio-recording and note-taking were used to document the interviews for collecting both verbal and textural record of the interview sessions. Respondents were informed of the recording procedure including the usage of digital recording equipment by 1) consent forms delivered before or at the beginning of the interview; 2) oral introductions at the beginning of the interview session. Digital audio recorder was used and placed between the researcher and the respondent where could be seen, if the interview was conducted in a face-to-face manner. The audio records and notes were sources of transcribing the interviews to provide data for analysis.

The research data collected from this study was stored electronically. The notes taken during interviews were typed into an electronic document. Additional principles of data storage introduced by Creswell (2013) were also be followed. All the data files had backup copies that stored in authorized cloud storage space. There was a list of types of information developed when the data collection phase was finished. All respondents' names were removed or replaced by pseudonym in all the data files. A visual data collection matrix that documented the location of data files was created for easy accesses to the interview data during the data analysis phase of this study.

Post-interview self-reflection. As suggested by Guest *et al*. (2013), a 15-to-20-minute self-reflection took place after each interview session. Post-interview self-debriefing helped the researcher to not only evaluate the interview process, but also identify possible improvements. During self-reflection, the researcher reflected on the information collected during the interview that was new or repeating, the flow of the interview procedure, and the utility of the questions. Modifying, adding or reducing questions and adjustment of the order of questions occurred accordingly as the result of each post-interview debrief.

Step 4: Analyze Data

Table 3.1 and table 3.2 show the alignment between the Research Questions 1-3 and the interview questions, and the steps to derive results for Research Question 4.

Table 3.1: The alignment between the Research Questions 1-3 and the interview questions

Research Questions 1-3	Data Sources	Interview Questions
1. What was the nature of the requests that managers received from their clients?	Critical Incidents	1a. Please identify one training request you have received from the internal clients within the past 5-8 years. 1b. Please describe that training request.
2. What were the decisions that managers made in response to clients' training requests?	Semi-Structured Interviews	2a. What was your final decision in response to the client's request?
3. What were the reasons for the decisions made by managers in response to clients' training requests?	Semi-Structured Interviews	3a. Upon receiving that request, did you ask your clients any additional questions or information to help you make decisions? *If yes, what questions did you ask?* 3b. Did you discuss the request with your supervisors or staff members? *If yes, what did you discuss with them?* 3c. What were some considerations you used when deciding how to respond? 3d. What formal or informal guidelines did you use to help respond to such requests? 3e. In retrospect, do you think the best decision was made in regard to the requests? Why or why not? 3f. What process did you use to confirm if it is the best decision or not?

Table 3.2: The data analysis steps to answer Research Question 4

Research Question 4	Data Sources	Data Analysis Steps to Answer Research Question 4
4. What decision-making approaches emerged from the managers' responses to clients' training requests?	All data collected	4.1 Organize all interview data 4.2 Review all the results of Research Questions 1, 2 & 3 4.3 Code the key results 4.4 Categorize similar and correlated codes 4.5 Interpret the categories by assigning names to each category 4.6 Provide operational definitions for each decision-making approach emerged in the data

The data analysis process for this study started with organizing data, followed by identifying themes and establishing credibility of the themes. Dedoose software was used for data organization and analysis. The software did not create codes or categories for the study, but rather was used for organizing codes, excerpts and memos, so that the researcher was able to identify any recurrent patterns within the data.

Organizing data. Since there were two types of data collected for the study, the data organization was completed separately for each type of data.

Critical incidents organization. After obtaining enough critical incidents of receiving training requests, these incidents were revised for clarity and consistency (Jacobs, 1986). Each critical incident that was described by the respondents was revised following a standardized written format. This written format was developed as a result of reviewing and synthesizing 12 peer-reviewed journal articles and dissertations that used the CIT method as their primary research method (e.g. Wessel, 1985; Sherman, 2013; Line, 1972; Jacobs, 2018; Peffers, 2013).

The format is presented in the table below:

Table 3.3: The format used in the study to revise the description of the critical moments

Length	Approximately 3-4 sentences
Grammatical person	First person pronounces singular or plural e.g. I, me, my, we, us, our
Content	• Who initiated the request? • What was the request? • How did the manager make decisions in response to the request?

This format was aligned with the standard format of a critical incident (Butterfield *et al.*, 2005; Coetzer *et al.*, 2012). Upon receiving the transcribed interviews, each critical incident collected through the interviews was revised into a short paragraph with a length of 3-4 sentences. In general, first-person pronounces were used to describe the critical incident. It could be singular, or plural based on the stories. The revised paragraphs shall include enough information on who initiated the requests, the description of the requests, as well as the situation that led up to making decisions. Each component was summarized in 1-2 sentences. Upon revision, all incidents were presented to the field expert of this study for checking the trustworthiness and credibility of the incidents. All revised critical incidents were gathered and organized in one document after all interview sessions were completed.

Below are two critical incidents collected from the pilot study and revised into the format described above.

Example 1: When I worked in XX university, we had a staff of 30 students who led orientation sessions for incoming freshman, so my job was given by my supervisors in the office to develop a program to train these student staff. Based on the mission and vision of my office, as well as my supervisor's expectation, the training program shall target on logistical details of the job, team and community building and a variety of leadership skills.

Example 2: We have a lot of clients who use our online system to generate XX report, so it is very important for them to know how to operate the system. Last year, our department decided to conduct a series of training sessions for our clients to teach them how to use the system. I was one of the staff that designed and delivered such training sessions in my department.

Semi-structured interview data organization. The responses to the semi-structured interview questions were transcribed verbatim after each interview session. All semi-structured interview responses were gathered into one document and ready for analysis once all the interviews were completed.

Using Dedoose to analyze data. Dedoose, a software designed for analyzing qualitative data was used for analyzing the data of the study. All critical incidents and the semi-structured interview data, when finished, were used as the primary data sources. Upon the completion of transcribing and revising, the data were gathered into one inclusive dataset. The finalized inclusive dataset was entered into Dedoose.

Figure 3.1 demonstrated the six-step procedure of data analysis designed specifically for this study. After organization, the inclusive dataset was entered in Dedoose. The entire dataset was carefully read. Notes and memos were taken when reading the data in the software. In the meantime, anything that potentially answered the research questions or reflected any key concept regarding decision-making was highlighted and read repeatedly again. Further, all of the highlighted information was gathered again for coding. The open coding strategy was adopted in this study. The process of coding was performed through aggregating the text into small categories of information. Each highlighted information was summarized into a phrase or short sentences to represent its essence. According to Creswell (2013), codes were anything relevant to this study, including information that the researcher hoped to collect, unanticipated information as well as information that was conceptually interesting and related to research questions of the present study.

Moving forward from coding, all the codes were further identified into themes based on their similarities and differences. When the themes of interview data were available, the researcher interpreted them based on the research purpose of this study. Specifically, a general idea and meanings behind the themes were extracted to answer the research questions. Interpretation of the data was connected to the previous literature review for describing the findings and drawing conclusions. The last step of data analysis of this study was representing and visualizing the data to report and display the findings of the study.

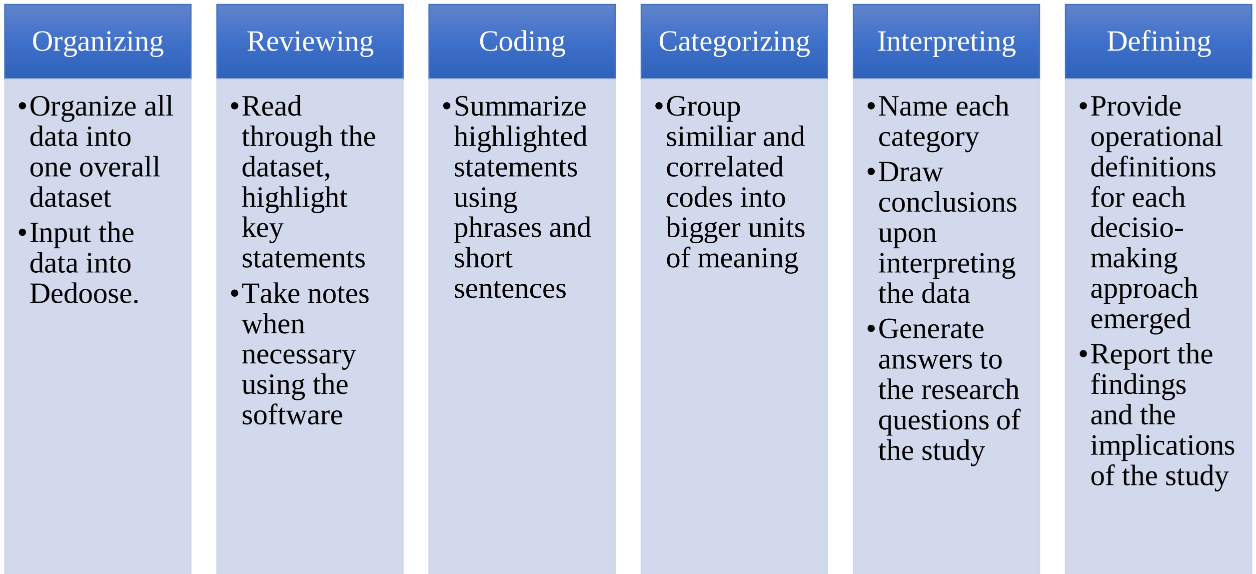

Figure 3.1: Step-By-Step Data Analysis with the Assistance of Dedoose

Identify themes. Data analysis of the study was accomplished by using qualitative analysis method. The information within the inclusive qualitative dataset was coded and categorized into themes to represent common and different ideas in the interview responses. The findings were further interpreted and reported to answer the research questions of the study. The process of assigning themes and interpreting the results followed a six-step procedure introduced above, which was originally proposed by Creswell (2013).

All data collected were analyzed using thematic analysis, a data analysis strategy under the category of qualitative analysis that appears in the literature of many fields, such as psychology, sociology, history, economics, biology, astronomy, so on and so forth (Crabtree & Miller, 1992; Denzin & Lincoln, 1994; Marshall & Rossman, 1989). Thematic analysis is also a method used in practice. Practitioners like management consultants also apply this data analysis approach in analyzing new market trends, organizational strategies and organizational culture (Boyatzis, 1998). Thematic analysis is a process of encoding qualitative information for investigating complex research problems (Boyatzis, 1998; Thomas & Harden, 2008) by searching, analyzing and synthesizing recurring themes within the dataset (Braun & Clarke, 2006). Boyatzis (1998) introduced five purposes of using thematic analysis. Thematic analysis of qualitative data can serve as a way of seeing, a way of making sense out of scattered material and a way of analyzing qualitative information. It can also be useful to systematically observe an object or phenomenon, whether it is a person, an interactive relationship, a group, a situation, an organization or a culture. Thematic analysis also converts qualitative information into quantitative data that are understandable for more people with interest, if proper technique is used. As a result, thematic analysis allows researchers and practitioners to interpret and communicate information of people, organizations and events systematically.

One principle the data analysis process of this study must follow is to increase the use of data to the largest extent, with the least alternation and sacrificing of the comprehensiveness and validity of the data (Flanagan, 1954). Thematic analysis can be accomplished by encoding qualitative data into themes. Themes, in qualitative research study, represent the recurring patterns within the data, and they are broad units of information containing similar codes that reveal a common idea (Creswell, 2013). One characteristic of theme is recurring. The repetitive patterns existing in the data will be recognized as themes as they represent recurring responses or meanings to some degree (Braun & Clarke, 2006). Therefore, the goal of conducting thematic analysis is to identify the recurring themes to organize repeating ideas that commonly appear in the responses, and therefore to disclose any potential generality within the dataset (Ayres, Kavanaugh, & Knafl, 2003; Bradley, Curry & Devers, 2007; Buetow, 2010; Ryan & Bernard, 2003; Vaismoradi *et al.,* 2016). Thematic analysis is a proper data analysis method for this study due to its nature of flexibility. It allows the researcher to interpret and examine different aspects of qualitative data based on personal knowledge and understanding of the issue to answer the research questions (Boyatzis, 1998; Braun & Clarke, 2006; Vaismoradi, Turunen & Bondas, 2013).

The purpose of this study is to understand and describe the decision-making approaches used by managers when they respond to internal requests of training. Therefore, the use of the results of the study is to present a specific on-the-job activity of training managers (Flanagan, 1954). Knowing this as the primary aim of this research, identifying themes in this study was an inductive process. The following rules were adopted from Kuckartz (2014) and applied during the process of data analysis:

- The themes must be established in connection with the research questions of this study;
- The themes must be grounded to the data collected for the study;
- The themes must by mutually exclusive from each other;
- The themes must be established based on the reoccurring patterns identified in the data, therefore must not be too detailed or too abstract;
- The themes must be established to reflect the interpretation of the researcher. As a result, the researcher is required to recognize the deeper meaning of the respondents' responses to the interview questions.

Establish credibility and trustworthiness of the themes. Reliability and content validity were constantly examined when the researcher developed the instruments. The researcher referred to a variety of literature in designing qualitative research and studies employing semi-structured interviews and the CIT method to construct the interview questions and protocols. The researcher also consulted experts in qualitative methodology in the University of Illinois at Champaign-Urbana to ensure the reliability and validity of the interview questions.

A pilot study with two respondents was conducted to validate the interview protocol, as mentioned earlier in this chapter.

During each interview session, a sample scenario was provided as an example of critical incidents that were under investigated in this study to ensure the validity of the information provided by the respondents. The researcher provided a copy of this scenario and read loud during the interview. This was to hope to set a guidance in terms of the narratives or experience that the respondents were expected to articulate on. The sample scenario was presented in Appendix I.

Unfortunately, there is not a definite rule or standard to judge the results of data analysis in CIT and semi-structured interviews. The identification of themes largely relies on subjective determinations. Due to this reason, it is necessary to submit the identified themes to others to review, to ensure the reliability of the results (Flanagan, 1954). Throughout the process of data analysis, the field expert of this study was consulted on a regular basis, who helped the researcher to ensure the credibility of the revised incidents, and the reliability of results of the thematic analysis.

CHAPTER 4: RESULTS

Chapter 4 includes five sections. Section one presents the nine respondents' demographic characteristics. Section two through section five present the findings that addressed each research question of the study.

Demographic Characteristics of the Interview Respondents

The criteria used for selecting the respondents for this study was introduced in previous chapter. To collect the most descriptive data for the study, 13 prospective respondents who met the criteria were initially contacted via email. Nine interviews were successfully conducted to gather qualitative data to draw conclusions and implications.

Table 4.1 shows the detailed demographic information of these managers who participated in this study. All nine respondents were senior level managers in their respective organizations, and eight of them said that they had more than ten years of firm time in their organization. Among the nine final respondents, five managers were reported to be from the HRD department in their organization, three managers were reported to be from the IT department, and one from the Tax department. All organizations that these nine managers were reported to work in were nation-wide and well-known medium to large sized companies in the industry of safety science, financial services, accounting services, relocation services, HR consulting, insurance and public sector. Finally, all managers identified that they were responsible for training and developing employees either in their department or across their organizations.

Table 4.1: Respondents' Demographic Characteristics

Respondent	Job Title	Dept	Firm Time (yrs)	Business Type
A	Technology Manager	IT	18	Insurance
B	Technology Manager	IT	18	Insurance
C	System Manager	IT	32	Insurance
D	Digital Transformation Manager	HRD	10	Safety Science Company
E	Associate Director	HRD	19	Public Sector
F	Training & Development Manager	HRD	12	Financial Services
G	Manager	Tax	10	Accounting Services
H	Global Leader	HRD	10	Relocation Services
I	Project Manager and Senior Training Consultant	HRD	4	HR Consulting

The next five sections present the key findings of each research question. Qualitative data analysis approach was applied to generate the findings of the study. The data analysis process was supported by using Dedoose software.

Research Question 1. What Was the Nature of the Requests That Managers Received from Their Clients?

The first research question was addressed by analyzing the critical incidents provided by respondents of the study. Overall, 41 critical incidents were collected. All 41 critical incidents were identified, and revised following format of critical incidents as specified in chapter four. Appendix L lists all 41 critical incidents of receiving training requests from clients.

Five major types of requests were identified through analyzing the critical incidents. When managers received training requests from their internal clients, the requests were found to be one of the following:

- Clients requested a technical training program to provide various skills.
- Clients requested an awareness training program to explain on-going changes in the organization.
- Clients requested a managerial training program to support current and prospective managers and supervisors.
- Clients requested a compliance or safety training program be scheduled.
- Clients requested a customized training program based on perceived performance issues.

Table 4.2 presents the five types of the requests that managers received from their clients, the critical incidents that represent this nature of request, and the frequency of critical incidents that represent this type of request.

Table 4.2: Nature of the requests that managers received from clients

Nature of The Requests That Managers Received from Clients	**Critical Incidents**	**Frequency**
Clients requested a technical training program to provide various skills.	1, 4, 7, 8, 12, 13, 15, 17, 29, 30, 31, 32, 33, 34, 41	15
Clients requested an awareness training program to explain on-going changes in the organization.	2, 6, 9, 10, 11, 14, 18, 19, 21, 27, 37, 40	12
Clients requested a managerial training program to support current and prospective managers and supervisors.	3, 16, 20, 22, 23, 24	6
Clients requested a compliance or safety training program be scheduled.	28, 35, 36, 38	4
Clients requested a customized training program based on perceived performance issues.	5, 25, 26, 39	4

Findings: Research Question 1

The findings suggested that managers received five types of training requests. Following is a discussion of each type of training request.

Clients requested a technical training program to provide various skills. 15 of the 41 critical incidents indicated that managers received technical training requests from their clients. Critical incident 13 and 30 are presented below as illustrative examples.

Critical Incident 13

> A client requested sales training from me and upon questioning, I learned that the product that they were trying to get everybody to sell, there was no incentive to sell it, but there were compensations to sell other products. So I am not sure it is a skill problem at that point, it could be a problem with incentives. I need to ask more questions to make sure it is actually knowledge or skill that is getting the way of performance before I responded to the request.

Critical Incident 30

> I received a request from the Vice President of Finance in our company on how to use knowledge management in finance department, how to keep the content up to data and organized so people can find them easily. I had a meeting with the V.P. as well as some people in finance department to have a better idea of what the problem might be. I am not sure if it is knowledge management as what the V.P. stated, my hunch is content management is what he needed, but I would like to put something together for next steps whenever they are ready, and then we could experiment more. Until we talk about this more, we do not know.

Many respondents recalled that fellow employees requested a technical training program especially when new methodology or technology adopted in their organization. The purpose of requesting this type of training was to familiarize employees with necessary knowledge and skills so that they would be able to successfully perform their work. Below is a critical incident shared by one respondent.

Critical Incident 15

> I was responsible for conducting a quarterly week long, meaning 5 business days, training session on wireless communication technology. The audience for that training included members of our regional office staff, and members of management would take that same class to become familiar with the technical work that their people were doing. Most of them were not new to the organization but perhaps new to that role. Even though the employees who were taking that course were not new to the organization, the technology, the subject matter was relatively new to many people.

Critical incident 17 showed that one respondent received requests for technical training due to the increased amount of customer complaints.

Critical Incident 17

> Our organization was receiving concerns from our outside offices that people did not understand the wireless technology well enough to support the products and services, or deliver the immediate training to others, in other words, there is no “train the trainer” environment. I was involved in making the decision we would develop a wireless technology training program for the company that would be offered to the selected employees that were close to that work of

supporting those products and services. I also helped coordinate some research that helped us to figure out which office needed the training the most based on their operational and technology needs. We implemented a classroom training to overcome the concerns as well as to establish a “train the trainer” program with a site visit to one of our vendors incorporated.

Sometimes a technical training program was requested by employees because they would like to obtain certification from the industry. Critical incident 8 was an example where one manager identified a former employee from his department who requested a training program to get a certificate in the area where this employee wanted to work for.

Critical Incident 8

One of my team member’s career goals and security plan is to get into the security-related job here. So he request to be able to get a certificate in security. I know that was part of his development plan and goals, so he is a happy employee if his able to do the type of work they are interested. Security is one of the area that is growing, and we have a need for a lot of talented people here in this company. Other thing is that the training is self-directed combined with a few internal online trainings, so it would not a disruption of his day-to-day work. The downside was that I had to replace him. Understanding what the need of the company was and knowing the employee’s long-term goals and he will still be working at his job while taking the training, I went ahead and approved the training.

Not only individual employees requested training programs to help them obtain the skills and knowledge to perform their job, people in management position would also request technical training for better team performance. For example, one manager received request for training on a specific software from the director of sales in his organization.

Critical Incident 31

> The director of sales requested a training on Microsoft Dynamics through email. Upon receiving this request, I had a follow up meeting with this person and asked more questions, including the learning needs and what they planned to do in terms of the training plan and developing the materials. I sent them examples of templates that we had as well as an instructional design guideline that we used and suggested that we need to emphasize reinforcement after the training is conducted.

Clients requested an awareness training program to explain on-going changes in the organization. Another frequently-mentioned type of training request was awareness training that explained on-going changes in the organization. Organizational changes that drove the needs for training included expansion of the organization into international market, acquisitions of other business, newly adopted work process, new products and services, etc. Critical incident 9 and 14 are presented below as illustrative examples.

Critical Incident 9

> My company provides this training on excellence on operations management, which is a system that helps people work more efficiently. I did not have any expectations of the training in terms of the changes we would want to see after the training. I just hope people can go take the training and say, “this is what we can do” and “this is how we should do things”. I sent my employees to take that

training, but the results were not effective. The training was informative, yet we could not apply it with our work here.

Critical Incident 14

We had a new feature for our product called freeze-it, all of the 4000 agents have to know about it, have basic understanding about how it works, and they need to be able to answer the questions from customers, so we had to train all 4000 the agents on this kind of changes incessantly. The return on investment on actually training agents is really really tiny, but we are still going to do it because it is unacceptable for us to have a customer call and the agent not be aware that we have this functionality or understand how it works.

As the organization kept growing across the world and became an international business, training became critical to new employees as well as current employees for receiving updates regarding organization's missions, strategies, structures, etc. One critical incident showed when their company began implementing a new work process, the respondent's role as the training and development department manager needed to "get everybody align to this new skill". Another critical incident also indicated that she provided training to other colleagues and employees if "there is a new approach or methodology we have to use in our daily work". Similarly, one respondent recalled the time when they received training requests due to organization changes.

Critical Incident 6

The IT department sent me a request about a confidential project. The organization was mobbing a large portion of the relocating process to a newly created office, while the IT department was working on re-configure the updated system in terms of removing fields, process fields, it would interrupt the current counselor’s work in the system. We actually put them through our training to show them what happened when they were working in the system at the same time, to help them how to avoid the conflicting situation. At the end, we decided to create two different environments, one for the IT department do their work while the other one is for us to conduct training.

Clients requested a managerial training program to support managers and supervisors. Managers often received requests for providing managerial training programs to support current and prospective managers and supervisors in the organization. In non-HRD departments, managers were frequently asked to serve as mentors. Employees would seek for mentors who could provide guidance on career development, answer questions at work, advise them on how to navigate the organization or how to transit between roles if they recently received promotion, and to fulfill other individual needs for improving management skills. Critical incident 22 and 24 are presented below as illustrative examples.

Critical Incident 22

I had an employee named John. He was at a point in his career pursuing leadership in the organizations. Realizing that he had exceptionally strong background in both business and technology, as well as his personal life situation—he had a young family, I guided him with multiple options and analyzed the pros and cons of each option for him by giving him input how he could best leverage his situation with specific training options. As a result, he has got into leadership within the architecture space, and it all worked out great.

Critical Incident 24

> Someone in our firm specifically chose me to be their coach, and I accepted the request, because that person wanted a different female manager perspective. Before I offered any career advice to that person, actually it was more challenging for me because I did not work with that person at all, I let her know that I could give her advice more on a personal and general level and I brought another person onboard in order to get her on the next level because the outsider had more insights on the career paths system that our firm is implementing.

Respondent I shared a critical incident when she received a request for improving managers' communication skill and coping with different reactions of employees during the performance evaluation process.

Critical Incident 3

> There were clients asked us to do a training once a year for the managers who oversaw performance evaluation using performance ratings. In most cases, there were clear performance rating structure established in the organization, but the managers also needed to be well trained on how to deal with different employees' reactions to their performance rating. We decided to include in the training to help managers to prepare themselves with good communication skills before the performance appraisal meetings.

Clients requested a compliance or safety training program be scheduled. Respondents provided four critical incidents where compliance or safety training was requested. Due to the nature of this type of training, the requests were submitted to follow the industry standards. Sometimes, the training was required by laws and regulations and it must be conducted at a proper time following a guided procedure. Critical incident 35 and 36 are two examples of this type of training request.

Critical Incident 35

Regulatory touch points are enforced on many activities that all agents on the phones. If an agent reopens a closed account because of its previous suspicious activity, one single charge go through that account after it is flagged for suspicious activity, that is $275,000 for every transaction. So we roll out training related any one of those regulatory touch points for every single time because the consequences of not doing so would be very high impact. We have actual real numbers of what would happen if somebody makes this error.

Critical Incident 36

We have learned that smoke has carcinogens in it and fire fighters absorb those carcinogens through the skin on their face in work, so there is a higher risk of cancer in firefighting than in other organizations. We decided to change fire fighters' behavior and make them use a baby wipe after they come out of the fire. We put up signs, says "remember to wipe your face", as an environmental cue or a prompt to remind people of what their right behavior is.

Clients requested a customized training program based on perceived performance issues. Managers reported that they received training requests from clients based on perceived performance issues. The performance issues could be caused by external factors such as changes in economy and markets, cultural, language and time zone differences, technology advancement, as well as other factors that led to growing demands in training to get employees familiarized with up-to-date knowledge and skills. Following are two critical incidents that exemplified this type of training request.

Critical Incident 5

We did not initially have new hirer training when I started with the organization, we were quite small, about 800 employees, but as the organization continued to grow internationally, we need to train all these new hirers on who we are as an organization, what do we do, where we located, who are our leaders in the organization, how are we structured, etc., who are some of our major clients. Because I directly reported to the CEO and the president of the organization, and I also had a good working relationship with our operational managers globally, I could reach out to them and understand their needs, their clients and how large the team will grow to. At the end, I was able to put together a nicely comprehensive onboarding new hirer training customized for each region.

Critical Incident 39

We trained all the chemical response team in Hong Kong on how to teach out courses back in Hongkong to the national standard. We tried to do the same thing in Guangzhou, China but it did not work. We then learned that the fire department in Mainland China is military not civilian, so the same types of training did not translate. So I went to Mainland China to meet with the professors and people from the Chinese arm force police academy to understand how the training fire officers in china different from training fire officers in the U.S. We now are having people going to Langfang twice a year, deliver classes, because we learned how to apply this process to the demands of the Chinese military fire department.

The manager at the fire services institute elaborated on a particular critical incident. He explained how the changes in economics and farm markets led to the increased number of fire incidents, and therefore resulted in increased training requests for firefighting.

Critical Incident 25

We received increased calls because there was a higher number of accidents on farms because farmers will stock piling the corn, waiting to the price to go up, waiting for the ethanol demands to increase. We were confronted with an issue where there was a training need that was not what we anticipated, and we have more demands of classes on how to rescue farmers that were trapped in grains. After understanding why that was happening, we created a training program with firefighting on how to rescue someone who’s trapped in the grain building, and also cooperated with the farm bureau of the state to help educate the farmers on how to prevent fire in the first place. We started about five years ago, and the farmers are interacting with firefighting before there is an emergency, so they get to know each other better before there is a problem, and possibly prevented a problem.

In response to Research Question 1, managers reported that they received five types of training requests. The results of analyzing 41 critical incidents suggested that clients requested technical training programs for obtaining knowledge and skills, awareness training programs to explain on-going changes in the organization, managerial training programs to support current and prospective managers and supervisors, compliance or safety training programs to be scheduled as required by laws and regulations, and customized training programs based on perceived performance issues.

Research Question 2. What Were the Decisions that Managers Made in Response to Clients' Training Requests?

The second research question was addressed by analyzing the semi-structured interview data using qualitative analysis approach. Appendix M presents the coding scheme that was used to answer Research Question 2 and 3. During the interview, respondents were asked to describe their final decisions in response to clients' requests for training. In many cases, managers would approve the training requests submitted by the clients. Sometimes, they would approve the requests without any changes. Some managers preferred to give clear and immediate instructions on how and what the requesters need to do soon after they submitted a request for training, while in many other situations, managers performed a long-winding process of analysis to draw conclusions and make final decisions. Most respondents of the study explicitly mentioned that they would not only design, develop, or approve the requested training program. They also included appropriate change management efforts to help reinforce learning results and consolidate the solutions to performance issues in a long term. In other situations, managers did not approve the requests due to a variety of reasons.

Findings: Research Question 2

Results from analyzing the semi-structured interview data indicated five responses of the managers to clients' training requests:

- Approved the training request without any changes

- Approved the training request and suggested appropriate change management efforts to reinforce the results of training
- Approved the training request and gave immediate instructions on what clients should do
- Approved the training request and directed clients to multiple existing programs
- Did not approve the training request for a variety of reasons

Approved the training request without any changes. One type of decisions that managers made was to approve the training programs as requested. Usually, this response was made due to a few different reasons. Respondents explained that they approved the training requests if the training would bring values back to the organization and had significant benefits compared to the cost of training.

> Knowing that is part of his development plan and goals, I went ahead to approve that training, even though it is not applicable to his current job assignment or any of the work that we did…My thinking behind my decision is that our organization is very risk of verse and very security heavy, so security is one of the area that is growing and we have a need for a lot of talented people. (Respondent C)

If the cost of training was acceptable for the team or the company, managers approved the training requests. The cost of training not only concerned the budgetary cost and expenses, but also included the time cost and human resources cost. Respondent C shared a particular critical incident. One employee in his team requested to attend a training program for obtaining certification from the IT industry. Respondent C considered that if this employee would have to leave for a long period of time to attend such training, which might cause the team to lose productivity. Respondent C said he approved this employee's request because "it was not a disruption of his day-to-day work, so he was able to do the training without disrupting his current workload". Respondent F also mentioned the same rationale behind her approval of one training that she received in the past.

> In [the same time of] this particular training, this year, I am going to have several people traveling to another location to support our annual agency convention, we do it every four years, so I am gonna be short on people anyway. (Respondent F)

In the meantime, if the requested training program benefited the requesters' professional development, managers approved such requests, because attending the program would result in better job performance and increased job satisfaction of the employee.

> He is a happy employee that they are able to do the type of work they are interested. And it also met our needs, because we need good security people. (Respondent C)

Approved the training request and suggested appropriate change management efforts to reinforce the results of training. In some cases, managers not only approved the requested training program, but also suggested appropriate change management efforts to reinforce the results of training in order to solve performance problems in a long term. Many respondents believed that training was not the only solution or the only response to the requests. Appropriate change management efforts must be a part of the response and implemented department-wide or organization-wide. These change management efforts were as important as the training program.

> Once all these changes had been made in the system, [when] we know it was going to work that their objectives would be met once we train the new team in Bangalore, then we put together a change management process, if you will. (Respondent H)

> If a consensus needs to change or a system needs to change, or something else needs to change, we try to make sure we capture that in our business case documentation so that is part of the change plan, and [make] them realize training is one small piece of the change plan ordinarily, it is not the [entire] change plan. (Respondent F)

Managers proposed specific change management processes to implement in the organization along with the requested training program. For instance, one respondent suggested to make a static training environment. This digital training environment would not be affected by the user interface changes, which had negatively impacted the training practice before, “So eventually what we were able to do was to create a training environment that is static, so it did not change” (Respondent H). Other respondents included job aids to reinforce learning and to ensure learning transfer, “User support. After training support. If you can have a job aids, or a reference guide, or coach, it will be helpful, and you do not have to redo the training” (Respondent D).

Incorporating hands-on practice and real-world problems were also two decisions made by respondents to maximize training results. Five of nine respondents of the study emphasized the importance of having experiential learning as a component of the experience.

> Another development I incorporated was we wanted folks to be able to have an opportunity to visit a vendor location where they can see a little bit behind the scenes on how the technology works. (Respondent A)

> So it is an interesting journey, but it certainly has the application of design thinking because they are ideating, they learn from each other, they are using different design strategies, and the learning [result] is that they solve a particular problem. (Respondent D)

> After they had officially started doing the validation, they had to talk to a real client, it increased the complexity of the job because the clients might react in very different ways, they might have very different questions. The other improvement we are going to make is help them through the process like they can see how I communicate with a real client. How I respond to a client's requests or questions. They might get a better sense about how they communicate with a real person. (Respondent I)

Approved the training request and gave immediate instructions on what clients should do. Upon approving the requests of training, some managers chose to give immediate and clear instructions about what clients needed to do next. For example, respondent B was asked to serve as a fellow employee's mentor in his organization. When he received this request, he articulated his expectations to the mentees, and offered immediate instructions on what the mentee needed to do for succeeding in his current and future position.

> When I meet with anybody who seeks for leadership mentorship, I let them know the very first meeting I expect you to set up the agenda, I expect you to let

me know what the agenda is going to be ahead of time so I can prepare, and then we will get together and go through it. (Respondent B)

Respondent G encountered a very similar situation. An employee in her organization asked her to become a career coach. Upon receiving this request, she gave this employee very clear directions and instructions to help her become a better job performer.

> I try to give them some goals, like "now you are at the senior level, you need to be focusing on a few areas. Let us make sure we are focusing on those and track those. When we meet together, we can see where things are going"…I was happy to be her coach, but again you kind of have questions too, because my goal as a coach is to give her career advice and it is more challenging for me when I do not work with that person at all, or that industry at all, or that service line at all. So I have to be a little careful and let them be open and honest again, saying "I can give you advice more on a personal level, and a general level, but to get you on that next level, I might have to go outside, not just me, and to get more input" (Respondent G)

In another situation, one of her team members had difficulties to perform his/her job, therefore requested training in hopes to obtain knowledge and skills for better job performance. After identifying where the knowledge and skill gap was located, she also quickly told the employee what needed to done in order to overcome the difficulties and to gain knowledge and skills of the subject matter.

> If you are testing a bank acquisition, a client might have 3-4 bank acquisitions. We may say, it is going to take you an hour, or it should take you an hour to do all this bank acquisition test. (Respondent G)

Approved the training request and directed clients to multiple existing programs. Managers suggested clients to multiple existing training options after they approved the training request. Often time, managers knew that the requested training program had already been offered in the past, or there were other resources that clients could take advantage of to fulfill their needs. Managers did not point the clients to one certain training solution, but rather assisted them to select a proper training program among many choices, informed them available internal training resources within the organization, and pointed the clients to existing resources that were already available for them to select from.

> We have a good deal of training that is online in nature, meaning it is available virtually, but there are still training opportunities both required and desired that are more classroom in nature. As a manager, I am involved on a daily, weekly, monthly basis with helping my employees or a peer group determine whether or not a training may or may not to be appropriate for them to take. (Respondent A)

> I know where the resources are myself, I can say "start with these", a lot of stuff is on our intranet, if there is something out there that I think they could start with first, or if it is conceptually stuff, we have some on demand CPE that they can go to do some of the additional training, if for some reason, they just need some basic training on how to do a single lodger, the details of a single lodger before I go out there, vs. taking up somebody else's time, not that they would be mad about, but vs. having someone explain every single thing to them. (Respondent G)

When people sometimes come to us with request and say “I want to build problem solving skill on my team”. We can help direct them to the offerings that already exists. (Respondent F)

Then I would ask “do we already have existing content?” because that is always a question before you design new product. Sometimes there may be ongoing kaizen training in different areas of the company, and you wanna refer that person to someone who is already doing that. (Respondent D)

Did not approve the training request for a variety of reasons. Per some training requests, managers offered non-training solutions after investigating the problem. They decided that the problems would be solved by other methods instead of training.

Actually a lot of times the things are working the wrong way with people and maybe training is the solution, but training will not solve the problem. (Respondent C)

It is Rummler, I believe it was Geary Rummler from ISPI, wrote a book. What he said is that I think 75%, something like 80% of the requests has nothing to do with training. (Respondent D)

You have to look at other [factors], environment, the tools, the procedures, the management, what is missing? It is not always that the person does not have knowledge. (Respondent D)

A lack of capacity. A lack of capacity was one reason why managers did not approve clients’ training requests. Depending on the size of the organization and the amount of the training requests submitted, sometimes the HRD department might not be capable to accept every training request.

> We work at a training organization and if we were to say taking every request and follow up through every single request training, we were have to be two or three time the size as we are now, and it would be completely depend on how great it would work out. It is just not feasible or possible for us to take ownership or responsibility for any kind of skill deficit in the organization…What we do is that we decide we are not going to teach all of the professional development skills, because we do not have skills to teach everything to everybody. (Respondent F)

Managers did not have the expertise. Besides, the managers to which the requests submitted might not be the people who had the expertise. This was another form of incapacity that led to managers' rejection to the requests. Alternatively, the managers pointed the requesters to the appropriate person who was the subject matter expert.

> She has been insurance, but she moved out to outsourcing, it did not make sense for me to be her coach any more since she switched her service lines, so now she has an outsourcing coach. Somebody that works more with her. I do not know much more details of that to coach her to get to the next level in outsourcing position, where somebody as an outsourcing coach, they will know a bit more about what it takes to get her to the next level there. (Respondent G)

> Depending what it is, I would go to kind of the leaders of that industry, or the technical area of that [request], just get them set up with the right person. (Respondent G)

> We may decide that this is not training at all and we refer to the person to HR, to performance CI which is continuous improvement group, these are

blackbelts. We might need to refer them to IT, we might just suggest something else. (Respondent D)

The requested training program did not have value to the organization. As mentioned before, managers approved clients' training requests because the training was valuable to the organization. The same logic applied to the situation when they rejected the training requests. If the training did not directly have values to the organization, managers would suggest options, such as self-learning or external training opportunities, to the requesters.

> [The] subject matter could be not a huge value on us, let's say a future technology that we may or may not…not technology but future capability that we may or may not adopt, I can really justify spending a lot organization's dollars on training somebody on something we may not use. So they may just do Youtube videos, studying on their own at home, gathering the information that way, whereas other stuff that is absolutely critical that I would absolutely have people who would know the stuff, not only the organization paying for them to take that training, they are paying the trainer as well. It depends on what they know already, what it is they want to come up to speed on. (Respondent B)
>
> If somebody wants to become really good at using the statistical program, that is sort of very individualized skill, unless [it is] for using across the whole organization. Specific individual looking to specific things, we would suggest them to go external because we have done a needs assessment and we identify the key skills that we need to support, from that we determine what our core offerings are. (Respondent F)

When the requested training did not yield the best results to the organization, managers would not accept or approve the training request, rather they offered alternatives that returned higher value to the company than what was requested.

> And what I could explain to them that the way that they are going to require it is going to hurt fire departments, make them resentful, and move them away from the good. They wanted to hear a solution about how they can get closer to do this, so we worked with professionals they identified to create the online program, and we hosted it with fire departments throughout the study. That allowed us to keep tracking who took the training, and allowed us to report back how successful the program was, to show them we were meeting their goal, but we were doing it with our methods instead of their solutions. (Respondent E)

The analysis of the semi-structured interview data revealed that managers made different decisions in response to the requests received. In certain instances, managers approved the training requests submitted by clients without any changes. Moreover, they not only approved the request, but also suggested appropriate change management efforts to reinforce the results of training. Some managers preferred to give immediate instructions on what clients should do upon approving the requests for training, while in other times, they directed clients to multiple existing training programs to fulfill their needs. In some situations, managers did not approve the training request due to reasons such as a lack of capacity of HRD function in the organization, or low perceived value of the requested training. Instead, they suggested non-training solutions to the problems.

Research Question 3. What Were the Reasons for the Decisions Made by Managers in Response to Clients' Training Requests?

The third research question was addressed through analyzing the semi-structured interview data. Results of the analysis showed that managers made decisions based on whether:

- The requested training programs would support the strategic goals and missions of the organization
- The requested training programs would address clients' needs
- The requested training programs would benefit the trainees to better execute their job duties
- The requested training programs would generate value for the organization
- The requested training programs were advocated by the stakeholders
- The requested training programs were consistent with managers' past experience and their knowledge in HRD

Findings: Research Question 3

The findings suggested six reasons for the decisions made by managers. Following is a discussion of each reason.

Managers made decisions based on whether the requested training programs would support the strategic goals and missions of the organization. Managers often prioritized the training requests that substantially aligned with business outcomes. Managers who made training decisions asked enough questions to find out business needs and made sure the requested training program contribute to improving business outcomes.

> That is the first question because many time people want training, but it is not related to a business outcome. Tying it to business outcome helps you establish some revenue

generation or some impact to PML because you are looking at from the business standpoint. (Respondent D)

All of these questions, you might not have to ask them. You might just find one thing, such as ‘OK, when will they use the learning?’ could be a question, because they might say ‘not until next year’, so you are not gonna train them right now, or you may have to have refreshers (Respondent D).

Instead what we are going to do is we are going to focus on capabilities that are going to drive the business in the way that is the most aligned to the business strategy (Respondent F).

We do a need assessment, an organization-wide need analysis. This organizational needs-assessment for the professional development portfolio we do it every couple of years. We look at “what is our business strategy?”, where we are trying to drive, what are the key skills that are sort of inherit in that business strategy? (Respondent F)

One criterion for managers to evaluate training decisions was to what degree that the results of training decisions aligned with and supported business outcomes. A decision would be considered effective if the results led to improving business outcomes, or if it fulfilled the purpose of the organizational strategy.

The final thing that I look at is that—did the training support the companies' goals and priorities. So, if it did not directly support where we are trying to go with our companies initiatives and goals, then it was probably a bad decision on my part to allow them or to approve them to take that type of training. (Respondent C)

> We do not have a formal process around it, but our strategy helps us to make sure that we are doing the things we are supposed to be doing and helps us identify the things that we should not be doing. (Respondent F)

When clients seek for training to solve performance issues, managers were aware that the role and purpose of HRD function must be aligned with the strategic goals and business outcomes of the organization. This mindset shaped how the solutions would be determined, in which way it would be implemented, and what goals the training would be desired to achieve.

> They have numbers that they are trying to drive. I should be as a learning leader, more concerned with trying to find out if there is a way to help us understand how we contribute to driving their numbers. That is a way better place for me to have my staff spend their time than on trying to calculate something that is not meaningful to anybody. (Respondent F)

> You should be thinking about define success, you should be thinking about business impact. (Respondent D)

> It is all about focusing on the bigger strategy, not the output. I do not design training programs, I help the training programs somebody else designs are what is needed. I do not fix fire trucks. I make sure they get fixed in the right way. We have got other part of the organization. (Respondent E)

If the HRD function was at high decision-making level in the organization, managers' responses to training requests would be greatly supported by the leadership and management of the organization.

> I actually reported to the CEO and the president of the organization, the leadership team. So, I had really terrific opportunity. That does not happen often

for training directors or training managers to have that level of connection. (Respondent H)

Respondent E believed that "you have to have HRD at the executive level to be able to articulate those concerns." He agreed that if HRD was at high impact level of the organization, managers would be easily to perform a long deliberative decision process with more stakeholders involved in order to reach more superior training decisions.

> You have to have HRD at the executive level to be able to articulate those concerns…if you are the new person in the organization, and you are not in a place in the organization chart where you can make these conversations happen, you might be forced to do things you think are wrong, because the non-inclusive decision-making process left out your voice (Respondent E)

Managers made decisions based on whether the requested training programs would address clients' needs. Managers believed that it was important to understand whether the requested training programs would address clients' needs. Many respondents recalled that they collected as much relevant information as possible to make decisions. One typical way was to directly ask clients questions for identifying clients' needs and expectations. Respondent D, H and Respondent I used this strategy to pinpoint clients' needs and expectations.

> In every design work, you need to do your analysis. Did some meetings, you know, 1:1 meeting with operational managers. What will be looking for as new hirer onboarding training for your team? What topics do you think should be covered? So, it is kind of an informal survey to get us started, then put the training plan together. What topic would be covered? How often would we deliver the training? What are we anticipated the numbers of participants to be?

> How that training would be the overview of all of the courses to come within the reminder of that month, where we look at the staff back about how they do their job? (Respondent H)

> One basically was who is going to the assignment? What would they need from me besides the templates? What else might be needed? (Respondent D)

> I would ask the manager why she or he wants to raise the request because I think the purpose is very important. What goals or objectives do they want to achieve through the training? So I will understand their purpose first. (Respondent I)

> Usually I will gather some information like what needs to be learned, like what is the timeline, by when they have to learn that thing, how much time do I have or what resources I have, so I can plan accordingly like if I have to do it in a very short time, I have to find already [available] materials or resources to support me to do that, but if it is a long process, maybe I can develop the material by myself. The purpose of course is very important, and the timeline, and resources. (Respondent I)

Managers also used results from needs assessments to identify training needs that matched business outcomes and strategies. A few respondents emphasized the importance of prioritizing training needs that matched the organizational strategies, business goals and business outcomes.

> We do a need assessment, an organization-wide need analysis. This organizational needs-assessment for the professional development portfolio we do it every couple of years. We look at "what is our business strategy?", where

> we are trying to drive, what are the key skills that are sort of inherit in that business strategy? (Respondent F)

Managers made decisions based on whether the requested training programs would benefit the trainees to better execute their job duties. The alignment between job duties and the training content made certain training requests priority among all the requests. Training that aimed to improve the employees' skills and knowledge related to their job duties and therefore successfully uplifted their job performance would be approved or responded sooner than others.

> …a group of employees whose work does not fit that model, or we are not sure, it might not fit the model, and as a result, we would not plan on having them attend that training right away. We would prioritize them lower than other employees who would benefit from it sooner. (Respondent A)

> Probably the more expensive of the training, I will be looking to send in a more experienced senior level employee, because they can draw more out of that. (Respondent A)

When there were limited resources of training, managers often must carefully select the recipients of training. Especially when there was opportunity cost or budgetary concerns, managers must determine who would attend the training based on the employees' job duties and the content of training to ensure maximized results and benefits from training. Respondent A was involved in this process. He was responsible for "determining which of my direct report group will need to attend and then setting expectations around attendance and what we expect you to gain from attending the training, making sure the folks are able to practice the training they received and applying it to their job".

> One of the key things will be identifying the employees who would benefit the most and the soonest from attending. By that I mean I have responsibilities for a group of employees that are implementing a specific project, and these particular practices that are taught in this training have a direct correlation or influence to the project work or the project deliverable they are responsible for, so I made a decision that group will be my first group of employees get trained and have the other training resources to them so that they can be very quickly begin applying what they have learned to their current day-to-day job. (Respondent A)

Some managers performed job analysis to identify changes in job duties, which would serve as the subject matters of the proposed training. They also analyzed employees' current states of performance to determine learning needs.

> If I look at this, what can be automated from this job? This is process custom request. Provide options. Definitely can be automated. This will be maybe. This may require [human] work, but it could be [automated]. This is for the person who actually is doing this. So, you can manage this, taking out and just automate these pieces. From that aspect, this would be perfect because a lot of people, they do not know what to automate. They want to use AI but where? When we are doing analysis or collecting data, there are perfect opportunities to automate. This whole thing can be automated to be honest. This can be a reason for that. You do a process change, this would be a good thing to have. I do not think a lot of people know how to do that. (Respondent D)

> We leave comments—everything is electronic. If something is wrong, I will leave a comment that says, "can you update this?" If I see a lot of those, it is really my responsibility to take that person on the side and say, "I think we are missing conceptually what is going on here". (Respondent D)

Managers made decisions based on whether the requested training programs would generate value for the organization. The financial impacts of training were taken into considerations by managers when responding to training requests. Many managers agreed that they would prioritize the request of training that yielded the highest financial benefits or required the lowest cost. When managers received requests for training, they calculated the value of the requested training and made responses based on the perceived value. Most respondents of this study believed that the requested training must have values back to the organization. The calculation of training value varied in forms. Sometimes managers examined the return on investment (ROI) of training, while other times managers considered if the cost of training requested was affordable before they approved the requests.

> Especially we are in a big expense mode right now, does the training provide a significant return on our investment? (Respondent C)
>
> Now there is a minimum expectation that "I am not just wasting the organization's money" whether that will be on their salary while they are there taking the training or whatever we pay for the training itself. I have an expectation that the organization is not just throwing the money away to just have them spend time on something that they do not absorb. (Respondent A)
>
> As a manager, part of my job in addition to making sure people had the training they need, there is also a balance of making sure that the cost and the expenses

> of training has a return on investment and it is within the company's guidelines to spend whatever that amount of money, so I would say cost and expenses factor in to those decisions. (Respondent B)
>
> Is it worth on our return on investment, is it worth on sending somebody? The other thing was what was the value of training, say sending somebody [out of state] versus the value of deliver our day-to-day work that we were responsible for because sending somebody to this training, we are taking them out of my services for a whole week. Not only the cost of the training, I am lost productivity. So is it worth the value of that? In [the same time of] this particular training, this year, I am going to have several people traveling to another location to support our annual agency convention, we do it every four years, so I am gonna be short on people anyway. (Respondent C)

The actual ROI of training was somewhat difficult to quantify in practice, therefore, managers used forecasted ROI results to justify the worth of taking in and implementing the training requests. Respondent F had experiences with forecasting and estimating ROI of training to make decisions. She emphasized that it was not easy to pinpoint the financial impacts of training because it was almost impossible to isolated training effects from a variety of compounding factors, instead, "making a whole bunch of assumptions about how much money you saved by solving problems quicker". "You are just guessing. It is just like this really big guess". ROI is "guessing where strategy actually helps make sure to drive to the outcomes that you want to drive, and helps you prioritize the work that you are doing".

For certain types of training requests, the consequences could be severely negative if managers did not say "yes" to it immediately. An extreme example that Respondent F discussed was a request for compliance training concerning anti-money laundry.

> A consent order costs a hundred of thousands of dollars, just in potentially dissent fines. That has nothing to do with getting out of the consent order, which extends beyond the training because the regulators come in, we have a whole bunch of people that have to respond to the requests from the regulator, all the reporting that we made…It is a high effort. (Respondent F)

> Every single time that an agent does something like reopening an account that was closed because its suspicious activity, so if an agent were to reopen it, one single charge went through that account after it was flagged for suspicious activity, that is 275,000 dollars for every transaction. If an agent makes a mistake and inappropriately reopens an account that should not be opened at the first place, every time that person makes a transaction and uses their card, it is a 275, 000 dollar fine. (Respondent F)

Respondent E experienced a similar situation. She had to approve certain requests due to the potentially soaring cost of not doing it, "So far, I have the university given me almost 120, 000 dollars that they did not want to give me because I made the business case that the cost of not doing this is much greater than the cost of doing it".

The value of the requested training could be reflected in individual employee's compensation or career advancement as well. For example, as an IT manager, Respondent A believed that training would be considered valuable if it benefited the requesters' professional development.

> The third would be the personal development of that individual because we talk about skill development, and personal development. I will make a gesture here. You can think of them as lines on a graph, oftentimes, skill development and personal development are, you know, their lines may vary and never intersect, but then I believe that within the mathematical relationship, sometimes the times cross and or become the same line for a period of time. So, another factor, basically that factor being a decision point, or a manager's decision to look at training would also be 'how does the training match their personal development goals or the development goals of the company?' 'how does it match the skill development goals of that individual and organization?' And sometimes they can be same, sometimes they can be different, that is neither good nor bad. It depends on the situation and in the person receiving the training. (Respondent A)

Respondent I shared an example where a training program was necessary and important for managers to succeed in evaluating subordinates' performance because "usually the performance [rating results] relate to the salary or the bonus the employees will receive. That is why they will have different reactions" (Respondent I).

Given that business always strives for making maximized profits, training that yielded the most financial benefits or required the least cost was the one that received approval easier than others. In addition, due to the intention to maximize profits, there was often limited budget allocated to training, so managers sometimes had to consider and use other alternatives that contained higher financial benefits. There were different methods to express the financial value of requested training, such as cost-benefit ratio, ROI, the hidden cost of the training, etc.

If you have to do face to face training, you have to book the venue, then prepare some snacks, etc. the other thing is clients' available time, web app is more flexible. You do not have to travel to attend the trainings. If you are busy, you might get to squeeze one hour to attend the online training. (Respondent I)

Is it worth on our return on investment, is it worth on sending somebody? The other thing was what was the value of training, say sending somebody [out of state] versus the value of deliver our day-to-day work that we were responsible for because sending somebody to this training, we are taking them out of my services for a whole week. Not only the cost of the training, I am lost productivity. So, is it worth the value of that? (Respondent C)

You can go to your app. So, we have to train all the agents on freeze-it, so there are 4000 agents that all have to know, really basically understand how it works, so if they get questions about it, they can answer. We have to train people on this kind of changes incessantly. What is the ROI on that? How do you figure out the ROI on teaching all the agents to be able to answer questions on freeze-it? (Respondent F)

Actual expense of the training does come into play. As a manager, part of my job in addition to making sure people had the training they need, there is also a balance of making sure that the cost and the expenses of training has a return on investment and it is within the company's guidelines to spend whatever that amount of money, so I would say cost and expenses factor in to those decisions. (Respondent A)

Consequently, when clients submitted their requests, managers would ask the clients if the training could be self-funded. The sources of funding served as another factor that affected how managers would respond to the request for training. If the requested training did require significant amount of budget, managers would encourage the clients to self-fund the training themselves or to find other sources of funding.

> We actually stack that with those projects, internally sources, or sometimes it might be work that we say that it has to be done externally. There is a question "who is going to pay for it?" (Respondent F)

> My organization is called [me] to figure out how to do this training. We said "sure, here is what gonna cost." We were told "Great, figure out where to get the money." … So, the hard part was finding the funding and having enough of the fiscal understanding as an executive to know where the funding issue is. Especially in government, there are a lot of we call "unfunded mandates." (Respondent B)

Managers made decisions based on whether the requested training programs were advocated by the stakeholders. The stakeholders of training were a critical component of the decision-making process. Engaging all stakeholders was a common practice of all interviewed managers. Respondents frequently met with stakeholders, whether they were customers, trainees, management, etc. to make decisions in response to clients' training requests.

> And then we had a meeting with the vendor and myself, we talked about what the needs were, we sent them templates, we asked questions that would be helpful…The director of sales was the person who decided there were some expectations. (Respondent D)

It is a meeting with the learners, participants, stakeholders, managers of the program, we meet together and we go through the whole story. (Respondent D)

We now are doing everything from rebuild prompts, train firefighters, and when we go to train firefighters around the state, we asked the local farm bureau to come help. So, the farmers are interacting with firefighting before there is an emergency, so they get to know each other better before there is a problem, and possibly prevented a problem. (Respondent E)

In some organizations, decisions were made based on consensus. The purpose of having all stakeholders involved in the decision-making process was to fortify and validate the decisions through multiple sources.

We do have this consensus building [structure]. It is not a singular autonomous individual saying, "I am going to develop this person or this team", so we get to triangulate from multiple people on what the person needs. (Respondent B)

Respondent D believed that subject matter experts needed to be involved in the decision-making process.

These are my form that talks about having a subject matter expert and sitting by an expert is very critical because we may want to design a class but you do not have the person with the knowledge to design it, you can't do it. Typically, they come from the business. I have been there really ready to free up somebody who is at sales and who knows the system to help create the materials. (Respondent D)

Respondent B worked with training coordinators to arrange training programs for new employees and to ensure these training programs run through smoothly.

> This is in fact with a training coordinator where a new team member works with them for the first six months. They are a very structured, almost like a syllabus to go through what they do, you know, one through 10 on the list to check off, and those are the things they need to do right off the bat. (Respondent B)

In response to different types of training requests, managers engaged and collaborated with different types of stakeholders. If it was an industry-level training request, managers considered to direct the requesters to external vendors who were qualified to provide training on industry-level knowledge and skills. If the training request was concerning company specific knowledge, managers made decisions to have the requesters trained with internal trainers.

> The company uses some outside or external training companies, or contractors to provide some of the industry level training. (Respondent A)

> Three of the four new members need very specific product training and that will be delivered by the external vendor who is the expert in it,,, but then there is also some company specific training that takes that industry level training and applies some of our companies' principles and specific subject matters to it, so employees can work through actual real-life virtual examples that apply to their job. So it is a mix of outside industry training and some customized training. (Respondent B)

> We have a lot of webinars, we have specifically people in our firm that have that high level of knowledge of everything, so they will do a lot of webinars, or trainings for us to make sure we get all of our certifications that we need to stay on task for our licenses. (Respondent G)

Managers made decisions based on whether the requested training programs were consistent with their past experience and knowledge in HRD. Mangers tended to retrieved sources of information to support their decision-making in current situations. Some of them used HRD research studies as references to make decisions in practice. This was particularly true for managers with a degree in HRD, or managers in the HRD functions of their organization. For respondents who did not have a degree in the field of HRD, or who were managers in line departments, they tended to use past experiences as a guidance for making current decisions. If the training in the past did not benefit the recipients of training, managers would more likely reject the same training requests in the future.

> There is a lot of information about this, in an old study, I do still rely on this study. There was a study on what really matters in how training is designed. It does not matter if it was classroom, online, e-learning, virtual video conference, it is the design of the instruction. (Respondent H)

> Robert Mager has several books on this, we talked about performance analysis. (Respondent D)

> One is, we used Kirkpatrick's level 1 and 2, for student feedback. I wanted to use 3 and 4, but you do not have a good way to do that yet. (Respondent E)

> We need to know whether it is beneficial, so the next person comes along with it "I really want to take this training" but it was not really beneficial the last time, maybe I will focus on something else. (Respondent C)

Some managers reported that they made decisions because they had been a manager in the organization for many years, and the accumulation of work experiences with making training decisions became intuition that helped them to make decisions in current situation.

> I have never read any theories. I have never got experiences with models. I rely largely on my intuition… (Respondent B)
>
> I, from a teacher standpoint, I felt I was not at my best in that situation. (Respondent B)
>
> To me, it is really based on my years of experiences as a manager. I got 32 years of experiences at my company, a lot of it has based on what has worked well in the past, what was valuable, what was the understanding of my employees and the people coming to the training or requesting the training, just what has worked well in the past, or what has not. (Respondent C)
>
> It is hard to put a dollar figure on it, but it is more based on intuition and experiences where we will get that. (Respondent C)
>
> So it is literally an international strategic HRD problem that I applied from what I learned from College of Education here to be able to sell it. (Respondent E)
>
> These are things that I have subject expert matter knowledge of because I was a firefighter and a nurse, but the organizational development and the strategic HRD part is because of my education from the College of Education. (Respondent E)

As discussed above, there were six reasons for the decisions that managers made in response to clients' training requests. Managers made decisions based on whether the requested training programs would support the strategic goals and missions of the organization, whether the requested training programs would address clients' needs, whether the requested training programs would generate value for the organization and whether the requests were supported and advocated by other stakeholders. Some managers in HRD department referred to research studies and theoretical models in HRD, while others from the line departments referred to their past experience to made decisions to respond to clients' training requests.

Research Question 4. What Decision-Making Approaches Emerged from the Managers' Responses to Clients' Training Requests?

The last research question was addressed by analyzing both critical incidents and the semi-structured interview data. In this study, a decision-making approach describes the primary basis for proposing actions that individuals should take within a specific context.

Findings: Research Question 4

Table 4.3 shows the four decision approaches emerged from the study and their respective operational definitions. Table 4.4 presents the corresponding critical incidents to each of the four decision-making approaches, as well as the frequency of the critical incidents in each category of decision-making approach.

Table 4.3: Decision approaches emerged in the study and their operational definitions

Decision-making Approach	**Operational Definitions**
Expedited	Managers made decisions to ensure the clients' requests were fulfilled without delay.
Value-added	Managers made decisions based on the perception of gain from the requested training.
Consensus-based	Managers made decisions based on stakeholders' consensus on the need for the requested training.
Experience-based	Managers made decisions based on past practice or professional literature in HRD.

Table 4.4: Four decision-making approaches and the corresponding critical incidents

Decision-Making Approach	Critical Incidents	Frequency
Expedited	2, 4, 12, 20, 24, 26, 30, 31, 41	9
Value-added	3, 7, 8, 9, 10, 11, 13, 14, 17, 19, 28, 34, 35, 36, 38	15
Consensus-based	1, 5, 6, 7, 15, 18, 21, 25, 32, 37, 39	11
Experience-based	16, 22, 23, 27, 29, 33, 40	7

Expedited approach. Managers who used Expedited approach made decisions to ensure the clients' requests were fulfilled without delay. When making decisions to respond to requests for training, they identified quick decision points and sometimes experimented alternatives. In this way, they were able to make corrections if something doesn't work along the way without receiving unsuccessful outcomes at the end of the process.

Respondents of the study explained how they used Expedited approach to make decisions to respond to training requests. The rationale of using this approach was that clients preferred "quick wins" and would be more cooperative in the process after receiving fast responses. Making expedited decisions allowed managers to experiment, then received fast feedback for further efficient corrective actions as needed throughout the process. Using Expedited approach, managers were able to quickly obtain partial success without risking making ineffective decision at the end after spending so much time, efforts and costs. Critical incident 4 and 30 were two examples of responses made by using expedited approach.

Critical Incident 4

Last summer, we hired a few summer interns to conduct data validation for our company and my manager asked me to train these interns. I thought about the timeline first and I had about only 2 weeks to help the interns to equip with the necessary skills. When the timeframe is set, I thought of how I am going to deliver the training and how I can incorporate opportunities to practice the skills trained. I decided to use in-class training, which was split in 2 weeks.

Critical Incident 30

I received a request from the Vice President of Finance in our company on how to use knowledge management in finance department, how to keep the content up to data and organized so people can find them easily. I had a meeting with the V.P. as well as some people in finance department to have a better idea of what the problem might be. I am not sure if it is knowledge management as what the V.P. stated, my hunch is content management is what he needed, but I would like to put something together for next steps whenever they are ready, and then we could experiment more. Until we talk about this more, we do not know.

Respondent D and E explained in detail about how they applied Expedited approach to make decisions. They both agreed that it was effective and efficient to "pilot as you go" and made decisions successively to reach the desired goal at the end.

I kind of explained what might be, what would be a quick win. You might not know the details, or the solution might be, but you want to make the client to feel that you are listening so you look for the easy things that you can do, and easy thing could be "let's get together" which is with him, listen to your people, so I can find this problem more if you can some people I can talk to. and then we can have this meeting and we can experiment more. (Respondent D)

If you approach it from an agile point of view for training, this is what I am going to do with that finance [training]. Start with an experiment, or pilot. Do not make it the actual. Do not tell them this is the end of course. Start with a pilot. Small people. Small impact. Do one section, maybe an hour, see what happens, find out what you find out. Do a retrospect. Then you will find out more how the participants thought about it, how the client feels about it, what can be improved, what went well, what did not go well, and you start actions after all that. That way you have the client…first of all, you are giving them something right away, you would know what I called "scruffy" which means it is not perfection, but it is in a format that they do not mind changing. So a lot of times people do in design is they get request and they make this perfect e-learning course, flawless pictures, flawless navigation, they work hours making sure it works well, and someone was asking "what the heck is that?" and they put so much efforts into it, they do not want to change it, and they get hurt. They start doing all that, they make the client wait for this perfect thing. Start with prototype, start with something quick and dirty. (Respondent D)

You might not know the details, or the solution might be, but you want to make the client to feel that you are listening so you look for the easy things that you can do, and easy thing could be "let's get together" which is with him, listen to your people, so I can find this problem more if you can some people I can talk to. and then we can have this meeting and we can experiment more. (Respondent D)

> You do not build the whole course and then deliver it, you pilot test as you go, successively as you develop. I try to employ the same thing when I solve problems. (Respondent E)

The concept of expedited approach had been recognized by the profession association of HRD, Association for Talent Development (ATD), and had been applied as a strategy in some organizations. Managers learned this approach through participating in ATD conferences and from successful implementations of this approach in the organization, and thus adopted it in their daily practice of making training decisions.

> These are things industry terms in the IT world refer to a scrum and agile [approach]. These are approaches to completing projects and operational work in a very quick manner, kind of a fail fast and recover quickly approach to work, vs. spending a lot of time planning and implementing a final solution. (Respondent A)
>
> I am active at the Association of Talent and Development. That is the professional [association] I am still partaking. I go to the conference every year to find out what the fire services is going to invent five years from now. So it helps me to see what is happening around the industry and bring solutions back. An example where that helps is I learn about ADDIE being replaced by successive approximation. So instead of mapping out all five steps, then all your development and all your delivery, successive approximation says get one module done, pilot test that, get feedback, improve it, then start the next one. (Respondent E)

> We schedule typically a minimum three meetings, an initial planning meeting, and anywhere from 1 to infinity middle planning meetings, and a final meeting to make sure that we fixed everything that we thought we were fixing. That allows us to use that approximation model and make little adjustments along the way instead of going all the way down and fixing 10 things, we might stop 10 times and fix one thing each at lower cost because we fixed it early.
> (Respondent E)

Value-added approach. Managers who used Value-added approach made decisions based on the perception of gain from the requested training. When making decisions to respond to requests for training, managers were committed to making training decisions that maximized the perceived value and they carefully examined and calculated the cost as well as the benefits of training. In this way, they were able to prioritize requests based on the perceived value and ensure the alignment with the strategic goals and business objectives of the organization.

Many respondents of the study mentioned and emphasized the importance of pursuing training with the highest return. The perceived financial value of training was viewed as a broad concept, which consisted of the expenses of training, opportunity and time cost of training, the ROI of training, and the intangible impacts of training that could be translated into monetary value as well. Most respondents conducted analysis in a variety of forms to select the alternative that maximized the worth of training, and they viewed the perceived value of training as the most important indicator in the decision-making process. Moreover, managers justified decisions based on the value or financial impacts generated by the decision when they evaluated their decisions after implementation. Critical incident 7 and 11 illustrated the application of value-added approach in managers' decision-making process.

Critical Incident 7

I had a request for training in Orlando, FL for Microsoft training this year. Every year, I would send one or more people to this training every year. I worked with my senior analyst on my team to have them look at the agenda, the themes of the conferences and determined the value. I realized that I would be short on people to perform work here, so I would have not only lost the cost, but also the productivity. I felt like we were able to get the same information through alternative means. Taking all those into consideration, I made the decision to not to send anybody to the training this year. It was an effective decision because we did not lose productivity in the office, but still got the information from the alternative training options. My team also agreed on that decision.

Critical Incident 11

My organization is going to roll out a problem-solving methodology. We know that not everybody in the company knows this problem-solving methodology, so we know there is a lack of knowledge and skills around using this problem-solving methodology. Also, different department might have different understanding and usage of this methodology, we need a standardized process for problem-solving. We would be teaching everybody how to use this problem-solving methodology, providing it is successful, it would have significant return to the organization as we could cut problem-solving time in half. The ROI might be 100 times the amount we spend on that training. We developed an e-learning course that covers that Dmaic methodology.

Respondent B explained his rationale behind using Value-added approach to decide whether he should approve certain training requests. He said his baseline was “not wasting the organization’s money”. Respondent C was another manager that always considered the value of the training requested by his employees. He wanted to make sure that the training requests that he approved would benefit the team and the organization in a long term.

> Now there is a minimum expectation that “I am not just wasting the organization’s money” whether that will be on their salary while they are there taking the training or whatever we pay for the training itself. I have an expectation that the organization is not just throwing the money away to just have them spend time on something that they do not absorb. (Respondent B)

> I send somebody to Orlando, FL for a week for a Microsoft training that is going to end up costing, say $5,000 for all the expenses. So I have to weigh that is the information they get out of that is going to in long run save our 5000 dollars? (Respondent C)

Managers who used Value-added decision-making approach tended to be more analytical and rational than others. They spent more time on gathering and analyzing relevant information before making training decisions. Respondent I recalled that she “gather some information like what needs to be learned, like what is the timeline, by when they have to learn that thing, how much time do I have or what resources I have, so I can plan accordingly”. With regard to the requests for compliance training, managers carefully calculated and analyzed the consequences in dollars if such type of training was not developed or approved as requested.

Critical Incident 35

Regulatory touch points are enforced on many activities that all agents on the phones. If an agent reopens a closed account because of its previous suspicious activity, one single charge go through that account after it is flagged for suspicious activity, that is $275,000 for every transaction. So we roll out training related any one of those regulatory touch points for every single time because the consequences of not doing so would be very high impact. We have actual real numbers of what would happen if somebody makes this error.

Consensus-based approach. Managers who used Consensus-based approach made decisions based on stakeholders' consensus on the need for the requested training. When making decisions to respond to clients' requests for training, managers embraced and strived to obtain stakeholders' consensus, and therefore engaged as many stakeholders as possible to reach the collective agreement. In this way, they were able to form and ascertain the decisions with diverse perspectives included.

As shown in critical incident 5, 7 and 21, managers relied on the unique expertise and perspectives that each stakeholder had to ensure that potential difficulties could be foreseen and solved. Having leadership and higher-level management included in the decision-making process helped managers to gain supports from these stakeholders. Decisions made based on stakeholders' consensus had high level of effectiveness.

Critical incident 5

We did not initially have new hirer training when I started with the organization, we were quite small, about 800 employees, but as the organization continued to grow internationally, we need to train all these new hirers on who we are as an organization, what do we do, where we located, who are our leaders in the organization, how are we structured, etc., who are some of our major clients. Because I directly reported to the CEO and the president of the organization, and I also had a good working relationship with our operational managers globally, I could reach out to them and understand their needs, their clients and how large the team will grow to. At the end, I was able to put together a nicely comprehensive onboarding new hirer training customized for each region. Organizational process changes drove the needs for training.

Critical incident 7

I had a request for training in Orlando, FL for Microsoft training this year. Every year, I would send one or more people to this training every year. I worked with my senior analyst on my team to have them look at the agenda, the themes of the conferences and determined the value. I realized that I would be short on people to perform work here, so I would have not only lost the cost, but also the productivity. I felt like we were able to get the same information through alternative means. Taking all those into consideration, I made the decision to not to send anybody to the training this year. It was an effective decision because we did not lose productivity in the office, but still got the information from the alternative training options. My team also agreed on that decision.

Critical incident 21

I had team where we had very structured training. When a new team member joined the organization, he will need to work with a training coordinator for the

> first six months. The training for this new hirer will be very structured, required by the organization, almost like a syllabus to go through what they do, you know, one through 10 on the list to check off, and those are the things they need to do right off the bat.

Respondents explained how they incorporated a team of experts to make decisions in their organizations. The experts could be from a variety of departments within the organization, as well as external vendors and stakeholders.

> So, I got myself, several people that hired folks from other places in the organization, our HR staff, and our IT department around the table, and said "Here is the problem. We need an electronic system, we need to be able to see where somebody is at in these steps. We need to touch papers once, and not have to make copies for each other. We need one central place where we can upload it." So, we mapped out, with everybody around the table, "here is the steps and the process. Here is who's responsible for each step. IT, go make an online solution that does this. How long do you need to do that?" "We need three weeks." "Great. Take four. In four weeks, we will come back together and see what you got put together. What are you going to need from other people?" "We need to know where all the hiring documents are from HR." "Great. HR, give them that." "We need to know which positions are going to be hiring for." "Alright, program guys, give them that information". "We need a budget to do this". "OK, how much do you need? And I will go find the money and allocate the funding". (Respondent E)

> Typically, we have weekly meetings and we would talk about the requests that came in. Doesn't mean that we are going to satisfy them but we will bring them up. Say X amount request came in, if we are going to actually solve this problem or address those needs, we will send somebody. But each week we will come up and talk about the requests or something we have. We have a list of requests, a list of projects ongoing, and it is like a status report we give. (Respondent D)

> Here are the topics that we heard you say you thought you needed, so here is what we are planning to deliver, outlines of each of the courses what would be included in that topic. Send out to the global operational directors and managers to get their feedback. Send to the leadership team also for their perspectives and their sign-offs. Once we had that, any changes, additions, etc, then we started designing and writing the training. (Respondent H)

> we do have this consensus building [structure]. It is not a singular autonomous individual saying, "I am going to develop this person or this team", so we get to triangulate from multiple people on what the person needs. (Respondent B)

Experience-based approach. Managers made decisions based on past practice or professional literature in HRD. When making decisions to respond to requests for training, they retrieved sources of information in the past that matched the current situation, such as past experience, best practice in the industry, and precious knowledge that helped to make current and future decisions. In this way, they were able to ensure the effectiveness of decisions in the present if the contexts were similar. Following are two examples of using Experience-based approach to make decisions in response to training requests.

Critical incident 22

I had an employee named John. He was at a point in his career pursuing leadership in the organizations. Realizing that he had exceptionally strong background in both business and technology, as well as his personal life situation—he had a young family, I guided him with multiple options and analyzed the pros and cons of each option for him by giving him input how he could best leverage his situation with specific training options. As a result, he has got into leadership within the architecture space, and it all worked out great.

Critical incident 27

A police officer shot at an autistic young man because at the time they did not know how to interact with people with autism. The legislators in Illinois introduced a bill to mandate an eight-hour training for all firefighters and police officers on how to deal with emergencies with people with autism. My job was to intersect with these legislators and to help them understand this might not be a good solution because a required eight-hour autism training would make many volunteer communities not able to have their fire department at all. I listened to the legislators, understood what their concerns were and based on my experience as an educator and a former fire fighter, I proposed a voluntary program that would be available online for on-hour and give emergency responders general information on what it might be like to interact with someone with autism.

The references that managers used to help them make current decisions included the successful decisions of approving similar training requests that were made in the past, theoretical models and knowledge that provided guidance for practice obtained from attending degree programs in HRD, etc.

> We need to know whether it is beneficial, so the next person comes along with it “I really want to take this training” but it was not really beneficial the last time, maybe I will focus on something else. (Respondent C)
>
> This is created in conjunction with the gentleman at Growup the Five Disciplines of Learning… (Respondent D)
>
> Robert Mager has several books on this, we talked about performance analysis. (Respondent D)
>
> I had to leverage my experiences as an educator at the university for many years, and my ability to interact as a fire fighter with these legislators to take them for what you identify here when they thought they had the perfect solution and help them to agree with something that is going to be a better kick for the audiences. (Respondent E)
>
> There is a lot of information about this, in an old study, I do still rely on this study. There was a study on what really matters in how training is designed. It does not matter if it was classroom, online, e-learning, virtual video conference, it is the design of the instruction. (Respondent H)

Four decision-making approaches emerged from analyzing the data of the study. The approaches were the following: Expedited, Value-added, Consensus-based, or Experience-based. Managers who used the Expedited approach made decisions to ensure clients’ training requests could be fulfilled without delay. Managers who used the Value-added approach made decisions based on the perception of gain from the requested training, and they focused on examining the perceived value to make decisions. With the Consensus-based approach, managers made decisions based on stakeholders' consensus on the need for the requested training, and they strived to engage stakeholders in the decision-making process. Finally, managers used the Experience-based approach to make decisions. They referred to past practice or professional literature in the field of HRD to respond to current requests for training from clients.

CHAPTER 5: SUMMARY, DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

This chapter consists of four sections. The first section summarizes the findings of the study. The second section discusses the results of the study. The third section presents the implications of the findings in terms of HRD practice and future research. Finally, the final section of the chapter presents conclusions that can be drawn from the study.

Summary of the Results

The four research questions of the study were addressed through analyzing the qualitative data. The results can be summarized as follows:

- In response to Research Question 1, managers reported that they received five types of training requests. The results of analyzing 41 critical incidents suggested that clients requested technical training programs for obtaining job-related knowledge and skills, awareness training programs to explain on-going changes in the organization, managerial training programs to support current and prospective managers and supervisors, compliance or safety training programs to be scheduled as required by laws and regulations, and customized training programs based on perceived performance issues.
- The analysis of the semi-structured interview data revealed that managers made different decisions in response to the requests received. In certain instances, managers approved the training requests submitted by clients without any changes. Moreover, they not only approved the request, but also suggested appropriate change management efforts to reinforce the results of training. Some managers preferred to give immediate instructions on what clients should do upon approving the requests for training, while in other times, they directed clients to multiple existing training programs to fulfill their needs. In some situations, managers did not approve the training request due to reasons such as a lack of

capacity of HRD function in the organization, or low perceived value of the requested training. Instead, they suggested non-training solutions to the problems.

- There were six reasons for the decisions that managers made in response to clients' training requests. Managers made decisions based on whether the requested training programs would support the strategic goals and missions of the organization, whether the requested training programs would address clients' needs, whether the requested training programs would generate value for the organization and whether the requests were supported and advocated by other stakeholders. Some managers in HRD department referred to research studies and theoretical models in HRD, while others from the line departments referred to their past experience to made decisions to respond to clients' training requests.
- Four decision-making approaches emerged from analyzing the data of this study. The approaches were the following: Expedited, Value-added, Consensus-based, or an Experience-based. Managers who used the Expedited approach made decisions to ensure clients' training requests could be fulfilled without delay. Managers who used the Value-added approach made decisions based on the perception of gain from the requested training, and they focused on examining the perceived value to make decisions. With the Consensus-based approach, managers made decisions based on stakeholders' consensus on the need for the requested training, and they strived to engage stakeholders in the decision-making process. Finally, managers used the Experience-based approach to make decisions. They referred to past practice or professional literature in the field of HRD to respond to current requests for training from clients.

Discussion

This section addresses four discussion points that have been derived from the results. First, the findings across research questions showed consistency. Second, the findings of the research questions showed that managers had their own patterns to make decisions in response to clients' training requests. Third, managers' experience did not play a large role in their decision-making process. Finally, the findings revealed that cost had served as an important deciding factor in managers' decision-making process.

The Findings across Research Questions Showed Consistency

The analysis of the critical incidents and semi-structured interview data showed consistency in the findings across different research questions. First, the findings of Research Question 1 and Research Question 3 showed consistency. As explained in Chapter 4, Research Question 1 was designed to address the nature of the training requests received by managers, while Research Question 3 aimed to understand the reasons for the decisions that managers made in response to the requests they received. When requests were submitted for obtaining various skills, managers made decisions based on whether the requested training programs could fulfill this purpose and benefit the trainees to better executive their job duties. For the training requests that intended to provide awareness training to explain on-going changes in the organization, managers made decisions based on whether such requested training programs would support the strategic goals and missions of the organization. Some clients requested managerial training, especially those who were newly promoted to a management position. When managers received requests to be a mentor, they referred to their experience and knowledge to made decisions in response to the request. For those clients who requested customized training programs based on perceived performance issues, managers made decisions based on whether the requested training program would address clients' needs.

The findings of Research Question 2 and Research Question 4 also showed consistency. Research Question 2 was designed to explore the decisions made by managers in response to clients' requests for training. As discussed in Chapter 4, managers offered five responses to their clients' training requests. Four types of responses indicated that managers approved the training requests with certain forms of revisions, which showed that in most cases, managers approved the requests for training submitted by clients. Managers who approved the training requests without any changes, or gave immediate instruction on what clients should do, illustrated the usage of Expedited decision-making approach. In the meantime, managers who approved the training request and suggested appropriate change-management efforts to reinforce the results of training showed that they adopted Value-added approach to make decisions. Sometimes, managers disapproved the training requests due to a lack of funding and resources, or the insufficiency of returns from the requested training program also indicated that managers used Value-added approach to make decisions. Lastly, managers who approved the training requests and directed clients to multiple existing programs implied that they adopted Experience-based decision-making approach.

Managers Seem to Use Their Own Patterns to Make Decisions

All managers interviewed in the study strived to make decisions that led to maximized results. Unfortunately, they did not always have the privilege to make complete rational decisions, because there were usually constraints of variables such as time, funding, and capacity. As much as they wanted to pinpoint the solutions that yielded the highest financial return to the organization, in many instances, their decision-making processes were bounded rational in nature, since they did not always have enough time, money, or skills to perform a completely rational decision-making process. This was aligned with what previous studies had discussed (Simon, 1986; Gigerenzer & Goldstein, 1996). Literature in decision-making discussed two possible reasons that led to bounded rational decision-making. The two reasons were cognitive limitations and unavailability of resources (Cyert & March, 1963). Using bounded rational decision-making process, managers were highly likely to search for ready-to-use solutions (Cyert & March, 1963; March & Simon, 1958; Simon, 1947). These ready-to-use solutions included off-the-shelf courses and immediate instructions given by managers. Accumulated knowledge regarding available training opportunities and solutions through accrued professional experience allow managers to adopt an accelerated process for reaching an immediate decision.

Insufficiency in variables like time, funding and capacity also resulted in the decisions of disapproving certain training requests, but the number of incidents when managers disapproved a training request was the lowest in this study. This corresponds to the researcher's assumption prior to collecting and analyzing data of this study. The high frequency of approval for training requests indicated a high level of acceptance that managers had for what their clients asked for. This also implied that managers might have a high level of trust for their clients, as they believed what the clients requested would be beneficial for solving the problems and would result in better performance outcomes.

Moreover, in this study, the decision-making approaches that managers used were also adaptive in nature. Previous studies suggested that decision makers would select different strategies based on the characteristics of the task and the situations where decisions were needed (Payne *et al*., 1993). In this study, managers used different approaches to make decisions.

Though four different decision-making approaches were emerged in the current study, the researcher noticed that managers did not use only one approach to make decisions for all requests they received, rather, they used different decision-making approaches to respond to different requests. Alternately, they even used a mix of multiple decision-making approaches when responding to one training request. Table 4.4 in previous chapter listed the critical incidents that corresponded to each decision-making approach. A few critical incidents indicated that managers used multiple decision-making approaches to respond to one training request. Thus, managers made judgements of the nature of the training requests and applied different strategies to form and validate their decisions.

Experience Did Not Play a Large Role in Managers' Decision-Making

Studies from a variety of fields, such as management and organizational development study, discussed how managers in organizations used tacit knowledge and skills accumulated from work experience over a long time to make decisions in an efficient way (Behling & Eckel, 1991; Brockman & Anthony, 1998; Klein, 1998). In this study, some managers mentioned that they referred to their past professional experience to make current decisions, and other managers explained how they used different theoretical models and knowledge they received from prior education experience to form current decisions. Experienced managers tended to use availability heuristics to speed up their decision-making process, and to ease the complex situation of problem-solving (Tversky & Kahneman, 1974).

However, managers' experience and knowledge in the field of HRD played a less significant role in their decision-making practice. Among the four decision-making approaches emerged in the study, Experience-based approach indicated that managers made decisions based on past experience and outcomes of previous decisions. Seven of 41 critical incidents represented the usage of Experience-based approach. The analysis of the semi-structured interview revealed only 21 excerpts were assigned a code that indicated managers used past experience and knowledge in the field of HRD to make decisions. This number was much lower than other codes and themes.

It is reasonable to believe that managers' educational background might influence how they made decisions. Considering the demographic characteristics of the respondents of the study, it was fascinating that the respondents consisted of managers from both HRD departments and non-HRD departments. In addition, some managers were reported that they had a Master's or higher degree in HRD particularly. The researcher noticed the possible influences of educational background in managers' selection of decision-making approaches. That is, managers who had studied in an academic degree program in HRD were more likely to refer to relevant literature and theoretical knowledge when making training decisions. Some managers recalled that they referred to different theoretical models when making decisions. For example, one respondent mentioned Kirkpatrick's four-level evaluation framework (Kirkpatrick, 1994; 1996) and another respondent mentioned Robert Mager's study (Mager & Pipe, 1997) on performance analysis that he used to guide his decision-making practice.

On contrary, for managers of non-HRD departments or without a degree in HRD, they were more likely to refer to previous professional experience to make decisions in response to clients' training requests. In certain situations, they considered the outcomes from previous decisions made to similar requests. If approving a previous training request resulted in positive outcomes, managers would be more likely to approve a similar training request in the future. If previous decisions did not return satisfactory outcomes, managers would be more likely to reject a similar request received later. Therefore, if similar training requests have been received before, then managers made the same decisions as before if previous decisions were proved effective. As a result, it is reasonable to interpret that decisions in the past affect how the decisions would be made in the future.

Cost Was an Important Deciding Factor in Managers' Decision-Making

The findings of Research Question 3 suggested that managers made decisions based on whether the requested training programs would generate financial value to the organization. During the interview, many managers scrutinized the financial value of training and made an effort to align the training with business strategy. Some of them prioritized the training requests based on the extent to which the requested training was compatible with the organizational strategy. They also engaged and involved management and leadership into the process as stakeholders to help the HRD department to gain supports from executives of the organization. Adopting this strategic HRD perspective, managers considered the cost of the requested training program as a key deciding factor when they made training decisions, and they ensured that the training requests that they approved have certain forms of ROI to the organizations so that they contributed to achieving business objectives (Davenport, Prusak & Wilson, 2003; Garavan, 2007; Sahoo & Sahoo, 2012).

As mentioned in previous chapter, managers prioritized training requests based on the perceived financial value of the requested training program. They also considered whether the requested training program would support the strategic goals and missions of the organization. HRD function should be the strategic partner of organizations. Garavan, Heraty & Morley (1998) discussed the role of HRD as a strategic lever in organizations and as a means to assist the implementation of business strategies of the organization. Strategic HRD must be integrated as a part of the organizational process and business planning (Garavan, 1991; 2007).

Managers interviewed for the study embraced this perspective. Some managers stated during the interview that HRD managers could fully fulfill the role of strategic organizational partners only if HRD function was placed at the executive level of the organization. They used different strategies to forecast and examine the costs and benefits of the requested training. If the requested training program was costly or had limited financial return to the organization, the request for such program would be rejected, or the clients would be directed to other options. This usually happened when individual employees requested to get access to a training opportunity that only yielded benefits to their personal development. Managers took actions and spent time in determining whether the requested training program would be impactful in improving performance across the entire organization. Aligning HRD function with the business outcomes of the organization is the key to enhance both employees' and organizational performance (Sahoo & Sahoo, 2012).

Implications

The results of the study shed light on developing HRD as a discipline of study and a field of practice. Implications drawn from the study are discussed in this section from the perspectives of improving HRD scholarship and practice. The following section initiates an urgent call for action to establish partnership and collaboration between HRD scholars and practitioners. It also proposes the responsibilities of universities who provide HRD education in terms of preparing and cultivating more effective HRD decision makers in the future.

Implications for HRD as a Discipline of Study

Prior to this study, few HRD studies have explored the decision-making approaches used by managers who are responsible to respond to training requests. This topic can be viewed as an area that deserves further exploration through the collaborations between HRD scholars and practitioners. This study investigated the nature of the requests received by managers, their responses to the requests and the reasons for the decisions they made. Four decision-making approaches emerged as a result. The study began to conceptualize different types of approaches that managers applied in their daily decision-making practice. It is a starting point of understanding the decision-making approaches that managers used to respond to training requests. Continuous efforts need to be made for further comprehension on this topic. More and more managers with training responsibilities from organizations in a variety of industries should be invited to share their experience with making training decisions.

The analysis of the data implied that managers with an advanced degree in HRD tended to refer to more theoretical models that they learned in the field than others from non-HRD departments. Hence, managers' educational background might influence the way managers made decisions. The research questions of this study did not address the relationship between managers' educational background in HRD, which might have certain degree of impact on how managers made decisions to respond to training requests. As a result, more qualitative studies are needed to further understand whether the usage of certain decision-making approaches is associated with managers' educational background. Future studies can focus on the influences of managers' educational background in HRD on managers' selection of decision-making approaches as well as their responses to clients' training requests. In addition, the responses made in the past might also influence the decision-making approach used for current and future requests. Therefore, understanding the relationship between these three aspects can be very valuable. A revised conceptual framework for future study is provided below.

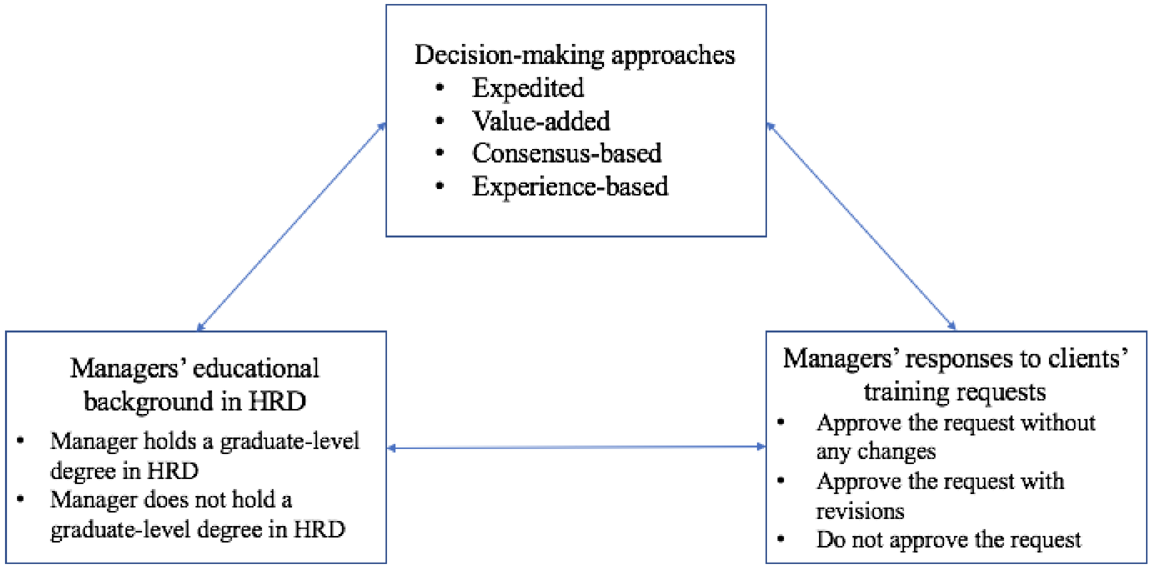

Figure 5.1: The Revised Conceptual Framework for Future Study

Studies that collect more sources of data are needed in the future. During the interview, managers were asked to recall their past experience of making decisions to respond to training requests. There might be potential recollection errors existing in the interview data. Moreover, social desirability bias can also potentially be associated with collecting qualitative data from one-on-one interviews. Respondents might provide answers that they perceived as the "correct" or the "best" ones, which might be diverged from their actual practice. Thus, in the future, research studies that are designed to employ more types of data collection strategies, such as surveys, document analysis and observations, will provide more insights. A mix-method research that incorporates both qualitative and quantitative analysis methods will also be beneficial in exploring this topic further.

Implications for HRD as a Field of Practice

This study sheds light on understanding the state of the practice of managers who are responsible for responding to clients' training requests. Argyris and Schön (1974) proposed two theories of action. They argued that people claim and explain how they would behave in certain situations, but their actions are actually guided by their mental maps, which may or may not be consistent with what they claim they would do. The former behavior can be explained by Espoused Theory of Action, which denotes the statement people give to explain what they would do. The later represents Theory-In-Use, which guides the actual actions that people take. This study collected and analyzed respondents' espoused theories through the data gathering process, which was designed to ask what managers did under a circumstance where a decision was needed. The next challenge for HRD to develop as a field is to accurately learn and define the theories-in-use that managers adopt when making training-related decisions, because these theories-in-actions truthfully reveal the managers' behaviors and actions during the process of decision-making. Starting from there, reasonable judgement can be made on whether managers' theories-in-use align with the theories proposed in HRD literature. Furthermore, more research and studies in HRD should be produced to influence and guide managers' theories-in-use, so that they can achieve effective decision-making when processing clients' training requests.

This study has implications for developing HRD as a field of practice. First, according to the findings of the study, the ownership of HRD is decentralized in many organizations, so it is critical for HRD professionals to establish and maintain partnerships with line managers. Previous research in HRD underlined the decentralization and the shared ownership of HRD function in organizations (Wognum & Mulder, 1999). This was reflected in the current study too. Of which the total seven organizations that the respondents were from, only one organization was reported to have completely centralized HRD function, meaning that their HRD department was responsible for taking in all training requests and implementing all training programs. In other organizations, the responsibilities of training and developing employees were shared between the HR or HRD department and the home department where the employees were employed within. The managers of the employees' home department had the obligations to orient, train, develop, and mentor their employee, while the organization-wide HRD department provided large-scale training opportunities for industry and company specific knowledge and skills. Line managers were viewed as "actors" in HRD (Garavan, 1991; Garavan *et al.*, 1998) and HRD professionals were challenged to engage them as key stakeholders of training and partners in HRD functions.

The training requests submitted to non-HRD managers focused more on individual employees' performance, while the training requests received by the HRD managers targeted larger groups of employees within the organization. Three organizations were reported to have a formal documentation system to record information such as the training requests, analysis of the needs and other relevant information, the decisions made to respond to the requests, as well as the evaluation results of the decisions. In the meantime, the non-HRD managers interviewed for the study tended to play a more passive role as training decision makers and applied less formal processes to form decisions in responses to the clients' training requests.

Due to the active involvement of non-HRD professionals in HRD activities in the organization, partnership between the HRD department and the non-HRD departments needs to be established in order to achieve strategic HRD (McCracken & Wallace, 2000). In organizations where their HRD function is highly decentralized, line managers play a significant part in receiving and processing training requests from internal clients. The current study showed that the training requests submitted to line managers were mainly from individual employees within the same departments and concerned more about operational processes in the organization. Consequently, they become the first line "actors" in making training decisions as Garavan 1991 and Garavan *et al.* (1998) stated in their studies. If a healthy collaborative relationship between non-HRD departments and HRD departments can be built, it will reduce the number of requests submitted to the HRD department and therefore free up the capacity of HRD managers to focus on those requests with larger scales and impacts in the organization.

Second, after partnership between non-HRD managers is created and sustained, the role of HRD function as a strategic partner of the organization must be clearly defined and reinforced. With line managers managing training requests that concern technical issues and small group of audience, HRD managers can concentrate on the requests about strategic issues that affect the whole organization. In organizations that embrace strategic HRD, the HRD function also influence the formation of business strategy and missions (Butler, 1988; McCracken & Wallace, 2000). In addition, HRD function should develop a formal process of requesting training programs, as well as a directive process to help managers make decisions, starting from defining performance problems, collecting relevant information, all the way to forming the final responses to the requests and evaluating the decisions. Once this system is created, the increasingly documented training requests and decision-making processes can serve as references to help make managers future training decisions. Furthermore, the real-life cases can serve as instructional materials for developing current and prospective managers with better decision-making skills in responding to training requests from clients.

Third, training alone might not be the solution to many performance issues**.** Many critical incidents collected for this study showed that training alone was not the solution to performance issues. This means that training must be combined with other carefully planned and executed change management endeavor that takes place afterwards to maximize and sustain the results. A few managers interviewed for the study stressed the importance of creating a reinforcing climate in organization to achieve enduring training transfer. Job aids, super users who can demonstrate high level of expertise, and other supportive efforts must be incorporated as part of the solution in order to achieve the desired training results.

One of the purposes of conducting training and development activities in organizations is to equip employees with must-have knowledge and skills for satisfactory job performance. One myth that many practitioners have encountered is that when employees do not have the desired level of job performance, they will be assumed to be in need of training. This is not always the truth. In the first place, most of the performance issues are not due to the lack of training. Multiple respondents of the study emphasized the importance of defining the problem. Often times, the clients submitted their requests for training because they thought they understood what the problem and the solutions should be, which may or may not be the real performance problem and appropriate solutions. Many managers interviewed for the study explained their experience with identifying the root causes underneath the perceived performance issues. Knowledge gap can easily be the symptom that disguises managers, but other reasons, such as dysfunctions in management processes, could be the real reasons for employees' unsatisfactory performance. As a consequence, it is critical to understand the right problem in order to find the right solutions and to involve the right people for solving the problem. Managers who have training responsibilities must be competent in developing accurate problem statement and be capable to direct the clients to non-training solutions if needed.

Even if the performance issues are due to deficiency in knowledge and skills or behavioral problems, training alone might not the solution either. Assuming the learning results are satisfactory after training, they are not going to sustain for a long term without a continuous learning and support system. Many respondents embraced this perspective. In their day-to-day practice, they made sure to incorporate strategies to sustain the results of training.

Finally, continuous and advanced professional development would be beneficial for developing highly competent decision makers in HRD. In order to make effective HRD decisions, managers must be capable to conduct performance analysis to make effective decisions. Having the performance problems correctly identified and clearly defined is the premise to find the right solution. Many managers interviewed for the study stated the importance of defining problems before proceeding to make the effective decision. When receiving training requests, managers should be able to work with clients to collect relevant information for analyzing the problems, instead of quickly agreeing to clients' suggestions and resolutions no matter what are being suggested.

This study provides insights with regard to developing HRD degree programs and other advanced learning opportunities that higher education institutions in HRD could offer. As prospective managers in HRD functions, HRD graduate students must be provided opportunities to learn theories as well as practical knowledge in decision-making while studying in the program, so they can become effective HRD decision makers in the future. Real cases of making decisions to respond to clients' training requests should be provided as learning materials to provide HRD students with the opportunity to learn from the best practice of making HRD related decisions.

Except for including courses that teach decision theory in HRD degree programs, universities must seek for other opportunities to help current HRD managers and practitioners to polish their decision-making skills. The respondents of this study consisted of a group of senior level managers in various mid-to-large sized organizations in the United States. Most of the managers interviewed already held a master's or doctorate degree in HRD or other business-related fields. Due to their roles in the organization as well as their educational background, it might be unrealistic to convince managers like them to complete another Master's degree program in HRD to learn up-to-date knowledge. Therefore, universities that offer graduate-level degree programs in HRD must take the responsibility to forge an ongoing and mutually beneficial relationship with HRD practitioners. They must strive to create opportunities for HRD professionals, especially for middle and high-level managers, to continuously improve their skills and abilities in decision-making. The forms of these advanced learning opportunities can range from certificate programs and workshops that offer experiential and practical learning experience, to book clubs and discussion groups that allow practitioners to have access to state-of-the-art literature in making HRD-related decisions. Thus, universities that offer advanced degree programs in HRD need to establish sustainable partnership with practitioners in the field. Through the partnership, universities can provide non-degree programs to those middle-or-high level managers so that they could be able to access up-to-date scholar works and practical guidance in conducting performance analysis.

Conclusions

Decision-making is a core competency of managers in organizations. This study initiates the conceptualization of the decision-making approaches used by managers when responding to clients' training requests and expands the understanding in decision-making in the realm of HRD. The implications drawn from the study contribute to developing HRD as a discipline of study and a field of practice.

Making decisions in response to clients' training needs represents the process level of performance that Rummler and Brache (2013) proposed. The decisions, as the outputs of the process level, would have impacts on the job/performer level of performance and the organization level of performance. Therefore, improving managers' decision-making skills leads to improving not only the job performance of individual employees, but also the performance on the organizational level. Investigating the approaches that managers currently use reveals the merits and defects in managers' decision-making practice when responding to training requests.

Like any other system approach, performance analysis serves as a foundation of making effective decisions. Many respondents of the study stressed the importance of defining the problem and identifying the causes to the problem in the early stage of their decision-making process. A robust performance analysis will result in a clear problem statement that defines the performance problems and the potential causes. It also identifies the desired outcomes to help decision makers propose and implement training solutions (Jacobs, 2014). Thus, managers must possess adequate knowledge and skills to conduct performance analysis in order to make effective decisions in HRD.

According to the findings of this study, managers' past experience and knowledge in HRD play a less significant role in assisting them to make current and future decisions. Referring to the best practices may accelerate the decision-making process for achieving fruitful outcomes (Lervik *et al.*, 2005). Thus, learning from past successful instances residing in both practice and research would help managers to continuously sharpen their skills in making effective decisions in HRD. However, the limited use of knowledge in HRD by respondents of the study when they made decisions discloses a research-to-practice gap, which exists in many applied fields of study (Amabile *et al*., 2001; Edwards & Emmanuel, 1990; Short, Keefer & Stone, 2006). Many possible reasons contribute to the research-to-practice gap, for example, insufficient dissemination of research in decision-making in HRD context to guide practice, lack of education for practitioners to learn essential knowledge and skills of decision-making, and the scarce opportunity to bring scholars and practitioners together (Short *et al*, 2006). This study challenges universities that offer advanced HRD degree programs to take responsibilities in closing such gap and cultivating more effective HRD decision makers. To better accommodate the development needs of senior level managers who are responsible for training in organizations, universities should provide opportunities, such as certificate programs and workshops, to introduce state-of-the art scholar work in performance analysis, HRD process, system theory, and other relevant topics. Practitioners can also use these opportunities to form communities of practice, where best practices in decision-making across different areas of profession can be shared.

Being the initial endeavor to explore the decision-making practice in HRD, three areas need to be improved in future efforts to further understand this topic. Firstly, the number of respondents can be increased in future studies. The nine respondents of the study were senior level managers invited from various organizations who had training as their primary job responsibilities in a U.S. based organization. Eventually 41 critical incidents were collected. More prospective respondents shall be included in the future for gathering more critical incidents. Managers from international organizations should also be included in future research to study managers' decision-making processes in the global context.

Triangulation is another area that can be improved. As discussed earlier, the qualitative data of the study was mainly gathered from interviews. To eliminate potential social desirability bias and recollection errors, other methods of collecting data, such as observations, can be employed in future studies to reduce such bias and errors. Case studies that allow an up-close examination of decision-making process within multiple organizational contexts should be another option for continuous investigation of decision-making in HRD.

In addition, further efforts can be made in appraising the differences in making training decisions by HRD managers and line managers, because they are highly likely to possess different levels of educational background in HRD, which might have impacts on how they made decisions to respond to clients' training requests. To achieve this, structured interviews, empirical studies or studies using mixed method analysis can be developed for comparing between managers from HRD and other functions in organizations.

REFERENCES

Abernathy, C. M., & Hamm, R. M. (1995). Why a book about surgical intuition. *Surgical intuition: what it is and how to get it.* Philadelphia, PA: Henley & Belfus.

Agor, W. H. (1984). *Intuitive management.* NJ: *Englewood Cliffs.*

Agor, W. H. (1986). The Logic of Intuition: How Top Executives Make Important Decisions. *Organizational Dynamics*, *14*(3), 5-18.

Aharoni, Y., Tihanyi, L., & Connelly, B. L. (2011). Managerial decision-making in international business: A forty-five-year retrospective. *Journal of World Business*, *46*(2), 135-142.

Akdere, M. (2011). An analysis of decision-making process in organizations: Implications for quality management and systematic practice. *Total Quality Management & Business Excellence*, *22*(12), 1317-1330.

Amabile, T. M., Nasco, C. P., Mueller, J., Wojcik, T., Odomirok, P. W., Marsh, M., et al. (2001). Academic-practitioner collaboration in management research: A case of cross-profession collaboration. *Academy of Management Journal, 44* (2), 418-431.

Andersson, B. E., & Nilsson, S. G. (1964). Studies in the reliability and validity of the critical incident technique. *Journal of Applied Psychology*, *48*(6), 398.

Artinger, F., Petersen, M., Gigerenzer, G., & Weibler, J. (2015). Heuristics as adaptive decision strategies in management. *Journal of Organizational Behavior*, *36*(S1).

Argyris, C., & Schon, D. A. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco, LA: Jossey-Bass.

Ayres, L., Kavanaugh, K., & Knafl, K. A. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative health research*, *13*(6), 871-883.

Baghbanian, A., Hughes, I., Kebriaei, A., & Khavarpour, F. A. (2012). Adaptive decision-making: how Australian healthcare managers decide. *Australian Health Review*, *36*(1), 49-56.

Barkema, H. G., Baum, J. A., & Mannix, E. A. (2002). Management challenges in a new time. *Academy of Management Journal*, *45*(5), 916-930.

Barnard, C. (1938). *The functions of the executive*. Cambridge, Mass*:* Harvard University Press.

Barros, G. (2010). Herbert A. Simon and the concept of rationality: boundaries and procedures. *Revista de economia política*, *30*(3), 455-472.

Bastick, T. (1982). *Intuition: How we think and act.* New York, NY: Wiley.

Bateman, T. S., & Zeithaml, C. P. (1989). The psychological context of strategic decisions: A model and convergent experimental findings. *Strategic Management Journal*, *10*(1), 59-74.

Bateman, T. S., & Zeithaml, C. P. (1989). The psychological context of strategic decisions: A test of relevance to practitioners. *Strategic Management Journal*, *10*(6), 587-592.

Bauer, J. C., Schmitt, P., Morwitz, V. G., & Winer, R. S. (2013). Managerial decision making in customer management: adaptive, fast and frugal?. *Journal of the Academy of Marketing Science*, *41*(4), 436-455.

Bazerman, M. H. (1994). *Judgment in managerial decision-making* (3rd ed.). New York, NY: John Wiley.

Beach, L. R. (1997). *The psychology of decision making: People in organizations.* Thousand Oaks, CA: Sage.

Behling, O., & Eckel, N. L. (1991). Making sense out of intuition. *The Executive*, *5*(1), 46-54.

Berthon, P., Pitt, L. F., & Ewing, M. T. (2001). Corollaries of the collective: The influence of organizational culture and memory development on perceived decision-making context. *Journal of the Academy of Marketing Science*, *29*(2), 135-150.

Bettman, J. R., Johnson, E. J., Luce, M. F., & Payne, J. W. (1993). Correlation, conflict, and choice. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *19*(4), 931–951.

Bettman, J. R., Luce, M. F., & Payne, J. W. (1998). Constructive consumer choice processes. *Journal of Consumer Research*, *25*(3), 187–217.

Biggs, J. B. (1985). The role of metalearning in study processes. *British journal of educational psychology*, *55*(3), 185-212.

Bird, B. (2002). Learning entrepreneurship competencies: The self-directed learning approach. *International Journal of Entrepreneurship Education*, *1*(2), 203-227.

Bitner, M. J., Booms, B. H., & Tetreault, M. S. (1990). The service encounter: diagnosing favorable and unfavorable incidents. *The Journal of Marketing*, 71-84.

Blattberg, R. C., & Hoch, S. J. (1990). Database models and managerial intuition: 50% model+ 50% manager. *Management Science*, *36*(8), 887-899.

Borgen, W. A., Hatch, W. E., & Amundson, N. E. (1990). The experience of unemployment for university graduates: An exploratory study. *Journal of Employment Counseling*, *27*(3), 104-112.

Borrero, S., & Henao, F. (2017). Can managers be really objective? Bias in multicriteria decision analysis. *Academy of Strategic Management Journal*, *16*(1), 244-259.

Bott, G., & Tourish, D. (2016). The critical incident technique reappraised: Using critical incidents to illuminate organizational practices and build theory. *Qualitative Research in Organizations and Management: An International Journal*, *11*(4), 276-300.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative research journal*, *9*(2), 27-40.

Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. New York: Wiley.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development.* Thousand Oaks, CA: Sage.

Bradley, C. P. (1992). Uncomfortable prescribing decisions: a critical incident study. *Bmj*, *304*(6822), 294-296.

Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health services research*, *42*(4), 1758-1772.

Brannick, M. T., Levine, E. L., & Morgeson, F. P. (2007). *Job and work analysis: Methods, research, and applications for human resource management*. Thousand Oaks, CA, Sage.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Brehmer B. (1990). Strategies in real-time, dynamic decision making. In R. Hogarth (Ed.), *Insights in decision making* (pp. 262-291). Chicago: University of Chicago Press.

Brehmer, B. (1992). Dynamic decision making: Human control of complex systems. *Acta psychologica*, *81*(3), 211-241.

Brinkerhoff, R. O. (1989). Evaluating Training Programs in Business and Industry. *New Directions for Program Evaluation*, 44, 1-104.

Brockmann, E. N., & Anthony, W. P. (1998). The influence of tacit knowledge and collective mind on strategic planning. *Journal of Managerial issues*, 204-222.

Broedling, L. A. (1999). Applying a systems approach to human resource management. *Human Resource Management*, *38*(3), 269-277.

Bryman, A. (2004). Qualitative research on leadership: A critical but appreciative review. *The leadership quarterly*, *15*(6), 729-769.

Buetow, S. (2010). Thematic analysis and its reconceptualization as 'saliency analysis'. *Journal of Health Services Research & Policy*, *15*(2), 123-125.

Burgoyne, J. G. (1993). The competence movement: Issues, stakeholders and prospects. *Personnel Review*, *22*(6), 6-13.

Burke, L. A., & Miller, M. K. (1999). Taking the mystery out of intuitive decision making. *The Academy of Management Executive*, *13*(4), 91-99.

Burns, A. C., Williams, L. A., & "Trey" Maxham III, J. (2000). Narrative text biases attending the critical incidents technique. *Qualitative Market Research: An International Journal*, *3*(4), 178-186.

Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of business venturing*, *12*(1), 9-30.

Butler, J. E. (1988). Human resource management as a driving force in business strategy. *Journal of General Management*, *13*(4), 88-102.

Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Maglio, A. S. T. (2005). Fifty years of the critical incident technique: 1954-2004 and beyond. *Qualitative research*, *5*(4), 475-497.

Cabantous, L., & Gond, J. P. (2011). Rational decision making as performative praxis: Explaining rationality's éternel retour. *Organization science*, *22*(3), 573-586.

Calabretta, G., Gemser, G., & Wijnberg, N. M. (2017). The interplay between intuition and rationality in strategic decision making: A paradox perspective. *Organization Studies*, *38*(3-4), 365-401.

Cardona, P., & Lombardía, P. G. (2005). *How to develop leadership competencies*.

Cascio, W. F. (1999). *Costing human resources* (4th ed.). Mason, OH: Southwestern Publishing.

Certo, S. T., Connelly, B. L., & Tihanyi, L. (2008). Managers and their not-so rational decisions. *Business Horizons*, *51*(2), 113-119.

Cervone, H. F. (2015). Systematic vs intuitive decision making and the Pareto principle: Effective decision-making for project teams. *OCLC Systems & Services: International digital library perspectives*, *31*(3), 108-111.

Chalofsky, N., & Lincoln, C. I. (1983). *Up the HRD ladder: A guide for professional growth*. Addison: Wesley.

Chell, E. (1998). Critical Incident Technique. In Symon, G. & Cassell, C. (Eds). *Qualitative methods and analysis in organizational research: A practical guide* (pp. 51-72). London: Sage.

Chermack, T. J. (2003). Mental models in decision making and implications for human resource development. *Advances in developing human resources*, *5*(4), 408-422.

Chermack, T. J. (2003). Decision-making expertise at the core of human resource development. Advances in Developing Human Resources, 5(4), 365-377.

Citroen, C. L. (2011). The role of information in strategic decision-making. *International Journal of Information Management*, *31*(6), 493-501.

Clapham, S. E., & Schwenk, C. R. (1991). Self-serving attributions, managerial cognition, and company performance. *Strategic Management Journal*, *12*(3), 219-229.

Coetzer, A., Redmond, J., & Sharafizad, J. (2012). Decision making regarding access to training and development in medium-sized enterprises: An exploratory study using the Critical Incident Technique. *European Journal of Training and Development*, *36*(4), 426-447.

Connor, P. E., & Becker, B. W. (1994). Personal values and management: What do we know and why don't we know more?. *Journal of Management Inquiry*, *3*(1), 67-73.

Conrad, C.A. (1999). *Soft skills and the minority work force: a guide for informed discussion*. Washington DC: Joint Center for Political and Economic Studies.

Cope, J., & Watts, G. (2000). Learning by doing–an exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behavior & Research*, *6*(3), 104-124.

Corbin, J. & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Coscarelli, W. C., Burk, J., & Cotter, A. (1995). HRD and decision-making styles. *Human Resource Development Quarterly*, *6*(4), 383-395.

Costigan, R. D., & Brink, K. E. (2015). Another perspective on MBA program alignment: An investigation of learning goals. *Academy of Management Learning & Education*, *14*(2), 260-276.

Crabtree, B. F., & Miller, W. F. (1992). *A template approach to text analysis: developing and using codebooks.*

Cray, D., Mallory, G. R., Butler, R. J., Hickson, D. J., & Wilson, D. C. (1991). Explaining decision processes. *Journal of Management Studies*, *28*(3), 227-252.

Creswell, J. W., (2006). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W., (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage.

Creyer, E. H., Bettman, J. R., & Payne, J. W. (1990). The impact of accuracy and effort feedback and goals on adaptive decision behavior. *Journal of Behavioral Decision Making*, *3*(1), 1-16.

Cunha, M.P., Cunha, R.C. & Rego, A. (2009). Exploring the role of leader-subordinate interactions in the construction of organizational positivity. *Leadership*, *5*(1), 81-101.

Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. *Englewood Cliffs, NJ*, *2*, 169-187.

Dane, E., & Pratt, M. G. (2007). Exploring intuition and its role in managerial decision making. *Academy of management review*, *32*(1), 33-54.

Dasborough, M.T. (2006). Cognitive asymmetry in employee emotional reactions to leadership behaviors. *The Leadership Quarterly*, *17*(2), 163-178.

Davenport, T. H., Prusak, L., & Wilson, H. J. (2003). *What's the big idea?: Creating and capitalizing on the best management thinking*. Brighton, Massachusetts: Harvard Business Press.

De Dreu, C. K. (2003). Time pressure and closing of the mind in negotiation. *Organizational Behavior and Human Decision Processes*, *91*(2), 280-295.

De Ruyter, K., Perkins, D. S., & Wetzels, M. (1995). Consumer-defined service expectations and post purchase dissatisfaction in moderately-priced restaurants: a cross-national study. *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, *8*(1), 177-187.

Dean, J. W., & Sharfman, M. P. (1993). Procedural rationality in the strategic decision-making process. *Journal of management Studies*, *30*(4), 587-610.

Denes-Raj, V., & Epstein, S. (1994). Conflict between intuitive and rational processing: When people behave against their better judgment. *Journal of personality and social psychology*, *66*(5), 819.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.

Denzin, N.K. & Lincoln, Y.S. (1994). *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.

Di Salvo, V. S., Nikkel, E., & Monroe, C. (1989). Theory and practice: A field investigation and identification of group members' perceptions of problems facing natural work groups. *Small Group Behavior*, *20*(4), 551-567.

Dierdorff, E. C., & Rubin, R. S. (2006). Toward a comprehensive empirical model of managerial competencies. Technical report presented to the MERInstitute of the Graduate Management Admission Council, McLean, VA.

Dietrich, C. (2010). Decision making: factors that influence decision making, heuristics used, and decision outcomes. *Inquiries Journal*, *2*(02).

Driver, M. J., Brousseau, K. R., & Hunsaker, P. L. (1990). *The dynamic decision maker: Five decision styles for executive and business success.* New York: HarperCollins.

Dror, Y. (1968). Public policymaking re-examined. San Francisco, CA: Chandler

Druskat, V. U., & Wheeler, J. V. (2003). Managing from the boundary: The effective leadership of self-managing work teams. *Academy of Management Journal*, *46*(4), 435-457.

Duhaime, I. M., & Schwenk, C. R. (1985). Conjectures on cognitive simplification in acquisition and divestment decision making. *Academy of Management Review*, *10*(2), 287-295.

Dukes, S. (1984). Phenomenological methodology in the human sciences. *Journal of religion and health*, *23*(3), 197-203.

Dutton, J. E., & Ashford, S. J. (1993). Selling issues to top management. *Academy of management review*, *18*(3), 397-428.

Dutton, J. E., & Duncan, R. B. (1987). The creation of momentum for change through the process of strategic issue diagnosis. *Strategic management journal*, *8*(3), 279-295.

Dutton, J. E., Fahey, L., & Narayanan, V. K. (1983). Toward understanding strategic issue diagnosis. *Strategic Management Journal*, *4*(4), 307-323.

Edland, A., & Svenson, O. (1993). Judgment and decision making under time pressure. In A. J. Maule & O. Svenson (Eds.). *Time pressure and stress in human judgment and decision making* (pp. 27-40). Boston, MA: Springer.

Edwards, K., & Emmanuel, O. (1990). Exploring the relevance gap. *Management Accounting*, *68*, 44-46.

Edvardsson, B. (1992). Service breakdowns: A study of critical incidents in an airline. *International Journal of Service Industry Management*, *3*(4), 17-29.

Edvardsson, B., & Roos, I. (2001). Critical incident techniques: Towards a framework for analysing the criticality of critical incidents. *International Journal of Service Industry Management*, *12*(3), 251-268.

Eilbert, L.R. (1953). A Study of Emotional Immaturity Utilizing the Critical Incident Technique. *University of Pittsburgh Bulletin*, *49*: 199-204.

Eisenhardt, K. M. (1989). Making fast strategic decisions in high-velocity environments. *Academy of Management journal*, *32*(3), 543-576.

Eisenhardt, K. M., & Zbaracki, M. J. (1992). Strategic decision making. *Strategic management journal*, *13*(S2), 17-37.

El Asame, M., & Wakrim, M. (2018). Towards a competency model: A review of the literature and the competency standards. *Education and Information Technologies*, *23*(1), 225-236.

Elbanna, S. (2006). Strategic decision-making: Process perspectives. *International Journal of Management Reviews*, *8*(1), 1-20.

Elbanna, S., & Child, J. (2007). Influences on strategic decision effectiveness: Development and test of an integrative model. *Strategic Management Journal*, *28*(4), 431-453.

Ellinger, A. D., & Bostrom, R. P. (2002). An examination of managers' beliefs about their roles as facilitators of learning. *Management Learning*, *33*(2), 147-179.

Ellis, S. C., Henry, R. M., & Shockley, J. (2010). Buyer perceptions of supply disruption risk: A behavioral view and empirical assessment. *Journal of Operations Management*, *28*(1), 34-46.

Elstein, A. S. (1999). Heuristics and biases: selected errors in clinical reasoning. *Academic Medicine: Journal of The Association of American Medical Colleges*, *74*(7), 791-794.

Epstein, S. (1998). Cognitive-experiential self-theory. In *Advanced personality* (pp. 211-238). Boston, MA: Springer.

Etzioni, A. (1968). *The active society: A theory of societal and political* processes. New York: Free Press.

Finkelstein, S., & Hambrick, D. C. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative science quarterly*, 484-503.

Flanagan, J. C. (1954). The critical incident technique. *Psychological bulletin*, *51*(4), 327-358.

Fleetwood, S., & Hesketh, A. (2008). Theorising under-theorisation in research on the HRM-performance link. *Personnel Review*, *37*(2), 126-144.

Franklin II, C. L. (2013). Developing expertise in management decision-making. *Academy of Strategic Management Journal*, *12*(1), 21-37.

Frederick, S. (2005). Cognitive reflection and decision making. *Journal of Economic perspectives*, *19*(4), 25-42.

Fredrickson, J. W. (1983). Strategic process research: Questions and recommendations. *Academy of Management Review*, *8*(4), 565-575.

Fredrickson, J. W. (1984). The comprehensiveness of strategic decision processes: Extension, observations, future directions. *Academy of Management journal*, *27*(3), 445-466.

Fredrickson, J. W., & Mitchell, T. R. (1984). Strategic decision processes: Comprehensiveness and performance in an industry with an unstable environment. *Academy of Management journal*, *27*(2), 399-423.

French, N. (2001). Decision theory and real estate investment: an analysis of the decision-making processes of real estate investment fund managers. *Managerial and decision economics*, *22*(7), 399-410.

Gabbott, M., & Hogg, G. (1996). The glory of stories: using critical incidents to understand service evaluation in the primary healthcare context. *Journal of Marketing Management*, *12*(6), 493-503.

Garavan, T. N. (1991). Strategic human resource development. *Journal of European industrial training*, *15*(1), 17-30.

Garavan, T. N. (2007). A strategic perspective on human resource development. *Advances in Developing Human Resources*, 9(1), 11-30.

Garavan, T. N., Costine, P., & Heraty, N. (1995). The emergence of strategic human resource development. *Journal of European Industrial Training*, *19*(10), 4-10.

Garavan, T. N., Heraty, N., & Morley, M. (1998). Actors in the HRD process: An exploratory study. *International studies of management & organization*, *28*(1), 114-135.

Gavetti, G., Levinthal, D., & Ocasio, W. (2007). Perspective—Neo-Carnegie: The Carnegie school's past, present, and reconstructing for the future. *Organization Science*, *18*(3), 523-536.

Gentry, W. A., & Sparks, T. E. (2012). A convergence/divergence perspective of leadership competencies managers believe are most important for success in organizations: A cross-cultural multilevel analysis of 40 countries. *Journal of Business and Psychology*, *27*(1), 15-30.

Gigerenzer, G. (2004). Fast and frugal heuristics: the tools of bounded rationality. In D. J. Koehler & N. Harvey (Eds.), *Blackwell handbook of judgment and decision making* (pp. 62–88). Oxford: Blackwell.

Gigerenzer, G. (2006). Bounded and rational. In Stainton, R.J. (Ed), *Contemporary debates in cognitive science* (pp. 115-133). Malden, MA: Blackwell.

Gigerenzer, G., & Brighton, H. (2009). Homo heuristicus: Why biased minds make better inferences. *Topics in cognitive science*, *1*(1), 107-143.

Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual review of psychology*, *62*, 451-482.

Gigerenzer, G., & Goldstein, D. G. (1996). Reasoning the fast and frugal way: models of bounded rationality. *Psychological review*, *103*(4), 650.

Gigerenzer, G., Todd, P. M., & the ABC Research Group. (1999). Simple heuristics that make us smart (1st ed.). New York: Oxford University Press.

Golden, B. R. (1992). The past is the past—or is it? The use of retrospective accounts as indicators of past strategy. *Academy of Management journal*, *35*(4), 848-860.

Goll, I., & Rasheed, A. A. (2005). The relationships between top management demographic characteristics, rational decision making, environmental munificence, and firm performance. *Organization studies*, *26*(7), 999-1023.

Goll, I., & Rasheed, A. M. (1997). Rational decision-making and firm performance: The moderating role of environment. *Strategic management journal*, 583-591.

Goll, I., & Sambharya, R. B. (1990). The effect of organizational culture and leadership on firm performance. *Advances in strategic management*, *6*, 183-200.

Graduate Management Admission Council (GMAC). (2012a). *Alumni perspectives survey: Survey report.*

Graduate Management Admission Council (GMAC). (2012b). *Prospective students survey: Survey report*. mba.com.

Graduate Management Admission Council (GMAC). (2012c). *Global management education graduate survey: Survey report.*

Graduate Management Admission Council (GMAC). (2012d). *Profile of graduate management admission candidates 2010- 2011.*

Graybill, E., Heggs, A., Truscott, S., Vinoski, E., Crenshaw, M., & Crimmins, D. (2017). Using the critical incident technique to measure long-term outcomes of interprofessional education. *Journal of interprofessional care*, *31*(4), 533-536.

Gremler, D. D. (2004). The critical incident technique in service research. *Journal of service research*, *7*(1), 65-89.

Groner, M., Groner, R., & Bischof, W. F. (1983). Approaches to heuristics: A historical review. *Methods of heuristics*, 1-18.

Grove, S. J., & Fisk, R. P. (1997). The impact of other customers on service experiences: a critical incident examination of "getting along". *Journal of retailing*, *73*(1), 63-85.

Guest, G., Namey, E. E., & Mitchell, M. L. (2013). *Collecting qualitative data: A field manual for applied research.* Thousand Oaks, CA: Sage.

Hales, C. P. (1986). what do managers do? a critical review of the evidence. *Journal of Management Studies*, *23*(1), 88.

Hamblin, A. C. (1974). Evaluation and Control of Training. *Industrial Training International*, *9*(5), 154-6.

Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. W. (1993). Top executive commitment to the status quo: Some tests of its determinants. *Strategic Management Journal*, *14*(6), 401-418.

Hamlin, B., & Stewart, J. (2011). What is HRD? A definitional review and synthesis of the HRD domain. *Journal of European Industrial Training*, *35*(3), 199-220.

Hammond, K. R., Hamm, R. M., Grassia, J., & Pearson, T. (1987). Direct comparison of the efficacy of intuitive and analytical cognition in expert judgment. *IEEE Transactions on systems, man, and cybernetics*, *17*(5), 753-770.

Harper, S. C. (1989). Intuition: What separates executives from managers. In W. H. Agor (Ed.), *Intuition in organizations: Leading and managing productively* (pp.111–124). Newbury Park, CA: Sage.

Hart, S. L. (1992). An integrative framework for strategy-making processes. *Academy of management review*, *17*(2), 327-351.

Hatcher, T. (2000). A study of the influence of the theoretical foundations of human resource development on research and practice. In *Proceedings of the Academy of Human Resource Development*.

Hayashi, A. (2001). When to trust your gut. *Harvard Business Review*, *79*(2), 58-65, 155.

Heckerman, D. G. (1975). Motivating managers to make investment decisions. *Journal of Financial Economics*, *2*(3), 273-292.

Hendry, C., & Pettigrew, A. (1990). Human resource management: an agenda for the 1990s. *International journal of human resource management*, *1*(1), 17-43.

Herling, R. W. (2003). Bounded rationality and the implications for HRD. *Advances in Developing Human Resources*, *5*(4), 393-407.

Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The Motivation to Work*. New York: John Wiley & Sons.

Hitt, M. A., & Tyler, B. B. (1991). Strategic decision models: Integrating different perspectives. *Strategic management journal*, *12*(5), 327-351.

Hitt, M. A., Keats, B. W., & DeMarie, S. M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *The academy of management executive*, *12*(4), 22-42.

Hogarth, R. M. (1987). *Judgement and choice: The psychology of decision.* Chichester [West Sussex]: Wiley.

Holton, E. F., & Naquin, S. (2005). A critical analysis of HRD evaluation models from a decision-making perspective. *Human Resource Development Quarterly*, *16*(2), 257-280.

Hopkinson, G. C., & Hogarth-Scott, S. (2001). " What happened was..." broadening the agenda for storied research. *Journal of Marketing Management*, *17*(1-2), 27-47.

Huber, G. P., & Power, D. J. (1985). Retrospective reports of strategic-level managers: Guidelines for increasing their accuracy. *Strategic management journal*, *6*(2), 171-180.

Huff, A. S., & Schwenk, C. (1990). Bias and sensemaking in good times and bad. *Mapping strategic thought*, *89*, 108.

Isaack, T. S. (1978). Intuition: An Ignored Dimension of Management. *Academy Of Management Review*, *3*(4), 917-922. doi:10.5465/AMR.1978.4289310

Isenberg, D. J. (1984). How senior managers think. (cover story). *Harvard Business Review*, *62*(6), 81.

Ivancevich, J. M., Szilagyi, A. D., & Wallace, M. J. (1977). *Organizational behavior and performance*. Santa Monica, CA: Goodyear Publishing Co.

Iwu, C. G., Kapondoro, L., Twum-Darko, M., & Lose, T. (2016). Strategic human resource metrics: a perspective of the general systems theory. *Acta Universitatis Danubius. Œconomica*, *12*(2).

Jackson, S. E., & Schuler, R. S. (1995). Understanding human resource management in the context of organizations and their environments. *Human Resource Management: Critical Perspectives on Business and Management*, *2*, 45-74.

Jacobs, R. (2003). *Structured on-the-job training: Unleashing employee expertise in the workplace*. San Francisco, CA: Berrett-Koehler Publishers.

Jacobs, R. (2014). System theory and human resource development. In Chalofsky, N., Morris, L., & Rocco, T. (eds.), *Handbook of Human Resource Development*, 21-39. San Francisco: Jossey-Bass.

Jacobs, R. (2016). *Improving Organizational Performance through Strategic Human Resource Development*. Lecture.

Jacobs, R. L. (1986). Use of the Critical Incident Technique to Analyze the Interpersonal Skill Requirements of Supervisors. *Journal of Industrial Teacher Education*, *23*(2), 56-61.

Jacobs, R. L. (1988). A proposed domain of human performance technology: Implications for theory and practice. *Performance improvement quarterly*, *1*(2), 2-12.

Jacobs, R. L. (1990). Human resource development as an interdisciplinary body of knowledge. *Human resource development quarterly*, *1*(1), 65-71.

Jacobs, R. L. (2014). System theory and HRD. *Handbook of human resource development*, 21-39.

Jacobs, R. L., Jones, M. J., & Neil, S. (1992). A case study in forecasting the financial benefits of unstructured and structured on-the-job training. *Human Resource Development Quarterly*, *3*(2), 133-139.

Janis, L., & Mann, L. (1977). *Decision making*. New York: Free Press.

Johnson, E. J., & Meyer, R. J. (1984). Compensatory choice models of noncompensatory processes: the effect of varying context. *Journal of Consumer Research*, *11*(1), 528–541.

Johnson, H. H., & Fredian, A. J. (1986). Simple Rules for Complex Change. *Training & Development Journal*, *40*(8), 47-49.

Johnston, R. (1995). The determinants of service quality: satisfiers and dissatisfiers. *International journal of service industry management*, *6*(5), 53-71.

Jonassen, D. H. (2012). Designing for decision making. *Educational technology research and development*, *60*(2), 341-359.

Judge, W. Q., & Miller, A. (1991). Antecedents and outcomes of decision speed in different environmental context. *Academy of Management Journal*, *34*(2), 449-463.

Katz, R. L. (1974). Skills or an effective administrator. *Harvard Business Review*. *52*(5): 90-102.

Kaempf, G. L., Klein, G., Thordsen, M. L., & Wolf, S. (1996). Decision making in complex naval command-and-control environments. *Human factors*, *38*(2), 220-231.

Kahneman, D. (2003). A perspective on judgment and choice: mapping bounded rationality. *American psychologist*, *58*(9), 697.

Kahneman, D. (2011). *Thinking, fast and slow*. New York : Farrar, Straus and Giroux.

Kahneman, D., & Tversky, A. (1979). On the interpretation of intuitive probability: A reply to Jonathan Cohen. *Cognition*, *7*(4), 409-411.

Kaplan, M. F., Wanshula, L. T., & Zanna, M. P. (1993). Time pressure and information integration in social judgment. In A. J. Maule & O. Svenson (Eds.). *Time pressure and stress in human judgment and decision making* (pp. 255-267). Boston, MA: Springer.

Kast, F. E., & Rosenzweig, J. E. (1972). General systems theory: Applications for organization and management. *Academy of management journal*, *15*(4), 447-465.

Kaufmann, L., Wagner, C. M., & Carter, C. R. (2017). Individual modes and patterns of rational and intuitive decision-making by purchasing managers. *Journal of Purchasing and Supply Management*, *23*(2), 82-93.

Kaulio, M. A. (2008). Project leadership in multi-project settings: Findings from a critical incident study. *International Journal of Project Management*, *26*(4), 338-347.

Kepner, C.H. & Tregoe, B. B. (1976). *The rational manager: A systematic approach to problem solving and decision makin*g. New York: McGraw-Hill.

Kesselman, G. A., Lopez, F. M., & Lopez, F. E. (1982). The development and validation of a self-report scored in-basket test in an assessment center setting. *Personnel Administration*, *11*(3), 228-238.

Khatri, N., & Ng, H. A. (2000). The role of intuition in strategic decision making. *Human relations*, *53*(1), 57-86.

Kimberly, J. R., & Rottman, D. B. (1987). Environment, organization and effectiveness: A biographical approach [1]. *Journal of Management Studies*, *24*(6), 595-622.

Kirkpatrick, D. L. (1998). *Evaluating training programs: The four levels*. San Francisco, CA: Berrett-Koehler.

Kirkpatrick, D. (1996). Revisiting Kirkpatrick's four-level model. *Training & Development*, *50*(1), 54-57.

Kirkpatrick, D. L. (1994). Evaluating training programs: the four levels. San Francisco, LA: Berrett-Koehler.

Klein, G. (1998). *Sources of power: How people make decisions.* Cambridge, Mass: MIT Press.

Klein, G. (2001). The fiction of optimization. In G. Gigerenzer & R. Selten (Eds.), *Bounded rationality: The adaptive toolbox* (pp. 103–122). Cambridge, MA: MIT Press.

Kluender, D.E. (1987). *Job Analysis*. In H.W. More & P. C. Unsinger, P.C. (Eds). *The Police Assessment Center* (pp. 49-65). Springfield, IL: Charles C. Thomas.

Kophuting, T. W., & Mutshewa, A. (2017). Analyzing Critical Incidents Stories to Understand Change Management Process in the Adoption of e-Resources at the University of Botswana Library. *International Information & Library Review*, *49*(4), 249-265.

Korte, R. F. (2003). Biases in decision making and implications for human resource development. *Advances in Developing Human Resources*, *5*(4), 440-457.

Kraut. A. 1., Pedigo. P. R.. McKenna, D. D., & Dunnette, M. D. (1989). The role of the manager: what's really important in different management jobs. *Academy of Management Executive*, 3: 100-103.

Kruglanski, A. W., & Freund, T. (1983). The freezing and unfreezing of lay-inferences: Effects on impressional primacy, ethnic stereotyping, and numerical anchoring. *Journal of experimental social psychology*, *19*(5), 448-468.

Kuckartz, U. (2014). *Qualitative text analysis: A guide to methods, practice and using software*. Thousand Oaks, CA: Sage.

Kuhn, T. S. (2012). *The structure of scientific revolutions*. University of Chicago press.

Kuzel, A. (1992). Sampling in qualitative inquiry. In B. Crabtree & W. Miller (Eds.), *Doing qualitative research* (pp.31-44). Newbury Park, CA: Sage.

Kvarnström, S. (2008). Difficulties in collaboration: a critical incident study of interprofessional healthcare teamwork. *Journal of interprofessional care, 22*(2), 191-203.

Kyndt, E. & Baert, H. (2015). Entrepreneurial competencies: Assessment and predictive value for entrepreneurship. *Journal of Vocational Behavior, 90*, 13-25.

Laguna, M., Wiechetek, M., & Talik, W. (2012). Competencies of managers and their business success. *Central European Business Review*, *1*(3), 7.

Langley, A., Mintzberg, H., Pitcher, P., Posada, E., & Saint-Macary, J. (1995). Opening up decision making: The view from the black stool. *Organization Science*, *6*(3), 260-279.

Lant, T. K., Milliken, F. J., & Batra, B. (1992). The role of managerial learning and interpretation in strategic persistence and reorientation: An empirical exploration. *Strategic Management Journal*, *13*(8), 585-608.

Lapidot, Y., Kark, R., & Shamir, B. (2007). The impact of situational vulnerability on the development and erosion of followers' trust in their leader. *The leadership quarterly*, *18*(1), 16-34.

Lara, F. J., & Salas-Vallina, A. (2017). Managerial competencies, innovation and engagement in SMEs: The mediating role of organizational learning. *Journal of Business Research, 79*, 152-160.

Laszlo, A., & Krippner, S. (1998). Systems theories: Their origins, foundations, and development. *Advances in psychology, 126*, 47-76.

Lee, R. (1996). What makes training pay? Issues in People Management. *Institute of Personnel and Development*, *11*.

Lengnick-Hall, C. A., & Lengnick-Hall, M. L. (1988). Strategic human resources management: A review of the literature and a proposed typology. *Academy of management Review*, *13*(3), 454-470.

Leonard-Barton, D. (1995). Wellsprings of knowledge: Building and sustaining the sources of innovation.

Lepak, D. P., & Snell, S. A. (1999). The human resource architecture: Toward a theory of human capital allocation and development. *Academy of management review*, *24*(1), 31-48.

Lervik, J. E., Hennestad, B. W., Amdam, R. P., Lunnan, R., & Nilsen, S. M. (2005). Implementing human resource development best practices: Replication or re-creation? *Human Resource Development International*, *8*(3), 345-360.

Lichtenstein, S., Lichtenstein, G., & Higgs, M. (2017). Personal values at work: A mixed-methods study of executives' strategic decision-making. *Journal of General Management*, *43*(1), 15-23.

Lieberman, M. D. (2000). Intuition: a social cognitive neuroscience approach. *Psychological bulletin*, *126*(1), 109.

Line, J. D. (1972). Determination of the training needs of foremen in a large engine plant by use of the critical incident technique.

Luthans, F. (1988). Successful vs. effective real managers. *The Academy of management EXECUTIVE*, *2*(2), 127-132.

MacGillivray, B. H. (2014). Heuristics structure and pervade formal risk assessment. *Risk Analysis*, *34*(4), 771-787.

Mager, R.F. & Pipe, P. (1997). *Analyzing performance problems, or, You really oughta wanna: how to figure out why people aren't doing what they should be, and what to do about it.* Atlanta, GA: Center for Effective Performance,

Maitland, E., & Sammartino, A. (2015). Decision making and uncertainty: The role of heuristics and experience in assessing a politically hazardous environment. *Strategic Management Journal*, *36*(10), 1554-1578.

Man, T. W., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of business venturing*, *17*(2), 123-142.

Mantel, S. P., Tatikonda, M. V., & Liao, Y. (2006). A behavioral study of supply manager decision-making: Factors influencing make versus buy evaluation. *Journal of Operations Management*, *24*(6), 822-838.

March, J. G., & Simon, H. A. (1958). Organizations. New York: J. Wiley and Sons.

Markman, G. D. (2007). Entrepreneur's competencies. In J. R. Baum, M. Frese & A. Baron. (Eds.). *The psychology of entrepreneurship (*pp. 67-92*)*. Mahwah, London: Lawrence Erlbaum Assoc.

Marshall, C. & Rossman, G. (1989). How to conduct the study: designing the research. *Designing qualitative research.* Maryland: Sage publications.

Marsick, V. J., & Watkins, K. E. (1994). The learning organization: An integrative vision for HRD. *Human Resource Development Quarterly*, *5*(4), 353-360.

Matlay, H. (1999). Employee relations in small firms: A micro-business perspective. *Employee relations*, *21*(3), 285-295.

Maule, A. J., Hockey, G. R. J., & Bdzola, L. (2000). Effects of time-pressure on decision-making under uncertainty: changes in affective state and information processing strategy. *Acta psychologica*, *104*(3), 283-301.

McCain, R. A. (1981). *Markets, decisions, and organizations: Intermediate microeconomic theory*. Upper Saddle River, NJ: Prentice Hall.

McCracken, M., & Wallace, M. (2000). Towards a redefinition of strategic HRD. *Journal of European industrial training*, *24*(5), 281-290.

McFadzean, E. (1999). Encouraging creative thinking. *Leadership & Organization Development Journal*, *20*(7), 374-383.

McGoldrick, J., Stewart, J., & Watson, S. (Eds.). (2001). *Understanding human resource development: a research-based approach*. London: Routledge.

McGoldrick, J., Stewart, J., & Watson, S. (Eds.). (2003). *Understanding human resource development: a research-based approach*. London: Routledge.

McKenney, J. L., & Keen, P. (1974). How managers' minds work. *Harvard Business Review*, 52, 79-90.

McLean, G. N., & McLean, L. (2001). If we can't define HRD in one country, how can we define it in an international context? *Human Resource Development International*, *4*(3), 313-326.

Means, B., Salas, E., Crandall, B., & Jacobs, T. O. (1993). Training decision makers for the real world. In G. A. Klein, J. Orasanu, R. Calderwood, & C. E. Zsambok (Eds.), *Decision making in action: Models and methods* (pp. 306–326). Norwood, NJ: Ablex.

Merrill, D. W., & Reid, R. H. (1981). *Personal styles and effective performance.* Radnor, PA: Chilton.

Michel, S. (2001). Analyzing service failures and recoveries: a process approach. *International journal of service industry management*, *12*(1), 20-33.

Miller, D., & Friesen, P. H. (1983). Strategy-making and environment: the third link. *Strategic management journal*, *4*(3), 221-235.

Miller, R. B., & Flanagan, J. C. (1950). The performance record: an objective meritrating procedure for industry. *Amer. Psychologist*, *5*, 331-332.

Milliken, F. J., & Lant, T. K. (1991). The effect of an organization's recent performance history on strategic persistence and change: The role of managerial interpretations. In J. Dutton,

A. Huff, & P. Shrivastava (Eds.), *Advances in strategic management, 7*, 125-152. Greenwich, GT: JAI Press.

Mintzberg, H. (1973). *The nature of managerial work.* New York: Harper and Row.

Mintzberg, H., Raisinghani, D., & Theoret, A. (1976). The structure of "unstructured" decision processes. *Administrative science quarterly*, 246-275.

Mitchelmore, S. & Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. *International Journal of Entrepreneurial Behavior & Research*, *16*(2), 92-111.

Morris, R. L., & Sanders, C. (2017). Critical moments in long-term condition management: A longitudinal qualitative social network study. *Chronic illness*, 1-16.

Moss, S. E., Valenzi, E. R., & Taggart, W. (2003). Are you hiding from your boss? The development of a taxonomy and instrument to assess the feedback management behaviors of good and bad performers. *Journal of Management, 29*(4), 487-510.

Mousavi, S., & Gigerenzer, G. (2014). Risk, uncertainty, and heuristics. *Journal of Business Research, 67*(8), 1671-1678.

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, California: Sage.

Nadler, L. & Nadler, Z. (1989). *Developing Human Resources: Concepts and a Model*. San Francisco, CA: Jossey-Bass.

Nadler, L., & Wiggs, G. (1986). *Managing human resource development: A practical guide.* San Francisco, CA: Jossey-Bass.

Nassif, V. M. J., Andreassi, T., & Tonelli, M. J. (2016). Critical incidents among women entrepreneurs: Personal and professional issues. *Revista de Administração (São Paulo), 51*(2), 212-224.

Neuhaus, P. (1996). Critical incidents in internal customer-supplier relationships: results of an empirical study. *Advances in Services Marketing and Management*, *5*, 283-313.

Nutt, P. C. (1989). *Making tough decisions: Tactics for improving managerial decision making.* San Francisco, CA: Jossey-Bass.

O'Donnell, D., & Garavan, T. N. (1997). Linking training policy and practice to organizational goals. *Journal of European industrial training*, *21*(9), 301-309.

O'Driscoll, M. P., & Cooper, C. L. (1996). A critical incident analysis of stress-coping behaviours at work. *Stress and Health*, *12*(2), 123-128.

Olsen, M., & Thomasson, B. (1992, June). Qualitative Methods in Service Quality Research: An Illustration of the Critical Incident Technique and Phenomenography'. In *QUIS3 Conference* (pp. 14-17).

Osbeck, L. M. (2001). Direct apprehension and social construction: Revisiting the concept of intuition. *Journal of Theoretical and Philosophical Psychology*, *21*(2), 118.

Pamplona: Eunsa.

Papadakis, V. M., & Barwise, P. (2002). How much do CEOs and top managers matter in strategic decision-making? *British Journal of Management*, *13*(1), 83-95.

Papadakis, V. M., Lioukas, S., & Chambers, D. (1998). Strategic decision-making processes: the role of management and context. *Strategic management journal*, *19*(2), 115-147.

Papouli, E. (2016). Using the Critical Incident Technique (CIT) to Explore How Students Develop Their Understanding of Social Work Values and Ethics in the Workplace During Their Final Placement. *Investigating Membership on University Institutional Review Boards: The Case for Social Work*, *5*(2), 56-72.

Parikh, J., Neubauer, F. F., & Lank, A. G. (1994). *Intuition: The new frontier of management*. Hoboken, NJ: Blackwell.

Parry, S. B. (1996). The quest for competencies. *Training*, 33(7), 48–54.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Thousand Oaks, CA: Sage.

Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, *1*(3), 261-283.

Payne, J. W., & Bettman, J. R. (2004). Walking with the scarecrow: the information-processing approach to decision research. In D. J. Koehler & N. Harvey (Eds.), *Blackwell handbook of judgment and decision making* (pp. 110–132). Oxford: Blackwell.

Payne, J. W., Bettman, J. R., & Luce, M. F. (1996). When time is money: Decision behavior under opportunity-cost time pressure. *Organizational behavior and human decision processes*, *66*(2), 131-152.

Payne, J. W., Johnson, E. J. & Bettman, J. R. (1993). *The adaptive decision maker.* Cambridge; Cambridge University Press

Pearl, J. (1984) *Heuristics: Intelligent search strategies for computer problem solving.* Reading, Mass: Addison-Wesley.

Pearman, J. R. (1978). A Systems Approach to Personnel Management: Advantages and Disadvantages of Implementation. *Public Personnel Management*, *7*(1), 6-18.

Peffers, S. N. (2013). Identifying innovative work behaviors: An inquiry using critical incident technique (Doctoral dissertation, Indiana State University).

Perlow, L. A., Okhuysen, G. A., & Repenning, N. P. (2002). The speed trap: Exploring the relationship between decision making and temporal context. *Academy of Management journal*, *45*(5), 931-955.

Peters, J. T., Hammond, K. R., & Summers, D. A. (1974). A note on intuitive vs analytic thinking. *Organizational Behavior and Human Performance*, *12*(1), 125-131.

Petitmengin-Peugeot, C. (1999). The intuitive experience. *Journal of Consciousness Studies*, *6*(2-3), 43-77.

Peus, C., Braun, S., & Frey, D. (2013). Situation-based measurement of the full range of leadership model—Development and validation of a situational judgment test. *The Leadership Quarterly*, *24*(5), 777-795.

Phillips, J. J. (1997). *Handbook of training evaluation and measurement methods* (3rd ed.). Oxford: Butterworth-Heineman.

Polya, G. (1954). *Patterns of Plausible Inference: Of Mathematics and Plausible Reasoning*. Princeton University Press.

Priem, R. L., Rasheed, A. M., & Kotulic, A. G. (1995). Rationality in strategic decision processes, environmental dynamism and firm performance. *Journal of Management*, *21*(5), 913-929.

Prietula, M. J., & Simon, H. A. (1989). The experts in your midst. *Harvard Business Review*, *67*(1), 120-124.

qualitative data analysis. *Qualitative health research*, *13*(6), 871-883.

Rainbird, H. (1995). The changing role of the training function: A test for integration of human resources and business strategy. *Human Resource Management Journal*, 5, 72-90.

Raissi, N., & Hakeem, A. (2017). How to Determine the Influencing Cultural Factors on the Strategic Decision-Making Process in the Banking Sector? *Journal of Management and Strategy*, *8*(1), 37.

Rajagopalan, N., Rasheed, A. M., & Datta, D. K. (1993). Strategic decision processes: Critical review and future directions. *Journal of management*, *19*(2), 349-384.

Rapley, T. (2007). *Doing conversation, discourse and document analysis.* London: Sage.

Rever-Moriyama, S. D. (1999). *Do unto others: The role of psychological contract breach, violation, justice, and trust on retaliation behaviours*. University of Calgary.

Riedl, D. F., Kaufmann, L., Zimmermann, C., & Perols, J. L. (n.d). Reducing uncertainty in supplier selection decisions: Antecedents and outcomes of procedural rationality. *Journal of Operations Management*, *31*(1-2), 24-36.

Riemen, D. J. (1986). The essential structure of a caring interaction: Doing phenomenology. *Nursing research: A qualitative perspective*, 85-105.

Robert Baum, J., & Wally, S. (2003). Strategic decision speed and firm performance. *Strategic Management Journal*, *24*(11), 1107-1129.

Robinson, D. G. & Robinson, J. C. (Eds.) (1998). *Moving from training to performance: A practical guidebook.* San Francisco, CA: Berrett-Koehler Publishers.

Ronan, W. W., & Latham, G. P. (1974). The reliability and validity of the critical incident technique: A closer look. *Studies in Personnel Psychology*.

Rothwell, W. J., & Lindholm, J. E. (1999). Competency identification, modelling and assessment in the USA. *International journal of training and development*, *3*(2), 90-105.

Rowan, R. (1989) What it is. In Agor, W. H. (Ed.), *Intuition in organizations: leading and managing productively.* Newbury Park, CA: Sage.

Rowe, A. J., & Mason, R. O. (1987). *Managing with style: A guide to understanding, assessing, and improving decision making*. San Francisco, CA: Jossey-Bass.

Rubin, R. S., & Dierdorff, E. C. (2009). How Relevant Is the MBA? Assessing the Alignment of Required Curricula and Required Managerial Competencies. *Academy of Management Learning & Education*, *8*(2), 208-224. doi:10.5465/AMLE.2009.41788843

Rummler, G. A., & Brache, A.P. (2013). *Improving performance: how to manage the white space on the organization chart.* San Francisco, LA: Jossey-Bass.

Ruona, W. E. A. (1998). Systems theory as a foundation for HRD. In *Proceedings of the 1998 Academy of Human Resource Development Conference. Baton Rouge, LA: Academy of Human Resource Development*.

Ruona, W.E.A. & Lynham, S. (1999). Toward a philosophical framework of thought and practice. In Kuchinke, K.P. (Ed.), *Baton Academy of Human Resource Development*, Baton Rouge, OH, pp. 206-15.

Russ, F. A., McNeilly, K. M., & Comer, J. M. (1996). Leadership, decision making and performance of sales managers: A multi-level approach. *Journal of Personal Selling & Sales Management*, *16*(3), 1-15.

Russ-Eft, D., & Preskill, H. (2001). *Evaluation in organizations: A systematic approach to enhancing learning, performance and change.* Thousand Oaks, CA: Sage.

Rutledge, L., LeMire, S., Hawks, M., & Mowdood, A. (2016). Competency-based talent management: Three perspectives in an academic library. *Journal of library administration*, *56*(3), 235-250.

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field methods*, *15*(1), 85-109.

Rynes, S. L., & Bartunek, J. M. (2013). Curriculum matters: Toward a more holistic graduate management education. *Graduate Management Admissions Council (GMAC), Disrupt or be disrupted: A blueprint for change in management education*, 179-207.

Rynes, S. L., Trank, C. Q., Lawson, A. M., & Ilies, R. (2003). Behavioral coursework in business education: Growing evidence of a legitimacy crisis. *Academy of Management Learning & Education*, *2*(3), 269-283.

Sadler-Smith, E. (2016). The role of intuition in entrepreneurship and business venturing decisions. *European Journal of Work and Organizational Psychology*, *25*(2), 212-225.

Sahoo, A. K., & Sahoo, C. K. (2012). Impact of strategic HRD initiatives on individual performance. *Productivity*, *53*(2).

Salancik, G. R., & Meindl, J. R. (1984). Corporate attributions as strategic illusions of management control. *Administrative science quarterly*, 238-254.

Sandwith, P. (1993). A hierarchy of management training requirements: The competency domain model. *Public Personnel Management*, *22*(1), 43-62.

satisfaction and satisfaction outcomes in organizations. San Francisco: Berrett-Koehler.

Schippmann, J. S., Ash, R. A., Battista, M., Carr, L., Eyde, L. D., Hesketh, B., ... & Pearlman, K. (2000). The practice of competency modeling (vol 53, pg. 703, 2000). *Personnel Psychology*, *53*(4), U3-U3.

Schneider, S. C., & De Meyer, A. (1991). Interpreting and responding to strategic issues: The impact of national culture. *Strategic management journal*, *12*(4), 307-320.

Schrenk, L. P. (1969). Aiding the decision maker-a decision process model. *IEEE Transactions on Man-Machine Systems*, *10*(4), 204-218.

Schroder, H. M. (1989). Managerial competence and style. *Adaptors and innovators: Styles of creativity and problem solving*, 97-124.

Schwenk, C. H. (1986). Information, cognitive biases, and commitment to a course of action. *Academy of Management Review, 11*(2), 298-310.

Schwenk, C. R. (1984). Cognitive simplification processes in strategic decision-making. *Strategic management journal*, *5*(2), 111-128.

Schwenk, C. R. (1995). Strategic decision making. *Journal of Management, 21*(3), 471-493.

Schwenk, C., & Tang, M. J. (1989). Economic and psychological explanations for strategic persistence. *Omega*, *17*(6), 559-570.

Senge, P. (1994). Building learning organizations. In C.E. Schneier, D. Laird & L. Baird (Eds.). *The training and development sourcebook* (pp.379-387). Amherst, Mass: Human Resource Development Press.

Shakun, M. F. (2001). Unbounded rationality. *Group Decision and Negotiation*, *10*(2), 97-118.

Shapiro, S., & Spence, M. T. (1997). Managerial intuition: A conceptual and operational framework. *Business horizons*, *40*(1), 63-69.

Sharoff, L. (2008). Critique of the critical incident technique. *Journal of Research in Nursing*, *13*(4), 301-309.

Sherman, D. L. (2013). Project manager interpersonal competency in virtual team environments: A qualitative study of virtual communication (Doctoral dissertation, Capella University).

Shirley, D. A., & Langan-Fox, J. (1996). Intuition: A review of the literature. *Psychological Reports, 79*(2), 563.

Short, D., Keefer, J. M., & Stone, S. J. (2006). The Link between Research and Practice: Experiences of Different Professions and Implications for HRD. *Online Submission*.

SHRM (2008). Leadership Competencies. Retrieved March 26, 2018, from https://www.shrm.org/resourcesandtools/hr-topics/behavioral-competencies/leadership-and-navigation/pages/leadershipcompetencies.aspx

Simon, H. A. (1947). *Administrative behavior: A Study of Decision-making Processes in Administrative Organization*, 1st ed. New York: The Macmillan Company.

Simon, H. A. (1956). Rational choice and the structure of the environment. *Psychological review*, *63*(2), 129.

Simon, H. A. (1957). *Models of Man Social and Rational, Mathematical Essays on Rational Human Behavior in a Social Setting.* New York: J. Wiley and Sons.

Simon, H. A. (1961). The New Science of Management Decision. *Harvard Business Review*, *39*(1), 104.

Simon, H. A. (1971). Decision making and organizational design. *Organizational Theory. Penguin Books*, 189-212.

Simon, H. A. (1978). Rationality as process and as product of thought. *The American economic review*, *68*(2), 1-16.

Simon, H. A. (1986). Rationality in psychology and economics. *Journal of Business*, S209-S224.

Simon, H. A. (1987). Making management decisions: The role of intuition and emotion. *The Academy of Management Executive (1987-1989)*, 57-64.

Simon, H.A. (1955). A behavioral model of rational choice. *The quarterly journal of economics*, 99-118.

Simon, H.A. (1979). Rational Decision Making in Business Organizations. *The American Economic Review*, *69*(4), 493-513.

Simon, H.A. (1982). *Models of bounded rationality*. Cambridge, Mass: MIT Press.

Simon, M., & Houghton, S. M. (2003). The relationship between overconfidence and the introduction of risky products: Evidence from a field study. *Academy of Management Journal*, *46*(2), 139-149.

Simons, R. H., & Thompson, B. M. (1998). Strategic determinants: the context of managerial decision making. *Journal of Managerial Psychology*, *13*(1/2), 7-21.

Sinclair, M., & Ashkanasy, N. M. (2005). Intuition: Myth or a decision-making tool? *Management learning*, *36*(3), 353-370.

Singh, J. V. (1986). Performance, slack, and risk taking in organizational decision making. *Academy of management Journal*, *29*(3), 562-585.

Singh, J., & Wilkes, R. E. (1996). When consumers complain: a path analysis of the key antecedents of consumer complaint response estimates. *Journal of the Academy of Marketing science*, *24*(4), 350-365.

Slovic, P., Fischhoff, B., & Lichtenstein, S. (1977). Behavioral decision theory. *Annual review of psychology*, *28*(1), 1-39.

Smith, D. H. (1990). *The Dictionary for Human Resource Development*.

Smith, J. A., Larkin, M. H. & Flowers, P. (Eds.) (2009). *Interpretative phenomenological analysis: Theory, method and research.* Thousand Oaks, CA: Sage.

Sparks, T. E., & Gentry, W. A. (2008). Leadership competencies: An exploratory study of what is important now and what has changed since the terrorist attacks of 9/11. *Journal of Leadership Studies*, *2*(2), 22-35.

Stauss, B. (1993). Using the critical incident technique in measuring and managing service quality. In E.E. Scheuing & W.F. Christopher (Eds.). *The service quality handbook* (pp.408-427). New York: Amacom.

Stauss, B., & Weinlich, B. (1997). Process-oriented measurement of service quality: Applying the sequential incident technique. *European Journal of Marketing*, *31*(1), 33-55.

Staw, B. M., McKechnie, P. I., & Puffer, S. M. (1983). The justification of organizational performance. *Administrative science quarterly*, 582-600.

Stein, J. (1981). Strategic decision methods. *Human Relations*, *34*(11), 917-933.

Straussfogel, D., & Von Schilling, C. (2009). Systems theory. *International Encyclopedia of Human Geography*, *1*, 151-158.

studies. New York: Braziller.

Sundström, G. A. (1987). Information search and decision making: The effects of information displays. *Acta Psychologica*, *65*(2), 165-179.

Suri, R., & Monroe, K. B. (2003). The effects of time constraints on consumers' judgments of prices and products. *Journal of consumer research*, *30*(1), 92-104.

Swanson, R. A. (1987). Human resource development definition. *St. Paul: University*.

Swanson, R. A. (1995). Human resource development: Performance is the key. *Human Resource Development Quarterly*, 6(2), 207-213.

Swanson, R. A. (2003). Decision premises and their implications for developing decision-making expertise. *Advances in Developing Human Resources*, *5*(4), 378-392.

Swanson, R. A., & Gradous, D. (1988). *Forecasting financial benefits of human resource development*. San Francisco, CA: Jossey-Bass.

Swanson, R. A., & Holton, E. F. III. (1999). *Results: How to measure performance, learning and*

Swanson, R. A., & Holton, III, E. F (2001). *Foundations of human resource development.* San Francisco, CA: Berrett-Koehler Publishers.

Swanson, R. A., & Holton, III, E. F (2008). *Foundations of human resource development* (2nd ed). San Francisco, CA: Berrett-Koehler Publishers.

Swanson, R.A (2001). Human resource development and its underlying theory. *Human Resource Development International*. *4*(3), 299-312.

Talik, E., Laguna, M., Wawrzenczyk-Kulik, M., Talik, W., Wiacek, G., Vingoe, G., Huyghe, P. (2012). The Astra-Manager tool: A method of measuring competencies of micro firm's managers. *Human Resource Management Research*, 2, 9-14.

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC medical research methodology*, *8*(1), 45.

Torraco, R. J., & Swanson, R. A. (1995). The strategic roles of human resource development. *Human Resource Planning*, *18*, 10-21.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *science*, *185*(4157), 1124-1131.

Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *211*(4481), 453-458.

Tversky, A., & Kahneman, D. (1983). Extensional versus intuitive reasoning: The conjunction fallacy in probability judgment. *Psychological review*, *90*(4), 293.

Tversky, A., & Kahneman, D. (1986). Rational choice and the framing of decisions. *Journal of business*, S251-S278.

Tyson, S., & Fell, A. (1986). *Evaluating the personnel function*. London: Hutchinson.

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, *6*(5), 100-110.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & health sciences*, *15*(3), 398-405.

van der Laan, L., & Erwee, R. (2012). Foresight styles assessment: a valid and reliable measure of dimensions of foresight competence? *Foresight*, *14*(5), 374-386.

Vaughan, F. E. (1979) Awakening intuition. Garden City, NY: Anchor Press/Doubleday.

Volery, T., Mueller, S., & von Siemens, B. (2015). Entrepreneur ambidexterity: A study of entrepreneur behaviours and competencies in growth-oriented small and medium-sized enterprises. *International Small Business Journal*, *33*(2), 109-129.

Von Bertalanffy, L. (1968) *General system theory: Foundations, development, applications.* New York: Braziller.

Von Bertalanffy, L. (1975). *Perspectives on general system—Theory scientific philosophical*

Vroom, V. H. (1973). A new look at managerial decision making. *Organizational dynamics*, *1*(4), 66-80.

Wagener, S., Gorgievski, M., & Rijsdijk, S. (2010). Businessman or host? Individual differences between entrepreneurs and small business owners in the hospitality industry. *The Service Industries Journal*, *30*(9), 1513-1527.

Walker, S., & Truly, E. (1992). The critical incidents technique: Philosophical foundations and methodological implications. *Marketing Theory and Applications, 3*, 270-275.

Walton, J. (1999). *Strategic human resource development.* Harlow, London: Prentice Hall.

Watkins, K. (1989). Business and industry. *Handbook of adult and continuing education*, *427*.

Weber, M. R., Finley, D. A., Crawford, A., & Rivera Jr, D. (2009). An exploratory study identifying soft skill competencies in entry-level managers. *Tourism and hospitality Research*, *9*(4), 353-361.

Weber, R.P. (1985). *Basic Content Analysis*. Beverley Hills, CA: Sage.

Weinberger, L. A. (1998). Commonly held theories of human resource development. *Human Resource Development International*, *1*(1), 75-93.

Weiner, B., Russell, D., & Lerman, D. (1979). The cognition–emotion process in achievement-related contexts. *Journal of Personality and Social psychology*, *37*(7), 1211.

Wengraf, T. (2001). *Qualitative research interviewing: Biographic narrative and semi-structured methods*. Sage.

Werner, J. M., & DeSimone, R. L. (2006). Human Resource Development 4e Published by Thomson South-western. *Indian Edition Akash Press Delhi India*.

Wertz, F. J., Charmaz, K., McMullen, L. M., Josselson, R., Anderson, R., & McSpadden, E. (2011). Five ways of doing qualitative analysis. *New York, NY: Guilford*.

Wessel, J. A. (1985). Critical elements of the state extension specialists position (Doctoral dissertation, The Ohio State University).

Wienclaw, R. (2008). Decision making under uncertainty. *Research Starters Business (Online Edition), Research Starters*.

Wienclaw, R. A. (2008). Behavioral foundations of management. *Research Starters Bousiness*, *1*(1), 11.

Wild, M. R. (1938). The behavior pattern of throwing and some observations concerning its course of development in children. *Research Quarterly. American Association for Health and Physical Education*, *9*(3), 20-24.

Witte, E., Joost, N., & Thimm, A. L. (1972). Field research on complex decision-making processes-the phase theorem. *International Studies of Management & Organization*, *2*(2), 156-182.

Witteman, C., van den Bercken, J., Claes, L., & Godoy, A. (2009). Assessing rational and intuitive thinking styles. *European Journal of Psychological Assessment*, *25*(1), 39-47.

Wognum, A. A. M., & Mulder, M. M. (1999). Strategic HRD within companies. *International journal of training and development*, *3*(1), 2-13.

Wolff, S. B., Pescosolido, A. T., & Druskat, V. U. (2002). Emotional intelligence as the basis of leadership emergence in self-managing teams. *The Leadership Quarterly*, *13*(5), 505-522.

Woolsey, L. K. (1986). The critical incident technique: An innovative qualitative method of research. *Canadian Journal of Counselling*.

Wright, S. (2014). *First Intelligence: Using the Science and Spirit of Intuition*. Novato, CA: New World Library.

Yang, B. C., Wu, B. E., Shu, P. G., & Yang, M. H. (2006). On establishing the core competency identifying model: a value-activity and process oriented approach. *Industrial Management & Data Systems*, *106*(1), 60-80.

Yorks, L. (2005). *Strategic human resource development*. Masson, OH; Thomson. South-western.

Zakaria, N., Amelinckx, A., & Wilemon, D. (2004). Working together apart? Building a knowledge-sharing culture for global virtual teams. *Creativity and innovation management*, *13*(1), 15-29.

APPENDIX A: INVITATION TO THE PILOT STUDY

Dear Mr. /Mrs. [First name, Last name],

My name is Taylor Jing Tian, and I am currently a Ph.D. student studying Human Resources Education at University of Illinois at Urbana-Champaign. I am conducting a study of the approaches used by Human Resource Development (HRD) managers when making decisions during critical moments of their practice, under the supervision of Dr. Ronald Jacobs, Professor in the Department of Education Policy, Organization and Leadership. Here is a brief introduction of my dissertation research.

A Descriptive Study of the Decision Approaches Used by Those Managers Responsible for Responding to Requests for Training

Decision-making is a core competence of all managers, including managers responsible for training functions and programs in organizations. Until recently, most models in the literature have focused on having a rational understanding of the decision variables at hand. A concern is whether these models represent the more frequent situations in which an immediate decision is required and occur repeatedly during everyday practice. From this perspective, the literature has suggested that individuals make decisions based more on informal principles, than on rational considerations. Unfortunately, few studies have sought to understand how individuals make decisions when responding to clients' requests. The purpose of this study is to describe the approaches used by managers when making decisions to respond to training requests.

I plan to use the critical incident technique (the CIT method) and the semi-structured interviews to conduct my study, and I would like to invite you to a pilot study that is designed to help me gain more knowledge and understanding of the CIT method. In the pilot study, I will interview you using the proposal interview protocol and collect your feedback and suggestions on how to improve the design of the interview questions in a short debrief session. The entire session will be approximately 1.5 to 2 hours long.

I believe your insights would be very valuable for my study. Please respond to this email to let me know if you are willing to participate in this pilot study, or if you have any questions. Thank you very much!

Sincerely,
Taylor Jing Tian

Follow-Up Email to Schedule Interview Data with Respondents

Dear Mr./Mrs. [First name, Last name],

Thank you very much for agreeing to participate in the pilot study with me! Would you please let me know your availability between May XX, 2018 and June XX, 2018? I would be more than happy to schedule the interview at a date and a location that works the best for you.

The interview will be approximately 1.5 to 2 hours long. I have attached a list of questions to help you prepare for it. You might also be asked a few more follow-up questions during the interview.

Another document attached to this email is the consent form of this study. Please feel free to review it and let me know if you have any questions. I will bring over a copy of the form for you to sign when we meet for the interview.

Thank you again for being willing to share your experience and stories with me. I am looking forward to meeting you.

Sincerely,
Taylor Jing Tian

APPENDIX B: CONSENT FORM FOR THE PILOT STUDY RESPONDENTS

A Descriptive Study of the Decision Approaches Used by Those Managers Responsible for Responding to Requests for Training

You are being asked to participate in a research study. Researchers are required to provide a consent form such as this one to tell you about the research, to explain that taking part is voluntary, to describe the risks and benefits of participation, and to help you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Principal Investigator Name and Title: Professor Ronald Jacobs
Department and Institution: Human Resource Development, College of Education, University of Illinois at Urbana-Champaign
Contact Information: rljacobs@illinois.edu
Student Investigator Name: Taylor Jing Tian
Department and Institution: Human Resource Development, College of Education, University of Illinois at Urbana-Champaign
Contact Information: Email: jtian10@illinois.edu
Phone: 217-722-3274

Why am I being asked?

You are being asked to be a subject in a pilot study that explores approaches used by human resource development managers when making decisions during critical moments of their practice.

You have been asked to participate in the research because your experience with decision-making in HRD activities and serving as a HR/HRD manager and in your organization.

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future dealings with the University of Illinois at Urbana-Champaign. **If you decide to participate, you are free to withdraw at any time without affecting that relationship.**

Approximately 3 subjects may be involved in this pilot study.

What is the purpose of this research?

Decision-making is a core competence of all managers, including managers of human resource development functions and programs in organizations. Until recently, most models in the literature have focused on having a rational understanding of the decision variables at hand. A concern is whether these models represent the more frequent situations in which an immediate decision is required and occur repeatedly during everyday practice. From this perspective, the literature has suggested that individuals make decisions based more on informal principles, than on rational considerations. Unfortunately, few studies have sought to understand how individuals make decisions during situations which can be called critical moments of practice. Therefore, it is critical for scholars to understand and describe the approaches used by HRD managers when making decisions during critical moments of their practice.

The purpose of this pilot study is to gain better understanding of using the CIT method in studying the decision-making approaches used by HRD managers during critical moments of their practice. The researcher hopes to practice critical incident interview skills as well as the data management skills during this pilot study. On the other hand, conducting such pilot study gives the researcher a chance to test the reliability and validity of the instruments, as well as collect feedback and practical suggestions from HR/HRD practitioners.

What procedures are involved?

This research will be performed at a location preferred by the subject (e.g. subject's offices in their respective office) or via Skype.

This interview takes place on [Date] at [Time] for approximately 1.5 to 2 hours.

The study procedures are one-on-one semi-structured interview. Your conversation today with the researcher will be audio-taped using a digital audio recorder and will be transcribed verbatim later for data analysis purpose.

What are the potential risks and discomforts?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

Are there benefits to taking part in the research?

Taking part in this research study may not benefit you personally, but I as a research may learn new things about HRD practice.

Will my study-related information be kept confidential?

The information that you provide in today's interview will remain confidential for this study. Faculty, staff, students, and others with permission or authority to see your responses of today's interview will maintain its confidentiality to the extent permitted and required by laws and university policies. The names or personal identifiers of respondents will not be published or presented. None of your personal identifiers or your responses of today's interview will appear in any report to your supervisor or organization.

What are the costs for participating in this research?

There are no costs to you for participating in this research.

Will I be reimbursed for any of my expenses or paid for my participation in this research?

You will not be offered payment for being in this study.

Can I withdraw or be removed from the study?

If you decide to participate, you are free to withdraw your consent and discontinue participation at any time.

The Researchers also have the right to stop your participation in this study without your consent if:

- They believe it is in your best interests;
- You were to object to any future changes that may be made in the study plan;
- If you do not follow the study procedures.

Who should I contact if I have questions?

Please contact the researcher Taylor Jing Tian at jtian10@illinois.edu or 217-722-3274 if you have any questions about this study or your part in it or if you have questions, concerns or complaints about the research.

What are my rights as a research subject?

If you feel you have not been treated according to the descriptions in this form, or if you have any questions about your rights as a research subject, including questions, concerns, complaints, or to offer input, you may call the Office for the Protection of Research Subjects (OPRS) at 217-333-2670 or e-mail OPRS at irb@illinois.edu

Remember:

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

I have read (or someone has read to me) the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. I agree to participate in this research. I will be given a copy of this signed and dated form.

Signature	Date
Printed Name	
Signature of Person Obtaining Consent	Date (must be same as subject's)
Printed Name of Person Obtaining Consent	

APPENDIX C: INTERVIEW PROTOCOL OF THE PILOT STUDY

Introductory statement

Before I start the interview today, I would like to thank you for being agreed to participate in this pilot study and share your experience with me. My name is Taylor Jing Tian, and I am currently a Ph.D student studying Human Resource Development (HRD) at University of Illinois at Urbana-Champaign.

As you may already know, today's interview is a part of my research study for completing my thesis dissertation. I am conducting a descriptive study of the approaches used by HRD managers when making decisions during critical moments of their practice. During today's interview, I hope to learn more about your experience as a HR/HRD managers with decision-making especially when you have to respond to a request coming from other departments of your organization. I have a list of questions that I would like to ask you, and again I appreciate your time and willingness to be interviewed by me today.

The purpose of this pilot study is mainly to understand and test the usage of the Critical Incident Method (the CIT method). All of the information that you share with me today, including your contact information, identity, titles, answers to the interview questions, etc., will remain strictly confidential. The transcription of this interview will be anonymous, and your name or identity information will not appear on my thesis dissertation, any articles derived from the qualitative data collected from today's interview, or any types of report generated based on today's interview.

This interview will be approximately 1 to 1.5 hours long, and our conversation today will be recorded only for the purpose of transcribing and data analyzing later. I will be using a digital audio recorder (show the recorder to the respondent) to record this interview session. Is it ok with you?

[Wait for the respondent to respond]

If yes: Thank you! If at any time during the interview you would like me to stop recording the interview, please feel free to let me know.
If no: Thank you for letting me know. I will only take notes of our conversation.

Do you have any questions about the project, or anything you would like to know about before we start?

[Wait for the respondent to respond]

I have sent you the consent form of this study via email earlier. I have two copies for you, would you like to take a few minutes to read it again and sign it? Thank you and please feel free to let me know if you have any questions about the consent form.

[Wait for the respondent to read and sign the consent form]

Thank you very much for signing the consent form, and you can keep one copy for your record. If there are no further questions regarding this research study, I will start asking the first question.

Provide examples of the critical incident of decision-making

Please review the Ring-Ring Scenario, and answer the following 2 questions.

- What would you do if you were that HRD director?
- Why would you do that? How did you come up with that decision?

Collect the critical incidents of receiving training requests

Please recall and describe a time when you received a formal training request from an internal client within the past 5-8 years [This question will be repeated to collect multiple incidents of receiving training requests].

> *Note:* Clients hereinafter refer to any internal employees, your supervisor, or higher level management of your organization. For example, sometimes your supervisor might ask you to train a few of new employees, or you are assigned to provide training to employees from other departments in your company, etc.

Collecting detailed information regarding their decision-making process

In the incident X you just shared with me,

1. Upon receiving that request, what questions or information did you ask your clients?
2. Did you discuss the request with your supervisors or staff members?
3. What was the purpose of the discussion?
4. What were some considerations you used when deciding how to respond?
5. What formal or informal guidelines did you use to help respond to such requests?
6. What was your final decision in response to the client's formal request?
7. In retrospect, do you think the best decision was made in regards to the request? Why or why not?
8. What process did you use to confirm if it is the best decision or not?
9. Is there anything else you would like to add and share with me?

Debrief and conclusion

Thank you very much for you time. Now I would like to know more about what you think about the design of the interview. Please answer the following 7 questions.

1. To what degree did you feel comfortable during the interview?
2. To what degree do you think the questions (including the follow-up questions) are clearly stated and presented?
3. Which questions did you not fully understand? How to revise them?
4. To what degree did you feel comfortable recalling and describing a critical incident of receiving training requests?
5. How helpful do you think the Ring-Ring prompt is as an example of a critical incident?
6. To what degree do you think that the time allocation of this interview is appropriate?

7. What are other comments or suggestions do you have for this study?

Thank you very much for your feedback. Please feel free to contact me at any time at jtian10@illinois.edu if you have any other insights to help me improve my study.

APPENDIX D: INVITATION EMAIL TO THE INTERVIEW

Dear Mr. /Mrs. [First name, Last name],

My name is Taylor Jing Tian, and I am currently a Ph.D. student studying Human Resources Education at University of Illinois at Urbana-Champaign. I am conducting a study of the approaches used by Human Resource Development (HRD) managers when making decisions during critical moments of their practice, under the supervision of Dr. Ronald Jacobs, Professor in the Department of Education Policy, Organization and Leadership. I hope to gain a better understanding in the decision-making practice of HRD managers when there is a need of immediate responses to internal requests of training and other HRD solutions.

Therefore, I would like to invite you to participate in this study by sharing your experience of decision-making in an interview session with me. The interview will be in a semi-structured format and approximately 1 to 1.5 hours long.

I believe your insights would be very valuable for my study. Please respond to this email to let me know if you are willing to participate in this interview.

I also attached a brief introduction of this research study for your reference. Please feel free to email me if you have any questions. Thank you very much!

A STUDY OF THE DECISION-MAKING APPROACHES USED BY MANAGERS WHEN RESPONDING TO REQUESTS FOR TRAINING

Decision-making is a core competence of all managers, including managers responsible for training functions and programs in organizations. Until recently, most models in the literature have focused on having a rational understanding of the decision variables at hand. A concern is whether these models represent the more frequent situations in which an immediate decision is required and occur repeatedly during everyday practice. From this perspective, the literature has suggested that individuals make decisions based more on informal principles, than on rational considerations. Unfortunately, few studies have sought to understand how individuals make decisions when responding to clients’ requests. The purpose of this study is to describe the approaches used by managers when making decisions to respond to training requests.

Sincerely,
Taylor Jing Tian

APPENDIX E: FOLLOW-UP EMAIL TO SCHEDULE INTERVIEWS

Dear Mr. /Mrs. [First name, Last name],

Thank you very much for agreeing to participate in the interview with me! Would you please let me know your availability between MM/DD, 2018 and MM/DD, 2018? I would be more than happy to schedule the interview at a date and a location that works the best for you.

The interview will be approximately 1 to 1.5 hours long. I have attached a list of questions to help you prepare for it. You might also be asked a few more follow-up questions during the interview.

Another document attached to this email is the consent form of this study. Please feel free to review it and let me know if you have any questions. I will bring over a copy of the form for you to sign when we meet for the interview.

Thank you again for being willing to share your experience and stories with me. I am looking forward to meeting you.

Sincerely,

Taylor Jing Tian

APPENDIX F: CONSENT FORM FOR INTERVIEW RESPONDENTS

A Study of the Decision-Making Approaches Used by Managers When Responding to Requests for Training

You are being asked to participate in a research study. Researchers are required to provide a consent form such as this one to tell you about the research, to explain that taking part is voluntary, to describe the risks and benefits of participation, and to help you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Principal Investigator Name and Title: Taylor Jing Tian, Ph.D. candidate
Department and Institution: Human Resource Development, College of Education, University of Illinois at Urbana-Champaign
Contact Information: jtian10@illinois.edu

Why am I being asked?

You are being asked to be a subject in a research study about the approaches used by human resource development managers when making decisions during critical moments of their practice.

You have been asked to participate in the research because your experience with decision-making in HRD activities and serving as a HR/HRD manager and in your organization.

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future dealings with the University of Illinois at Urbana-Champaign. **If you decide to participate, you are free to withdraw at any time without affecting that relationship.**

Approximately 10 subjects may be involved in this research at the University of Illinois at Urbana-Champaign.

What is the purpose of this research?

Decision-making is a core competence of all managers, including managers of human resource development functions and programs in organizations. Until recently, most models in the literature have focused on having a rational understanding of the decision variables at hand. A concern is whether these models represent the more frequent situations in which an immediate decision is required and occur repeatedly during everyday practice. From this perspective, the literature has suggested that individuals make decisions based more on informal principles, than on rational considerations. Unfortunately, few studies have sought to understand how individuals make decisions during situations which can be called critical moments of practice. The purpose of this study is to describe the approaches used by HRD managers when making decisions during critical moments of their practice.

What procedures are involved?

This research will be performed at a location preferred by the subject (e.g. subject's offices in their respective office).

This interview takes place on [Date] at [Time] for approximately 1 to 1.5 hours.

The study procedures are one-on-one semi-structured interview.

What are the potential risks and discomforts?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

Are there benefits to taking part in the research?

Taking part in this research study may not benefit you personally, but I as a research may learn new things about HRD practice.

Will my study-related information be kept confidential?

The information that you provide in today's interview will remain confidential for this study. Faculty, staff, students, and others with permission or authority to see your responses of today's interview will maintain its confidentiality to the extent permitted and required by laws and university policies. The names or personal identifiers of respondents will not be published or presented. None of your personal identifiers or your responses of today's interview will appear in any report to your supervisor or organization.

What are the costs for participating in this research?

There are no costs to you for participating in this research.

Will I be reimbursed for any of my expenses or paid for my participation in this research?

You will not be offered payment for being in this study.

Can I withdraw or be removed from the study?

If you decide to participate, you are free to withdraw your consent and discontinue participation at any time.

The Researchers also have the right to stop your participation in this study without your consent if:

- They believe it is in your best interests;
- You were to object to any future changes that may be made in the study plan;
- If you do not follow the study procedures.

Who should I contact if I have questions?

Contact the researchers Taylor Jing Tian at jtian10@illinois.edu or 217-722-3274 if you have any questions about this study or your part in it or if you have questions, concerns or complaints about the research.

What are my rights as a research subject?

If you feel you have not been treated according to the descriptions in this form, or if you have any questions about your rights as a research subject, including questions, concerns, complaints, or to offer input, you may call the Office for the Protection of Research Subjects (OPRS) at 217-333-2670 or e-mail OPRS at irb@illinois.edu

Remember:

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

I have read (or someone has read to me) the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. I agree to participate in this research. I will be given a copy of this signed and dated form.

______________________________ Signature	____________ Date
______________________________ Printed Name	
______________________________ Signature of Person Obtaining Consent	____________ Date (must be same as subject's)
______________________________ Printed Name of Person Obtaining Consent	

APPENDIX G: INTERVIEW QUESTIONS

Questions were sent to the respondents prior to the interview for review and preparation.

Section 1

Please read the following prompt and answer two questions.

- What would you do if you were that HRD director?
- Why would you do that? How did you come up with that decision?

Ring-Ring! Scenario

One day, the HRD director of Company A receives a phone call at work.
HRD director: Good morning. How can I help you?

Manager from another department: Hi. This is Joe at ABC department. We need your help. We need some training for our team members to help them follow through on the Kaizen recommendations.

> *Note*: Kaizen is a long-term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality. (Sources: Wikipedia)

HRD director: Sounds interesting. Kaizen is sometimes difficult to implement. Tell me more.

Manager from another department: Well, we go through the entire process, and everyone agrees to the changes, but the changes never last long. As a result, we are not meeting our goals. You have done some Kaizen for me. By the way, the lunches were great. Can we scheduled another course-how about a two-day session next week?

HRD director: Sounds like we might be able to assist you. Here is what I suggest…

Section 2

Please identify one training request you have received from the internal clients within the past 5-8 years.

Please describe that training request to me.

[This question will be repeated to collect multiple incidents of receiving training requests].

Note: Clients hereinafter refer to any internal employees, your supervisor, or higher level management of your organization. For example, sometimes your supervisor might ask you to train a few of new employees, or you are assigned to provide training to employees from other departments in your company, etc.

Section 3

In the incident X you just shared with me,

10. Upon receiving that request, did you ask your clients any additional questions or information to help you make decisions?
    a. If yes, what questions did you ask?
11. Did you discuss the request with your supervisors or staff members?
    a. If yes, what did you discuss with them?
12. What were some considerations you used when deciding how to respond?
13. What formal or informal guidelines did you use to help respond to such requests?
14. What was your final decision in response to the client's request?
15. In retrospect, do you think the best decision was made in regards to the request? Why or why not?
16. What process did you use to confirm if it is the best decision or not?
17. Is there anything else you would like to add and share with me?

Thank you very much for your feedback. Please feel free to contact me at any time at jtian10@illinois.edu if you have any other insights to help me improve my study.

APPENDIX H: INTERVIEW PROTOCOL

Introductory Statement

Before I start the interview today, I would like to thank you to being agreed to participate in this study share your experience and practice with me. My name is Taylor Jing Tian, and I am currently a Ph.D. student studying Human Resource Development (HRD) at University of Illinois at Urbana-Champaign.

As you may already know, today's interview is part of my research study for completing my thesis dissertation. I am conducting a study of the approaches used by those managers who are responsible to respond to requests for training. During today's interview, I hope to learn more about your experience as a manager with decision-making especially when you have to respond to a request coming from other departments of your organization. I have a list of questions that I would like to ask you, and again I appreciate your time and willingness to be interviewed by me today.

The purpose of this study is to understand and, further, be able to describe the decision-making approaches managers are using at practice for responding to training requests. All of the information you share with me, including your contact information, identity, titles, and anything else you have and will talk about will be remain strictly confidential. The transcription of this interview will remain anonymous, and your name or identity information will not appear on my thesis dissertation, any articles derived from the qualitative data collected from today's interview, and any types of report.

This interview will be approximately 1 to 1.5 hours long, and our conversation today will be recorded only for the purpose of better transcribing and data analyzing later. I will be using a digital audio recorder (show the recorder to the respondent) to record this interview session. Is it ok with you?

[Wait for the respondent to respond]

If yes: Thank you! If at any time during the interview you would like me to stop recording the interview, please feel free to let me know.

If no: Thank you for letting me know. I will only take notes of our conversation.

Do you have any questions about the project, or anything you would like to know about before we start?

[Wait for the respondent to respond]

I have sent you the consent form of this study via email earlier. I have two copies for you, would you like to take a few minutes to read it again and sign it? Thank you and please feel free to let me know if you have any questions about the consent form.

[Wait for the respondent to read and sign the consent form]

Thank you very much for signing the consent form and you can keep one copy for your record. If there are no further questions regarding this research study, I will start asking the first question.

Interview questions

Date of interview:
Interviewee:

Provide examples of the critical incident of decision-making

Please review the Ring-Ring Scenario, and answer the following 2 questions.

[Show the respondent the Ring-Ring prompt]

1. What would you do if you were that HRD director?
2. Why would you do that? How did you come up with that decision?

Collect critical incidents of receiving training requests

Please identify one training request you have received from the internal clients within the past 5-8 years.

Please describe that training request to me.

[This question will be repeated to collect multiple incidents of receiving training requests].

Note: Clients hereinafter refer to any internal employees, your supervisor, or higher level management of your organization. For example, sometimes your supervisor might ask you to train a few of new employees, or you are assigned to provide training to employees from other departments in your company, etc.

Collect detailed information regarding respondents' decision-making process

In the incident X you just share with me,

1. Upon receiving that request, did you ask your clients any additional questions or information to help you make decision?
    a. If yes, what questions did you ask?
2. Did you discuss the request with your supervisor or another staff?
    a. If yes, what did you discuss with them?
3. What were some considerations you used when deciding how to respond?
4. What formal or informal guidelines did you use to help respond to such requests?
5. What was your final decision in response to the client's request?
6. In retrospect, do you think the best decision was made in regards to the request? Why or why not?
7. What process did you use to confirm if it is the best decision or not?
8. Is there anything else you would like to add and share with me?

[This set of questions will be repeated for each incident that the participant shared. Due to the semi-structured nature of the interview, the researcher might have more follow-up and probing questions during the interview]

Conclusion

Thank you very much for you time. I will start transcribing today's interview, and once I finish all the interviews, I will start analyzing the qualitative data to write a report of my findings. Would you like to receive a copy of the report?

[Wait for the respondent to respond]
If yes: Great! I will send it through email as soon as I finish it. Thank you very much!
If no: Thank you for letting me know.

APPENDIX I: RING…RING! PROMPT

One day, the HRD director of Company A receives a phone call at work.

HRD director: Good morning. How can I help you?

Manager from another department: Hi. This is Joe at ABC department. We need your help. We need some training for our team members to help them follow through on the Kaizen recommendations.

HRD director: Sounds interesting. Kaizen is sometimes difficult to implement. Tell me more.

Manager from another department: Well, we go through the entire process, and everyone agrees to the changes, but the changes never last long. As a result, we are not meeting our goals. You have done some Kaizen for me. By the way, the lunches were great. Can we scheduled another course- how about a two-day session next week?

HRD director: Sounds like we might be able to assist you. Here is what I suggest…

If you were the HRD director in this scenario, what would you do?

APPENDIX J: IRB APPROVAL LETTER

ILLINOIS

Office for the Protection
of Research Subjects

IORG0000014 • FWA #00008584

Notice of Approval: Amendment 01

May 29, 2018

Principal Investigator	Ronald Jacobs, Ph.D.
CC	Jing Tian
Protocol Title	*A Descriptive Study of the Approaches Used by Human Resource Development Managers When Making Decisions During Critical Moments of Their Practice*
Protocol Number	18721
Funding Source	Unfunded
Review Type	Exempt Category 2
Amendment Requested	Addition of a pilot study
Status	Active
Risk Determination	No more than minimal risk
Approval Date	May 29, 2018

This letter authorizes the use of human subjects in the above protocol. The University of Illinois at Urbana-Champaign Institutional Review Board (IRB) has reviewed and approved the research study as described.

Exempt protocols are approved for a five year period from their original approval date, after which they will be closed and archived. Researchers may contact our office if the study will continue past five years.

The Principal Investigator of this study is reponsible for:

- Conducting research in a manner consistent with the requirements of the University and federal regulations found at 45 CFR 46.
- Requesting approval from the IRB prior to implementing modifications.
- Notifying OPRS of any problems involving human subjects, including unanticipated events, participant complaints, or protocol deviations.
- Notifying OPRS of the completion of the study.

Office for the Protection of Research Subjects
University of Illinois at Urbana-Champaign
(217) 333-2670
irb@illinois.edu

APPENDIX K: INTERVIEW TRANSCRIPTS

Interview A

Q: Thank you for your willingness to being interviewed by me. Before we get started, do you have any questions about this study?

A: I do not think so.

Q: How long have you been served in your organization and what is your role?

A: I am currently a technology manager within the IT department here. I have been with the company for a little bit over 25 years. In my current capacity, for approximately 12 years, and prior to that, I did have supervisory responsibility, but it was for a non-technical group, so outside of the IT department.

Q: You said you have been teaching and training people before. Can you talk a little bit more about that role?

A: It was in the past, prior to my supervisory portion of my career. I was a technical analyst, and I was responsible for conducting a quarterly week long, meaning 5 business days, training session on wireless communication technology. I was the actual instructor of that classroom training, and I was responsible for both developing, maintaining and delivering the subject matter on the wireless technology to a group that varied in size. Sometime there were as few as four or five students, sometimes as many as about 20.

Q: Was it still in this organization or with a different company?

A: Yes, it was still with this organization.

Q: So the training was 5 business days long? That was the entire session?

A: Yes, hour wise it runs roughly 8:30am until about 3:30pm, so it is roughly 6 to 7 hours in length.

Q: Who were your audience during that training program?

A: The audience for that training included members of our regional office staff, they had responsibilities over making cellular phone, two way radio, at the time, paging devices, decisions around acquiring the devices, being familiar with supporting the devices, interfacing with the local vendors who provided those devices and the services that associated with them. Occasionally, members of management would take that same class to become familiar with the technical work that their people were doing.

Q: So those people are not new hirers?

A: In some cases, I would say probably less than 5% may have been new hirers. Most of them were not new to the organization but perhaps new to that role. And it might also be helpful to know that the wireless technology was undergoing quite bit of change at that time. Even though the employees who were taking that course were not new to the organization, the technology, the subject matter was relatively new to many people.

Q: You sort of already answered the second question I was going to ask. It is what type of training do you provide for your organization? That one was definitely a great example and then you mentioned that in your current role, the trainings that you give to your fellow co-workers are mostly informal. Can you explain that to me a little bit more?

A: Sure. As a technology manager, I occasionally am responsible for work processes, and operational items that my immediate management peer group needs to know and understand, sometimes to assist me on my job or they have a piece of that work they need to own and drive to resolution and return a finished product to me. So as the owner of that particular work item, I can do whatever is asked for, so as a result, in an informal manner, which usually includes a, like a staff meeting, or an ad-hoc meeting, where that peer group would come together, I would present an overview of the subject matter, what is being asked of me, and I would provide informal training on that subject matter, so they can understand well enough to then perform an subsequent step of what has been asked, and then bring that work deliverable back to me to combine or coordinate for either leadership, or for a vendor, or for some other internal need. And then as a technology manager, I also have a group of approximately 20 people that I supervise and also in an informal capacity, I have the need to train and share knowledge with them in order for them to perform their job, or contribute to a work effort that may not be their day job so to speak, you know, their immediate job duty to do, but something is being asked that we need to pull a team of people together to accomplish a particular work outcome. It would be me who would be responsible for introducing that subject matter to them, making sure that they understand the technical and business detail of that, so they can perform their next step or their contribution to what is being asked. Often times, as what the peer group example, they would be returning a work product to me to be delivered either to leadership or to a vendor or to some other internal process.

Q: I assume this informal training is kind of ongoing or it is by request?

A: I would say it is less ongoing. It is usually more on an “as needed” basis. Perhaps an example would be appropriate here, especially when you go back and review notes and our conversation. Often time, we are asked to provide information on monetary or budgetary needs for an upcoming period of time, perhaps the next six months, perhaps the next calendar year. As a technology manager, I do not have all of the key knowledge and detail to assemble a complete budgetary document without including some of my direct employees to help gather and analyze that information. I would train that subset of employees on “this is what is been asked, here is a basic understanding of the budget process of what is being asked.” It might include an ad hoc meeting to review the materials, to review the step-by-step process that was being asked to adhere to, and then upon completion of that, then they will be tasked with following those steps, gathering the information and returning it back to me, so I can assemble to final deliverable of that budget planning document. All that is very informal and it does not involve any formal training that is provided by the company. It is more ad hoc and informal in nature.

Q: On the job?

A: Yeah, kind of on the job as needed to accomplish that specific goal.

Q: Just stay on this example, while you were providing these informal trainings to your fellow employees for them to understand the budgetary documentation process, what are some of the expectations you have for those employees?

A: The first will be, they come prepared for that meeting event, essentially being able to know that the reason they are being invited or included in the overview or the training to produce this final deliverable. They need to ensure that they are coming prepared with any meeting materials, perhaps some initial technical data they could anticipated being part of what being asked, because this type of request come up frequently, multiple times a year. So if they get invited by me to do this type of subject matter meeting, they should know in advance a little bit to be prepared and what type of things to bring for them to be prepared, both physically in terms of documentation, as well as just mentally being prepared to have the conversation and to review the process and steps and take on that information. I do not know how much detailed you are looking for there, some of the basic management expectation that during the delivery of that, they would be attentive, and willing to contribute if dialogue or discussion was needed, ultimately at the end of that delivery, whatever action items are their responsibility, it would be the expectation that they understand those things. If there is a specific due date or timeline that they have to do their part, they understand and comply with that.

Q: How would you evaluate or how did you evaluate the outcomes of the training?

A: At the end of the delivering, what needs to be done and what the expectations would be for them to provide deliverables back. It would be a combination of my management level observation on what they provided to me and how well they have followed the process steps, as well as once the final deliverable is assembled, and it moves on my immediate supervisor, there will be a checks and balances there that my immediate supervisor might have an expectation and provide a feedback to say "this answered all of our questions. It seems to be accurate." We use a term here called "completed staff work", meaning that if I deliver a work product to anyone, really, to a subordinate, a superior, or a peer that it is been done to our standards that it is accurate, consumable, it is directed to the correct audience level, all of those expectations are met. So that would be part of what I look for as a manager as well as whoever the next recipient is of that work product, as a result of that training, whether or not it might their expectation.

Q: In general, based on your experience with training either in your current role or previous role, what are some other objectives or goals you usually set for training?

A: I would say, first and foremost, it is to allow the recipients of the training to be more productive, and to have the knowledge that they need to perform whatever job duties that training related to. If it is how to fill out a time reporting document that upon completion of that training, they would be able to execute and complete their own time reporting document without having to ask a friend, a peer, or come back to me and ask for more help. In some cases, and your study may touch on this at some point, some organizations have mandatory or compliance training, in other words, there may be other specific piece of training that may be required by law, like in the case of some human resources training, like code of conduct, sexual harassment, antitrust and labor relations type of topic. The individuals who completed that training would be doing, not only just for the knowledge, but also make sure they are being compliant with the company's goals and objectives around the required training, trainings that exist to be compliant with some either internal standards or some industry standards.

Q: I think that is all I have to ask for your experience with training and your current and past roles. Is there anything else you would like to share with me about your job?

A: The only other thing that I think it might be pertinent, and stop me if it is duplicated information or not consistent with some of what you are trying to gather, but much of the training that I am involved with involves me making sure that my employees and my direct reports know that the training is available, and they know what internal resources to go to to find it, and often times certain training does require management level approval, so the training within our organization, there is a good deal of very formal training that if an employee desires or requires that training, often time they have to access to an actual IT system to submit their name, fill out a form, enroll into that course to be able to take it or complete it. We have a good deal of training that is online in nature, meaning it is available virtually, but there are still training opportunities both required and desired that are more classroom in nature. As a manager, I am involved on a daily, weekly, monthly basis with helping my employees or a peer group determine whether or not a training may or may not to be appropriate for them to take.

Q: That is definitely something I am looking at as well, especially you are helping your employees to determine if they should go in this training, if this training is appropriate, or somehow align with their career goals, or whatever in that nature. Feel free to give me an example that you helped your fellow co-workers that successfully take a training and have a very satisfied results from the training.

A: One example that comes to mind is that I had an employee who was interested in a leadership career development path within the organization, and our human resources department does a very nice job of offering both some industry level training and company specific training on leadership career development. I guided that employee first to some of the online or virtualized training that he could explore on his own at his own pace to begin getting an understanding on the types of topics that a leadership person will be expected to be involved with, expectations, skills, things in that nature, and as a result, they follow the curriculum that was suggested by our Human Resources online training process, and that employee came back to me and shared that it was very valuable, it helps give him exposure to some of the leadership topics within our organization that are pertinent if you were to continue following a path to become a management level person within the company. It helped him to make some decisions about what he wanted to do next in terms of his career development.

Q: While you were helping him to decide what course to take, what are some of the things that you took into consideration?

A: That is a good question. I think as a manager, when we are providing guidance on training, we need to think a little bit about, first and foremost, probably is what this employee asking to be trained in is appropriate for them, by that I mean, is it an appropriate subject matter and the appropriate time? Because obviously if somebody is very busy with their technical or their operational job, and it does not seem to be the perfect time to pursue training and they are not going to be able to focus on practice, that would become a factor, a deciding factor, that how much I would be encouraging that employee to pursue that training. Along the same line would be, does that person have the personality and the characteristics that would allow them to be successful in pursuing that training regardless what the mechanism was, [whether it is] online, or classroom, or perhaps outside the company training, that would be considered as well. What training mechanism might be the best for them based on their skills, habits, and their personality traits? Access to the training. By that I mean it is possible that an employee desires a specific training, but that particular training opportunity might be offered either time or locations that are not convenient for the employee to participate in. That would be another guiding factor on when it is the right time, what a better time for that training would be are more available, or when you are working in this particular location and take advantage of that time. Those are three [factors].

Q: Thank you so much. In the interview questions that I sent to you, there is a Ring-Ring scenario. When I was first trying to put it in there, I was trying to set up a critical incident, by that I mean the examples, or the stories, or the experience that I am collecting. Hopefully this kind of mimic the reality where a manager on their job when they received a training request from employees from other department in the same organization, how would they react, or how would they respond to that request. If you were the HRD director in this scenario, what would you do?

A gist of this scenario would be you are in charge of providing this training program on Kaizen. This particular manager from this department found out that the employees who received the training did not perform very well using the knowledge learned from the training. So he brought that up back to the training manager, asking them how they can fix it or what they can do differently.

A: As the HR development director, I think one of the first things I would consider either implementing one existed or if I needed to implement one for the purpose of this situation, I would consider a survey or feedback form. So both the manager over the business unit as well as the employees who took the training, if they can complete the survey or feedback [from] on "how would you rate this training?" "What did you like most about the training? What did you feel not very good about the training?" Maybe soliciting some specific feedback on, for instance, "how did the subject matter in section A help you understand the subject matter in section B?" Or "how did the subject matter of training in section A and B help you to walk you through perhaps the hands-on or the interactive portion of the training?" Maybe that survey or feedback mechanism could be a mix of both quantitative types of items and qualitative, or just of all free forms, but in some way gather feedback, because that might help me as the HR director to know it appears there might have been a problem with the training materials themselves, or the first section, or this portion of the training seem to work well, but when the employees got to the other portion of the training, they have trouble to draw a line of sight to the previously presented. A survey item or a feedback item we are trying to incorporate here that I failed to mention is the actual training materials themselves. Were there errors or were there missions in the documentation itself? Or in the event of an online course? Was there a page or a key click that did not work properly? Perhaps people got frustrated because they try to work through the example, but the example button in the online training was broken. So gathering that feedback to find out where might there be problems with the existing training.

I think I would also, if I am reading this correctly, that we went through the training, but the things never really got any better, we still did not meet our goals. So the HR director might also consider going back to the provider of that training. Was it provided by someone in the industry? Or someone particular in that company? Was it an in house training program? Trying to maybe match up. Did we use a quality source for the training subject matter?

The other thing that comes to mind would be being able to practice. Did the training offer an opportunity, once the instructor or the online tool presents the materials, presents the subject matter, were there adequate opportunities for the employees to actually practice? What is being taught in a real life scenario, like a situation-based type of activity where we say we are going to start project A, and we are going to apply the theories of Kaizen to accomplish these goals and have a breakout session or a round table type of environment where folks can have the opportunity to actually practice some of what was presented in the training materials.

Also as a HR development director, I might also ask the question to the managers, to the frontline supervisors, to say "did you deliver the proper message around the importance of this training to make sure that people do take it seriously and they show up for class, and they completed all the activities and exercises that might have been required by them?"

Q: Thank you. I feel like you just make a really quick decision on checking on different points related to training. So you want to gather the feedback from the trainees first of all to know what went well and what did not, and then you want to check on the quality of the materials making sure that the content of training is appropriate and effective. Then the third thing you wanted to check on was that if the training provide an opportunity for the trainees to apply the knowledge in a real life situation, whether from a scenario-based activity or anything in that nature. The last thing you wanted to check on is the managers and the supervisors to make sure the proper message has been delivered and the trainees showed up for class and actually paying attention and focus. Those are really good decisions I would say. Can you tell me how you came up with all these decisions in such a short time frame?

A: The true answer to that is probably just my experience, having been an instructor, and then having been a leadership person who has to be attentive to training, and having been a student, having received training within my organization. These are some of the key things we see happen when we are conducting or are the recipients within our organization. For every class, there is usually an expectation that management is asking the employees who need to either desire or required the training that they understand the expectation, "please take this seriously or show up on time. You will attend the entire course. You will not just show up on the first day, or come in all three days but only stay for two hours, or you start an online training and very quickly fast forward to the end to just say that you did it but you really did not go through the experience." Setting those expectations is very important.

[As for the survey and feedback], within our organization, I would say 90% of the training, whether it is classroom, or online, or virtual in nature, automatically comes with a survey at the end that says "how were the instructor? How were the materials? Was there inaccuracy in the materials? Were the materials presented in a way that was easily consumed by you? Did you have adequate opportunities to practice your skills in some virtual manner whether be a group activity or some online tester exercise?" That comes as a standard with many of our training programs at said company currently. I was able to come up with those things quickly because I had experience both as a student as well as a manager setting expectations, as well as what I will call the recipient of the outcomes. When I see people have been adequately trained, there is a director benefit to the company because they are able to react faster, perform better, be more productive, and they have the knowledge they need to be a better employee.

Q: Thank you. The next portion of the questions are just directly asking your past experience, your stories, your examples relates to an effective decision you made in the past that related to training. It can be either you provide training for people, or you approve a specific training program for your employees.

A: So just to clarify, you are interested in knowing my steps in making the decision.

Q: The process. You can also give me a little bit background information of that decision. In what situation there is a need of decision emerged? How did you come up with that decision? And why you think that decision was effective? That would be the three main points that I am looking for.

A: The example would be when I was the instructor over the wireless technology training. A key decision that was first made was that our organization was receiving concerns from our outside offices that people did not understand the wireless technology well enough to support the products and services, or deliver the immediate training to others, in other words, kind of a "train the trainer" sort of environment. As a result of that, I was involved in making the decision we would develop a wireless technology training program for the company that would be offered to the selected employees that were close to that work of supporting those products and services. As I mentioned earlier, I was involved in designing the curriculum. Another decision that was made was "who would be eligible or who would be the correct audience for this training?" I also helped coordinate some research that helped us to figure out which office needed the training the most based on their operational and technology needs. We used that information to decide which of our office staff would be trained first? In other words, which priority they would receive in the training being available to them? There were also decisions around in what manner we would do that training? And at the time, the training was taken place when teleconferencing, video conferencing was not very relevant, it was a pretty easy decision that it would be a classroom style training with printed materials. There was very little electronic presentation of the subject matter. It was mostly on paper, from printed materials that were delivered.

In a very short amount of time, by that I mean probably after about 9 months, which would approximately our first three classroom training sessions for approximately 40 people, the feedback was very positive. "Thank you so much for doing this training because our people now know how to interact with the vendors who were supplying the technology better. They can talk in a more confident manner to the companies, recipients, or the companies and users of the technology, and they were able to do a certain amount of train-the-trainer because they have been to class, they can share their newly acquired knowledge and their short-term experience with being more knowledgeable with others." That [train-the-trainer] also have a lot of positive feedback wrapped around it. We did not just educate people who were sent to the class, they were able to bring knowledge and some level of ability to share knowledge back to that local office and carry on the knowledge transfer.

Q: Great. I just have a couple follow up questions on that example. You mentioned you decided the content that you delivered and designed the curriculum, would you please tell me more about that?

A: Yeah, I can go into that a little bit more. The first requirement we need in the training is knowing that some people would attend class, having really little experience with the subject matter, and also not having a broad understanding of the subject matter, we spent a good deal of time creating an overview of the technology and that was not company specific, that was more industry level, where we conducted research to say what general industry knowledge should we provide an overview to help set the stage to the attendees to even understand the more detailed aspects of what we are going to talk about. Once that overview was developed, we incorporated some terms and definitions of the subject matter, so the attendees were familiar with the acronym or the abbreviations, the commonly used terms by the vendors and fellow technical experts. Then we progressed into the materials, they can always go back to the glossary or the appendix, if you will, of general information, so if we presented the more detailed aspects of the subject matter, they can always refer back and continue to build their knowledge, "now I understand this definition relates to this, and now I see why this item is dependent on the subject matter in the section, because by reading my definition or understanding my definitions and acronyms, I can see how this information is sequential and how it helps me to build my knowledge." We also incorporated a great deal of hands-on [practice], so certain sections of the materials required students to become familiar with actually programming or changing configuration on the wireless devices, so that gave them an opportunity to actually physically practice, touching the device and entering programming modes and programming code, and there again for your point of reference, this is back when cellular and paging and radio technology was nothing like it is today, there was a good deal of physicality to the devices and phones did not automatically roam and connect, you have to manually enter things on the phone for it to connect depending on where you were physically location wise.

Another development I incorporated was we wanted folks to be able to have an opportunity to visit a vendor location where they can see a little bit behind the scenes on how the technology works. We actually took them to a facility where they could see where a cellular telephone site connects to the broader data network and some of the equipment hooks together and how it secured and some physical aspects. So it involved a tour of that facility. To recap, we did a lot research on what the materials needed to present to be effective. We were deliberate about an overview, a definition of terms, and an appendix where people can go back and references things that were hard to remember, acronyms, abbreviations, things of that nature. And we present the materials in a very logical format. We reinforced it with some hands-on and a tour of a technology type facility.

Q: The whole process sounds like a sequence. How did you come up with that sequence? Did you refer something that you learned from school that your teacher was teaching that way? Why do you think the sequence would be the most effective?

A: I was a technical analyst working in this subject matter, so I asked myself "what high level information would I need to get started understanding this more?" So that helps develop the overview. "What are the key things I need to learn to be able to perform a job function in supporting the technology?" that is where we came with the definitions, the glossary, the appendix that includes highly technical information in them. Then being able to practice in a hands on fashion. The short answer is that it was my technical analyst role itself that allowed me to think about those things that should be included in the training. To your point about was there another teacher, or someone else that I was affiliated with or crossed paths with, I did as I became the instructor of this subject matter, I did try to incorporate some of the things that people who have taught me did really well, and some of that is very interpersonal in nature, you know, being well prepared, being positive, injecting a little fun and humor in the classroom environment, making sure people feel comfortable no matter who they are, or what level of experience or knowledge they have coming in with, making sure that everyone felt like equal, and the classroom ran in a very fair manner…so I did indeed include things that stayed with me from people that either taught me or I have work interactions with that did those aspects of training or communication very well.

Q: Do you have another example on this? Another effective decision you have made in the past?

A: Maybe another one is more related to my current supervisory role as a technology manager. Similar to your Ring-Ring activity, our organization is currently in the process of implementing Kaizen type of approach to work. These are things industry terms in the IT world refer to a scrum and agile [approach]. These are approaches to completing projects and operational work in a very quick manner, kind of a fail fast and recover quickly approach to work, vs. spending a lot of time planning and implementing a final solution. This is more of a "here is our desired state. Rather than taking a lot time to plan that and roll out one implementation to achieve that goal, let us do it in phases or pieces". So if we can do this small part first, it will get one aspect of our goal and it is already done and exists. Once that is done, we will try another phase and we deliver a little bit more towards that goal, even though that is not the final product yet. Along the way the advantage is if things are not going quite well or an outcome in supporting that goal is not quite what we thought it would be, rather than wait all that time to find out something isn't working well, you find out a little quicker along the way and you can take correction actions. So we are in the process right now to make some relatively large management decisions around what types of our work might fit in this new agile or scrum approach and managers, myself included, are being very deliberate about having our employees identify…well first and foremost, I will say, get trained. We are asking them to get familiar with this agile and scrum approach to work, so they are knowledgeable and understand from the industry perspective. And then in addition to that, there are a lot of activity taking place on trying to figure out what portions or types of work we are asked to do will fit into this new behavioral model if you will, or approach to work model. That involves a certain amount of research and expectation setting, we have to overcome certain amount of employees' perception "why cannot we just do it the way we have always done?" "Why do I have to learn something new to get my work done?" That is actually an item that touches your broader interest in your research. Sometimes with training, people do not just naturally want to take the time to get trained, they viewed it as just another thing to do. So ultimately what we hope to accomplish, or the desired end state is the management decisions being made to help us what work might fit into this new approach to work, what the value will be there? How will be shown or proved that we are more efficient or productive or accomplish our goals? Perhaps more efficiently and perhaps with less monetary resources because we are moving to achieving goals in a different way than we did before.

Q: Who is the provider of this type of training?

A: Currently it is a mix. The company uses some outside or external training companies, or contractors to provide some of the industry level training, but then there is also some company specific training that takes that industry level training and applies some of our companies' principles and specific subject matters to it, so employees can work through actual real-life virtual examples that apply to their job. So it is a mix of outside industry training and some customized training.

Q: I assume your role is more of approving people to go to that training rather than giving those company specific training yourself?

A: That would be correct. I am not involved in any way, shape or form in delivering that training. I am only involved in determining which of my direct report group will need to attend and then setting expectations around attendance and what we expect you to gain from attending the training, making sure the folks are able to practice the training they received and applying it to their job. So I am not serving in capacity of being an instructor or teacher.

Q: What are some of the important factors that you take into consideration when you are trying to send people to those trainings?

A: One of the key things will be identifying the employees who would benefit the most and the soonest from attending. By that I mean I have responsibilities for a group of employees that are implementing a specific project, and these particular practices that are taught in this training have a direct correlation or influence to the project work or the project deliverable they are responsible for, so I made a decision that group will be my first group of employees get trained and have the other training resources to them so that they can be very quickly begin applying what they have learned to their current day-to-day job. From there, the decision would be there might be a group of employees whose work does not fit that model, or we are not sure, it might not fit the model, and as a result, we would not plan on having them attend that training right away. We would prioritize them lower than other employees who would benefit from it sooner.

Q: Let us think from the flipped side. What about some of the unsuccessful decisions you have made in the past?

A: So a couple of things come to my mind now, I will try to maybe combine these two scenarios. Obviously, there is a real tangible cost to sending people to training of whatever type it may be. In often times, you find yourself faced with changing business environment, changing organizational expectations or philosophies, and sometimes time and energy by both management and the actual employees is wasted from the standpoint of…we may put employees through at the time what appears to be a training is needed or required or desirable for the work they are performing, and then circumstance changes and that employee is no longer asked to perform that work and they have be trained on something that costed time and money and energy to train them and now they are in a situation are not utilizing that training to the benefit of the organization. However, with that said, often times, that situation may change again, and the training is not really lost because they may move back to a position where that training does become relevant again. I have an analogy that I use of a tool box that has many tools in it. When you take a training class, you have a shiny new tool that you put into your tool box. In some cases, that tool becomes tarnished quickly because you used it every day, and at the end of the day, you put that tool back in the tool box, it is always with you. But a circumstance may come along, the next job or the next expectation is you do not need that tool any more, you need another tool that may or may not in your tool box if it is not, you go and acquire that tool. You take the training, you get the knowledge transfer, you spend time and energy learning and understanding the new thing. But eventually, somewhere down the line, you discover "I think the best tool for this job is this tool that I have acquired a long time ago".

Q: That is a great analogy. It makes me think about the clothes I own in my closet. I might purchase some of the pieces long time ago and do not wear them anymore, but one day, something might come up, and I will realized that I could wear this dress.

A: Yeah, it is perfect for this occasion.

Q: Do you another example in that nature I guess, unsuccessful decision?

A: Let me think about that. I have had personal experience with the situation I just described where someone went through training and because of circumstances beyond everyone's control, they moved into a role and they did not need that training to perform their next task, then it was a very long time before they had to use it again, if use it at all. My guess is that they might not have used it again at all. The only other example I have will be basically the same type of situation where someone received training and for whatever reason, the next role they moved on to did not require it, or this might be something different, so I had a situation where the person who received two or three very important and key pieces of training ended up leaving our company, so from the standpoint while they were here, that training was of benefit to the company, but then when they left, it became a tool in their tool box, but it was no longer benefit to our company because that person was no longer working for our company but rather moved on to a different opportunity. But there again, from a personal perspective, that person still has that knowledge and experience, you know, the skills they gained from that training, so the fact they are not using it in support our organization any longer does not negate the fact that it was valuable. That becomes more of a custom doing business vs. that the training had a negative outcome. Not really, the circumstances changed.

Q: It is just from different perspectives. The last question that I have is how did you evaluate the decisions that you made? I know you mentioned quite a few decision factors during the interview, is there any other things you always consider when you try to judge a decision of training if it is effective or not.

A: A couple of things came into my mind. Cost, the actual expense of the training does come into play. As a manager, part of my job in addition to making sure people had the training they need, there is also a balance of making sure that the cost and the expenses of training has a return on investment and it is within the company's guidelines to spend whatever that amount of money, so I would say cost and expenses factor in to those decisions.

I would say another key one is the time. There is a time commitment involved in employees attending training, while they are planning or actually attending training, it does take them from their work that either they have to do or could be doing, so the value has to be balanced, that if I have to pull person A off for a 4-day training class from their current job responsibilities, what is the impact for the rest of the team or their coworkers, if I have to bring in another resource to cover their work while they are in training, or if other coworkers absorb their work but they have to set other work aside, so the value of the time that it takes to train might affect another item is very much considered, is part of the decision, and it typically, as does the expense, comes back to some types of cost-to-benefit for return on investment analysis.

I will add a third. The third would be the personal development of that individual because we talk about skill development, and personal development. I will make a gesture here. You can think of them as lines on a graph, often times, skill development and personal development are, you know, their lines may vary and never intersect, but then I believe that within the mathematical relationship, sometimes the times cross and or become the same line for a period of time. So, another factor, basically that factor being a decision point, or a manager's decision to look at training would also be "how does the training match their personal development goals or the development goals of the company?" "how does it match the skill development goals of that individual and organization?" And sometimes they can be same, sometimes they can be different, that is neither good nor bad. It depends on the situation and in the person receiving the training.

Q: I want to test out how much I learned from the classroom can be applied in reality. When you are trying to evaluate your decision, have you ever used any models or theories to help you evaluate the outcomes of your decision?

A: I would say that comes back to a feedback mechanism of some kind and it can be more than one feedback mechanism. It could be as simple as the person receiving the training reports back to me as the manager or the decision maker of them receiving training, “I am applying what I learned on an hourly, daily, weekly, monthly basis, whatever the case may be. It has made me more productive or efficient”, or perhaps the feedback can be the opposite, where “I received this training, but I am either not practicing it or I have a perception that the training did not add any value to the work I am asked to perform.” Or it is a mix of both where “some aspects of the training I received did indeed help and have benefit but other aspects of it did not”. That would be more of a subjective feedback mechanism. I think there are also opportunities where there are more objective ways, where a person received perhaps a technical training on a particular item and as their manager, or a stakeholder to their work, I see that they are still entering the wrong data, or clicking on the wrong button, or skipping the screen, or whatever the technical aspect of his job is, I can actually see an actual data point, or statistics, that says they got this training, but the stuff they are doing, the job they are performing is still not adequate or is not meeting expectations.

Q: Is there anything else you would like to add or share with me?

A: I do not think so. We covered a lot of ground.

Interview C

Q: What are the common expectations you usually receive from the clients when you respond to a training request?

A: I wrote down a few things. So first of all, the training needs to be relevant to the work the clients…to me the clients here are gonna be more internal employees?

Q: Yes.

A: Relevant to the internal employees expect to perform as their job duties. When there is someone comes to me with the request for training, the big thing is…does it have values to our company? And to their career goals? Also to the priority of the company? That is probably the main thing.

Other expectation would be the training needs to be timely. To me the best case scenario is the training occurs just prior to the employees start a new role or responsibility. Another case might be an employee been in a role for sometime, learning the basic of the job and then this could be a timely training to reinforce what they have learned, or give a more in-depth training. Being timely is a big part of it.

Other expectation would be training occur during standard work hours, usually between 8 to 4, Monday through Friday. Although there might be some exceptions depending on the type of training, where the training would be occurring.

Another expectation would be the employees would be able to utilize the skills learned. In the training and in their day-to-day job responsibilities, which goes back to relevant.

Normally for new employees, by the time they finish their training, they will be expected to perform basic functions of the job or the training, will continue on the training with more experienced employees, with continuous supervision with me, the manager, or lead workers.

For new employees, give them the basic of the training, and reinforce that with on the job training, mentorship, all that sort.

Another thing is that I would be providing training for employees from another department. The expectation is that those employees will gain a better understanding of the work we perform, and as well as gaining a better understanding how our procedures, processes, things like that, that might impact the work they have to perform at their job. We may have some specific procedures we require. Part of the training would be, they can go back and perform their job more efficiently, because they know what is to expect for them from us.

Q: How often do you have to train people?

A: Actually not that often. So maybe for new employees, maybe bring in a new person maybe once a year, so the frequency of that is not very high. Probably more the training requests I get are specific skill set training, and part of the expectation on all of my employees is that they do sort of skill development continuously. So I will get request from them to do different types of training, whether it is specific to the work we delivering or can be more soft skill type of training.

Q: what kind of training do you usually providing? Or what kind of training do the new employees usually receive? Are those on the job or classroom?

A: Most of them will be on the job. There will be some classroom as well. So classroom will be around some of the tools that we have to use. An example of that would be service manage tool, where we do change management, problem implement management, so it is the tool we use for all that, so they may go through a classroom setting to learn that from the enterprise perspective. If it is specific to the work we deliver, it will be more on the job training, we will have a training plan on different things they would learn and see, and be more time spent with more senior people on the team.

Q: Perfect. So the second question I have for you is that, what are the objectives and goals you usually decide to achieve when responding to a request of training?

A: I kind of just did some brainstorming. So first thing the training needs to be engaging, and hold the employees' interest. If they are not engaged, or if they are bored, they are not gonna get much out of it. So it needs to be engaging. The other thing is to ensure that the training is ultimately benefit the company by giving the employees the skills that are applicable to the job. So for example, if I were to get a request for training doesn't relate or apply to the person's job, or if it is not part of the employee's development plan, they just want to take some training, I will most likely deny it, because it really doesn't fit the departments' goals and priorities. Every once a while, that happens.

Q: How do you measure those goals?

A: Which goals?

Q: Both of them.

A: so, for training being engaging for the employees, that is really gonna be more from feedback, employees' feedback. The second one would be…I do not know how I would measure it other than I keep track of understanding what their development plans are. I do have more things under this question.

Q: Ok.

A: another thing which is big, especially we are in a big expenses mode right now, does the training provide a significant return on our investment? So when we…somebody ask for a training, I ask is there in house training available? Versus travel for the training. Can the training be done on the job? Does the employee have to travel for the training? because that adds significant expense for meals, travel and hotels if they have to go somewhere else. From a return on investment, is what we get out of it worth the expense we put into it? So those are the type of things I look at for return on investment. The last things is that whether the employees are able to share with the training, or information from the training, with others when they complete the training. That is kind of my expectation when someone goes to a conference or goes to a training, that is applicable to our team, they need to come back and share information they have learned with the rest of the team.

Q: It is interesting. The original interest of my study was on ROI of training, but it is hard to do.

A: it is very hard to measure.

Q: Right, do you have any thought on that? Or experience?

A: Mine is more based on my experience as oppose to how much value you get out of training. I look at it… for example, I send somebody to Orlando, FL for a week for a Microsoft training that is going to end up costing, say $5,000 for all the expenses. So I have to weigh that is the information they get out of that is going to in long run save our 5000 dollars? It is hard to measure that. It is more on instinct, probably the more expensive of the training, I will be looking to send in a more experienced senior level employee, because they can draw more out of that.

Q: and they can be the ones that are gonna pass on the knowledge to others.

A: exactly. It is very hard to put on a dollar figure on your return on investment. It is really based on experience.

Q: Is there anything else on the question?

A: I think that was all for that.

Q: The purpose of today's interview is to…I am trying to ask for your stories as many as possible that are related to decision-making on training. I put together this Ring-Ring scenario, which you probably have a copy. In this scenario, if you were the HRD director, what would you do?

A: If a manager from another department call me wanting a training, the first thing on this scenario is I would get together with them and find out exactly what it is they are trying to accomplish for their training. In appearance that the training occurs before, what exactly worked well for them in that training? What did not work well? Is there really dig-in the requirements? Is there specific exports we would need to pull in for that type of training? do we have people who have been through this before to assist with the training? a lot of it is really probing them to figure out what exactly they need so we can build the proper training for them.

Q: Why do you think it is important to understand what the manger from the other department trying to accomplish? Why do you think that should be the first thing to do?

A: To me, you can go down to a path…if you just start off and start to build something, and then if you are gonna trying to put together a training without knowing what they really want, you can waste a lot of time and effort without doing that. To me, if you spend more time upfront learning what they need, you are gonna reduce the amount of time at the backend of reworking the training, or reworking whatever scenario they may want to be part of their training. so by spending a little more time upfront, you reduce the time on the backend a lot. I was here for testing for a long time, one of the things they teach you at testing is spending more time upfront, developing requirements, and what is the end results you want to get out of it. And if you can do that, you really reduce your time at the end.

Q: anything else you want to share with me on that?

A: I normally do not get a lot of requirement from the other departments like in this scenario. We do develop training for the enterprise department for all the company, but it is not for a specific group. It will be more for everybody. One of the things right now is we are rolling out Windows 10 to all of our 200,000 computers here. We have gone out and we have developed online training how to documentation, how to help documentation, that type of training to reduce the amount of phone calls coming in our customer service [asking] "how do I put a picture on my screen saver?" those types of things…lots of how to… what is different between window 7 and 10. So we develop training for the masses to help reduce that. That's a lot the type of training for people outside our department.

Q: You mentioned that for the training where the audience would be people from outside of your department, you would do online training. Why do you choose that?

A: For us and for the end user, it is convenience. It really does not make business sense to go out to put on training classes for thousands of thousands of people. You create once and put it out and make it accessible, and send an email out or communication on our internal intranet site, say there is an available internal training and go out and look at it. It is much cheaper to do that way, it is faster to do, we always leave the option that if they have additional questions, they can go directly to us.

Q: is this type of online training involve real people or trainer? Or it is mostly text-based?

A: It is more text-based, it is not interactive, it is more reading documentation. There may be some video example of things, we may have prepared some videos with narration behind it, but it all pre-recorded documentation.

Q: Great. Thank you! Now we can move on to the core of this interview. I would like you to think back over your experience with making decision to respond to a training request. Please recall a critical moment that you experienced where you think you made an effective decision and describe it to me.

A: The first one. I had a request for training in Orlando, FL for Microsoft training. Normally, I would send to one or more people to the training every year. As an organization, as a company, I think we end up sending maybe 10 people total to this training. So this year, I asked my team what is the value would this training be for our team. Because we sent somebody every year, by going this year, can we get some additional value? Is it worth on our return on investment, is it worth on sending somebody? The other thing was what was the value of training, say sending somebody [out of state] versus the value of deliver our day-to-day work that we were responsible for because sending somebody to this training, we are taking them out of my services for a whole week. Not only the cost of the training, I am lost productivity. So is it worth the value of that? In [the same time of] this particular training, this year, I am going to have several people traveling to another location to support our annual agency convention, we do it every four years, so I am gonna be short on people anyway. So our ability to continue provide our services of we promised to serve or deliver, would have been impacted as well. Taking all those into consideration, I made the decision to not to send anybody to the training this year. The other question that I has asked is that "do we have any alternative of this training?". we got some special training we do with Microsoft already that is unique to our company, so we are able to get some of this training any way without sending somebody for a week-long trip.

That is the first example.

Q: that is a perfect example. I just have two more follow-up questions. The first question one is I know you talked about different factors that led to your decision to not send your employee to that out of state training. Did you refer to anything before you reach the final decision?

A: Looking at the agenda of training, so I actually worked with my senior analyst on my team to have them look at the agenda for the different types of training [sessions during the week], what the themes for this annual conference would be, and really rely on them to determine the value of what we would get out of that training, so that would probably the main thing.

Q: that you refer back to?

A: yes.

Q: why do you think that is an effective decision?

A: I really feel like we were able to get the information we would have got through alternative means. I have to look at the workload we had coming up during the time framework of that conference. By now sending additional people, we still be able to deliver our service. I guess one way to determine whether it is an effective decision is the feedback from my team. None of my team really felt like it was a bad decision as well. Usually sometimes you would say “I am not gonna send anybody on it to a conference”, they may be upset or think that was…but everybody agreed with the decisions this year. It was worthwhile not to send somebody.

A: I got another example. I got a team member. My team does not really do security type of work, but one of his career goals and security plan is to get into the security-related job here. So he request to be able to get a certificate in security, to get certified in certain security…I am not sure what exactly what. Knowing that is part of his development plan and goals, I went ahead to approve that training, even though it is not applicable to his current job assignment or any of the work that we did. But what I…my thinking behind my decision is that our organization is very risk of verse and very security heavy, so security is one of the area that is growing and we have a need for a lot of talented people. This particular person has a very strong technical skillset, just not a lot of security training. so understanding what the need of the company was, and knowing what his long term goals were, I went ahead and approved it. Other thing is that it was not a disruption of his day-to-day work, so he was able to do the training without disrupting his current workload. Ultimately, it led to a selection for him in our IT security area, which met his career goals, his desires. He is a happy employee that they are able to do the type of work they are interested. And it also met our needs, because we need good security people. It worked out for the company. The downside was that I had to replace him. So it all go back to “let us go back to our training plans and train somebody new”.

So that was my another example where it is the effective decision-making although it really did not apply to our day-to-day work.

Q: Who is the provider of his security training?

A: actually that was a self-study. There were some online internal classes he also took.

Q: Do you have another example on the effective decision?

A: No.

Q: So let’s think on the flipped side. What about some ineffective decisions you have made?

A: This is…I probably could apply this for several different times. So we had training on excellence on operations management. It is an enterprise effort and really help you to become more efficient to do your work, a lot of measuring…putting measures on a lot of things you do, timeboxing it, make sure you are doing it…a lot of quantitative matrix that go with your work. I had several people request that training, they wanted to go through that training. but for our area that we are in, EOM did not necessarily apply well, so we did not have clear results from the training in our area. Even though they went through the training, they understood the what is all about, what the desired results are, it did not apply to us. So after the training was taken, we really saw no real changes, no new application of that training to how we did our job. We kept doing things the same way. So the result of that training is more informative training as oppose to applying what was learned and changing the way we did work. I guess to me, allowing that, approving that training, even though it was informative, in a long run, it was not effective, because it did not initiate changes, we really did not change the way we did anything. We did not get any return on investment. Fortunately, the good thing is it was an internal-based training. what really was lost was just more time spent doing it. We did not lose travel time, we did not lose…I am sure there were some applications we can take from that training to apply on how we do our job, but for the most part, it was no change occurred.

Q: what are some of the changed you expected to happen after the training?

A: That was a good question. See that is probably the failure on my part because I did not have a lot of expectations. Kind of what I expect was more people go through the training and come back, [to say]"this is what we can do" and "this is how we should do things". Maybe that was my expectation that we were able to apply something. But when we got back from that, it really did not apply to us. It is very hard to implement in the way that we do our job. EOM is very effective in a very ticket-based area, where a customer call in you have the ticket, you have to respond in a certain amount of time. You are measured on how much work you do, and how quickly you can resolve a problem for a customer, where my team is more…we call them the third-level team, where we do not necessarily work face to face with our customers.

We are more develop type of work, we drive our own schedule, we drive our own end results. EOM just didn't apply well with what we did. Even though it is good to understand why our company is doing this, it did not apply to us, so we did not get a lot out of the training.

Q: Did you conduct any type of measurement or evaluation?

A: No.

Q: I probably can apply that example to the training people take in the past. To me, that is probably the best example of ineffective training where people request training, and nothing really come out of it. We really did not evaluate the training and say "go ahead and take it".

A: you said that training was…I would not say required, but suggested by your company for people to take it. They think everybody should take it because it is beneficial for whatever reason. Is it because that your company has implemented and it has been successful?

Q: Right. Some departments were every successful with it. Like I said the one when you have a set of expected tasks you have to be done every day, and you have this time box, or…that is where it is very successful. You can look at process and how you improve those process to increase your throughput. Things of that sort. It did not apply well to our team.

A better example is I talk about AJAL at the very beginning. This is something as we are going through the training now, our focus is better, we are looking at what is the end result, how are we going to implement it after we going through this training, we have exports now to help us post the training. again, that was a failure of EOM, we took the training and there was nobody to support when you are done. With AJAL now, we are taking the training now, we are learning how it works, and we have professionals. But they are very well versed in their process, in their methodology, and they are helping my team with their process continuously implementing this process. I think the big difference is we are more focused on what the end result, and how we are going to implement it. And it applies to what we do.

Q: it is more relevant.

A: exactly. Relevancy was the number 1 thing I have talked about.

Q: Thank you very much for sharing it with me. Do you have another example?

A: that is the only one I have.

Q: The last area that I am interested in is the evaluation of the decisions, in terms of how you evaluate your decisions, can you tell me—1. What are the key issues for you to judge whether a decision is good or bed? 2. What are the important things you always take into consideration when you make decisions? 3. Do you refer to any theory, model, or framework to help you evaluate your decision?

A: so for the first questions, the first thing I always do is to get inputs or feedback from my employees, or the people taking the training. I either do this immediately after the training or within our one-on-one time we spend together, to [talk about] "was it worthwhile to them?" "did they get any benefits out of it?". So it is a more informal way of discussing it. They had to share that what they gain from it, how they apply it, to the work that they do. So the input and the feedback for the person taking the training is probably the number 1 thing. I always [try to know] "did they think the training was worthwhile or beneficial?" sometimes I will get the feedback too "no". which is good, which is I encourage it. We need to know whether it is beneficial, so the next person comes along with it "I really want to take this training" but it was not really beneficial the last time, maybe I will focus on something else. The final thing that I look at is that—did the training support the companies' goals and priorities. So if it did not directly support where we are trying to go with our companies initiatives and goals, then it was probably a bad decision on my part to allow them or to approve them to take that type of training.

Q: Do you collect the employees' feedback from conversations or if there are any written forms you use?

A: it is going to be more informal conversation. With everyone on my team, we have a monthly meeting for a half of hour, we sit down and we talk about what they did in the last month. Training is part of that conversation. Or they may just walk in the door and discuss it as well, I try to follow up immediately say after the travel for a conference, or some sort of training, to follow up with them fairly immediately afterwards.

Q: and then you would take that information to the next person when you are deciding if the next person need the training?

A: yes.

Q: how did you know if the training support the goals and the priorities of your organization?

A: to me, it is more just general understanding and general knowledge of what our priorities are. To me, knowing and being educated on what our priorities are, that is kind of how I know.

Q: so how about the second question?

A: the important thing is that if the training support our company's priorities and initiatives. Again I have talked a lot about this return on investment. Did we get the return on our investment of what we spend or develop the training or whatever to are we getting a return back. It is hard to put a dollar figure on it, but it is more based on intuition and experiences where we will get that. To me, we will get more return on the investment with on the job training, or working with an experienced individual to learn that job. For that types of training, I think we get more return on investment because they can turn around and actually start doing the job. The initial investment is low. So those are really the two things I look at.

Q: do you ever use any theories?

A: I do not. No models. To me, it is really based on my years of experiences as a manager. I got 32 years of experiences at my company, a lot of it has based on what has worked well in the past, what was valuable, what was the understanding of my employees and the people coming to the training or requesting the training, just what has worked well in the past, or what has not.

Q: when do you hire a new person on your team?

A: for me, it is when I lose a person. To me, we have not been growing, so if I have to hire a new person is when I lose a person. So most of the time, I have them [the leaving employee] to work on a transition plan, what needs to be done for this job, what skills will be needed, what I am doing right now, what are the things the new person will have to take over from them. So we are able to develop a training plan prior to the new person coming on board.

Q: great. Is there anything else you would like to add or share with me?

A: this is about it.

Interview B

Q: Thank you for being agreed to participate into today’s study. You have mentioned that the training that you have provided for your fellow employees include both formal and informal mentoring. Can you give me an example of that?

A: I want to qualify one thing and make sure I understand the purpose of this question—that is the type of training I provide, but there are times when, for example, my team members, people who work for me, that I have to arrange trainings to be provided for them, but I would not be the subject matter expert to them. So it really depends on what the spirit of the question on this and throughout all add on to this particular one, but my answers sometimes will be around the type of training I would personally provide to someone, which will be generally formal or informal mentoring. There is also types of training where, for example, right now, I have many new people on my team. Through my team members and my coordinator, we arrange them to go through the training program that is set up for new members, so I just want to give you that background so if it sounds like I am giving you the answer that doesn't quite go with a previous answer, that is why because this is different types of trainings.

Q: Awesome. I do want to get your stories and experiences from both perspectives, one as a training manager to help the team members to develop themselves, also as a trainer that actually provides training opportunities to your employees. I do want to get information from both sides.

A: In my current role, generally speaking, the formal training would be if there is an analyst who is pursuing becoming a manager at some point in the future, we will typically ask those people to set up mentoring relationships for generally a six-month period. It can be different than that depending on the situation but that is kind of the standard. It is the analyst to reach out to the manager, several managers to meet once months or so, and just give their perspectives on how they got to be the manager in the first place, how they manage what sort of advice they have for the mentee, things in that nature. Generally speaking, if I am asked to do formal mentoring now that is what is for. Now the informal, that can be anyone who I know in the organization who feels there is something in my background, might be useful for them to get my perspectives on. That could be, actually mostly like would be an analyst seeking for a leadership, but it can also be a peer who is for example now finds themselves in a role similar to what I was in the past. They might reach out for me for more informal advice on how to handle either things in general as they move into the role, or perhaps something specific inside of that role.

Q: How many formal mentees are you currently having right now?

A: Right now I do not have any. I have my own team that I am responsible for which I meet monthly but that is really not training or mentorship per se. It is just the expectation that me as their manager.

Q: During the mentoring meetings that you had in the past, what are some of the topics or subjects have been touched on?

A: Those are…I will give you a little bit more structural information here too. When I set those up, actually those get set up by the person who is seeking the training, that is actually very central to the philosophy of it—the training belongs to the trainees. They are the one to, in those situations, expect to reach out to the leaders and drive not only getting things set up, but also the agenda. When I meet with anybody who seeks for leadership mentorship, I let them know the very first meeting I expect you to set up the agenda, I expect you to let me know what the agenda is going to be ahead of time so I can prepare, and then we will get together and go through it. So to actually answer your question, more often than not, the subject matter covers how to navigate the organization as a leader, because that is typically a significate change from being an analyst to being someone in formal leadership having to interact with higher management, whether that'd be second level leadership or executive leadership, the analyst do not necessary have a great deal of experiences in interfacing with the high-ups so to speak, so that is generally part of it—how do you navigate the organization, how do you work with peers, how do you manage up. Other parts can be how to manage the transition from analyst to the manager, because that is something where the general takes depending on the type of work, maybe 6 months to a year for someone to stop thinking as an analyst, not being the person who does the work, now becoming the person who work through the group and get the results from the others. So part of the request or the more common thing is for people to seek out how do you do that, how do you make that change. The next most common thing that people seek out is how to handle the [situation] being one that is in charge. That is more of the HR type of stuff. If you had any performance issues to deal with as far as if someone has a medical issue and you can not review to the rest of the organization or anybody on the team why you are making this special accommodation for them. Things in that nature because that is really something that an analyst can't see before they become a leader, all those things that we have to keep a secret from them, so that type of thing. Beyond I would say it varies with individuals. They drive the agenda and they drive the questions, and that gets to be what everyone else wants. It is the three things that I went through there to be the three most common things I see everybody across all the time.

Q: Great. So for the training that you have been arranging for the team members, can you give me a couple more examples of that?

A: Some of them are extremely structural where we, depending on the team, depending on the maturity of the training program, I had team where we had very structured training. This is in fact with a training coordinator where a new team member works with them for the first six months. They is a very structured, almost like a syllabus to go through what they do, you know, one through 10 on the list to check off, and those are the things they need to do right off the bat. Other times it is much less formal, it could be something where somebody comes and joins the team and I know they are going to be working on a particular subset of our work, of all body of the work we do. I know I need to train them with the subject matter on that. So it will be very one on one. There is a lot of stuff that is somewhere in between that, for example, the team that I am on right now, I have lost four key resources in a very short period of time, and I have four people that have to replace them and they are all in sort of different stages of that training to which started around the first quarter of the year, right between second and third quarter, and two others that started here closer in the second to the third quarter, end of the second to the beginning of the third, so very different junctions in that, and then they have a little bit different responsibilities so they are coming up and just be on somewhat. Some of that is really structured where we have organized training and they are taking those modules that we have created. Sometimes they are working with an external vendor who is an expert in our product we support, and then other times just sitting down with the other team members, maybe all of the other team members, just to get a little bit of what each of them does so there is very structured in the spectrum, there is very unstructured in the spectrum and then the bulk that is kind of in between.

Q: Just to stay on this question, because there are different types of training, whether it is structured or informal, and others that external vendors provide. How did you decide which training to send your people into?

A: I will stop saying it-but every answer starts with “it depends”. In this case, three of the four new members need very specific product training and that will be delivered by the external vendor who is the expert in it. Some of that will be less produce-specific but still very technical in nature, and that could be the underlying hardware or the underlying operating system that provides the stuff that the other technical person on the team know, because they do it day-in day-out for years, so they may provide that. And then there is other that could be along the line with our change management. The processes or the procedures and the stuff that is less technical in nature but more procedural in nature, and they receive that sort of training either from the coordinator of the group, or the person who is in charge of chance management for the group. How I decide who gets what has to do with the type of the subject matter it would be for.

Q: What are some of the expectations you usually get from your fellow employees or the trainees?

A: That can vary for amount because there are some who want to know everything-they just want as much training they can get, they are looking to absorb as much information as possible. There are others, and typically ones who are more tenured, they are towards to the end of their career, but they know what they want to do that reaches that point they are just looking to be speed on something very specific, something that is very much a niche subject matter that most people might not be looking for because it is so deeply technical. As far as the expectations go, it varies depending on the individual and what their background is, what they already know, and what it is they want to know. Sometimes, the subject matter could be not a huge value on us, let's say a future technology that we may or may not…not technology but future capability that we may or may not adopt, I can really justify spending a lot organization's dollars on training somebody on something we may not use. So they may just do Youtube videos, studying on their own at home, gathering the information that way, whereas other stuff that is absolutely critical that I would absolutely have people who would know the stuff, not only the organization paying for them to take that training, they are paying the trainer as well. It depends on what they know already, what it is they want to come up to speed on. That is the expectation of me as to what they want me to provide.

Q: What are the objectives or the goals you usually decide to achieve?

A: In general sense, one of my goals is always selecting the most meaningful thing, meaning we are going to get the best bang for the buck. Now for some people, that means just staying out of their way and letting them absorb as much information as they can take on. For other people, who are less focused and a little less intentional, that means I have to do a little more spoon feeding to say "this is what I need you to do" "this is where I need you to be and then for a certain amount of time". That tends to work greatly based on the initiative of the trainee. So for some I can have a great deal of faith in that I know they will have it done so I just need to set the expectations that "I need you to be up speed on this thing, and I need you to be, for six months, I need you to be the person on call. If you get a call at 2 o'clock in the morning and you are all by yourself, that you know enough to handle it". That is different than "in six months, I need you to know enough about this that the guy who is the specialist is on vacation that you can get by". The expectations vary based on what the individual will ultimately do. Now there is a minimum expectation that "I am not just wasting the organization's money" whether that will be on their salary while they are there taking the training or whatever we pay for the training itself. I have an expectation that the organization is not just throwing the money away to just have them spend time on something that they do not absorb.

Q: Before we move on to the next section, is there anything else you would like to share with me about your job, or your role in making training decisions in general?

A: I do not know how far back I should think about this. I have been a manager for about 10 years, and the questions when I respond to them I did them pretty much as from today's standpoints. I have worked in areas where are much more dictated what people had to know and there were expectations that were more specifically delineated and measured. One of my earlier job is a manager, I would have a partner manager who worked there too. We would go so far to make sure how many tickets people were working per week and look at the team, the spread, so the people who are on the bottom of that list, they were doing less work then the others, we need to understand that they were just doing the harder issues, they were doing fewer tickets because each one takes longer, where people who are on the top of the list doing what we called "cherry picking" meaning they were picking the easiest things to work on all the time. Looks like they are doing a lot of work based on numbers, they are not really getting any better at their jobs because they are not really taking on any new technical information. So I just want to at least provide you that depending on the nature, today I have the third level team, back then I have first and second level teams, we manage that a lot differently.

Q: The question in the next section was formed on a Ring-Ring scenario. In this scenario, if you were the HRD director, what would you do?

A: Based on the way the background was written, I interpreted that as training did not go so well, but nothing in there that is necessarily… it was not straight there that it was a good training given badly, or the training itself is a problem. Odds are pretty good if I were that director I would already know that I would have confidence about the training itself, but not knowing that is why I answered the way I did. The first thing I want to do is to gather more information to figure out is this something where it is a good training? Perhaps a good training that was poorly delivered by that bad teacher? Therefore the absorption was not great. Maybe it is great training by great teacher, but there is a bunch of people that were resistant to change because it is the training that is going to teach them to do the new stuff in the new world, and they are so accustomed to what they were doing that they just do not want to change. So it could be either one of those things. My first step would be to try to figure out which one of those I am dealing with. Then once I understood which problem I had, I would go about addressing which one that was. So if it was the training itself, maybe it was out of date, maybe it was something we were delivering three days of training in one day, and nobody can absorb it fast enough. So either of those situations you can take steps to try to figure out how can we better deliver that. Part of that would be inquiring people who took it and did not absorb it very well say what the problems are. Are we doing this with online teaching and they are better at person to person? The second version of that is that the training was fine and there was a lousy teacher and there are those [situations] I had them. That would be a better opportunity to do coaching on whoever was doing the delivering the material and maybe we go through the second time, and I could audit the training, and try to understand what went badly. The third version of that is that you just have an organizational change management issue that individuals just simply are resistant to the materials. In that [case], we might not do anything with the training or the trainer, and you might have a personnel issue that you have to address and perhaps the worst case scenario would be you have to get rid of somebody. If you have a team that has one or two really tenured leaders on the team and they are the ones that are resistant, then as long as you can turn them around and get them to be the champions of the new stuff, then the rest of the team comes along. So sometimes it is a bad apple or two, sometimes it is the whole organization. I would try to figure out which problem I was actually up against and then take the appropriate steps to deal with whichever one it was.

Q: why do you think it is important to figure out what problems you are having?

A: If you just assume you got problem X and you set about to fix that, and you actually have problem Y, then you set about fixing the wrong thing. You are wasting all of your time and you are not fixing the problems, so you are really hurting yourself in two different ways. So that is all. So you just got to know what it is, what the real problem is before you set about fixing it.

Q: In the past 18 years of working in your organization, have you ever come across a similar situation like this in your practice?

A: I have never had any situation where somebody came right out of training that was so poorly received that somebody said "I need you to fix that". I have had situations where people came out of training that maybe did not take up the information as well as some other peers, and they need some extra attention now whether or not it was just they were paying attention, they were sleeping through class or whatever, or whether they were not technically adapt and just could not uptake the information as quickly as their peers. I had to deal with that. Those are individual problems generally. I never had something where entire class was the problem.

Q: During the 18 years of working in your organization, I am sure you have been asked to make decisions related to training. Can you please share with me an example of that?

A: The one I gave you about John was one where I gave them recommendations on how to proceed, I was not the one to deliver that training. He was pursuing leadership and it was the time we were both working in our enterprise architecture space, which was relatively here [in my organization]. He had both business and technology background that were exceptionally strong and in the work we were doing, that was extremely uncommon and very valuable. But he also was a pretty young guy, had a young family or whatnot, and I knew what it was like to have a bunch of young kids to have taken care of. You really do not have this much of your own time to invest in at home training or what not. So I just give him kind of some options. There was a really strong enterprise architecture master's program through Penn State that you can take virtually even back then. I said that is a very intense end of the spectrum because you only get six years to complete that program and try to fit that into a life style where you have a full-time job and a large family or whatnot. That could be very difficult. Then I sort of step down from there where you could pursue a less intense architecture training, but my point to him was that he was the intersection on a vine diagram that was very very small, not a lot of people that had his combination of skills and this was an excellent time for him to leverage those where he was because there was always benefits from moving around the organization and taking up the experiences and different things. He already did a fair amount as such a young guy, so I recommended his training program should really emphasize focusing on where he was, and then since that he has become, he has got into leadership within the architecture space, and it all worked out great. Again, I was not the one that actually delivered all of that training.

Q: Do you have another successful decision that you have made in the past?

A: Yes, but in more general terms, and that is just over the years, I have always been a technical manager, meaning that I have always managed technical teams. All of my experiences within finding the training that my team members or peers, or my team members or peers came up and looked up for my advice. I am just going back to the way I assess the other thing, that is, what is it that they need? Sometimes that is their weak spots so that they can get rid of the weak spot and be strong, and just about everything. Sometimes it is we have to let the weak spots continue to exist, because they really need to spend some time on something they are already strong at but they need to become even stronger. So over my entire career as a manager, even as a lead analyst, I have had multiple situations where I steered people towards the training that they needed to either shore up their weakness or focus on a strength and improve the situation. I have to say I have had multiple successes there but I can not point to them as individual incidences.

Q: How did you know what an employee's strength and weakness are? If that makes sense.

A: It does. Generally it comes from experiences with working with them, or the input of their managers. Sometime I would have a manager come to me that had worked with me in the past, and they knew what my technical capabilities had been as an analyst, they might come to me and say person X is really good at A, B and C, but when it comes to D that… and often times it was trying to convey technical information in a way that non-technical people could understand it. I am just going to use that as an example, I do not mean to suggest this is the only thing. Sometimes people come to me and say they are good at this group of things, but there is one little thing that kind of really sets them back so they would ask me to work with them on that. So sometimes it was because the manager said explicitly "this is what needed", sometimes it was because my work with them in the past had already told me what it is that they needed, and sometimes it was the individual coming and say "I feel like I really struggle with this situation. Can you help me with that?"

Q: So the training will be depended on individual learning needs?

A: Yeah that is largely environmental of where I have worked. If the place I worked was brand new people off the street and they were doing very repetitive work, then I would behave completely differently. But I have worked in a world-class IT organization my entire professional career, and I can count on the fact that these people have a certain level of technical acuminous professionalism. So yes everything that I have done has been on a group of people that have already had a great deal of talents, it is not like somebody that was raw and built them from ground 0.

Q: Do you have an example of an ineffective decision that you have made in the past?

A: Fortunately, I could only come up with only one of those really. It might have been others, but I cannot see the outcomes, so I do not know they are failures. This one was actually a friend of mine who was pursuing leadership. From the outside, I kind of told him that I might not be the best guy for him to work with, because we are already so similar in our styles and what we knew, we have been teammates together previously. We still did and it was only for six months, it was not like I was the only guy, but he has already had a bad mentor before that. So he wanted somebody he felt he could count on to not be a bad mentor. I felt when we were done, I really have not provided him a great deal of information. He might give you a completely different answer. He might tell you that was great. But from my perspective, it was we lacked in diversity in so many ways that I felt like I was just repeating back to him what he already knew almost all of the time. I provided some new information particularly in the realm of how you deal with managers and directors when you are a manager, but across six months, I felt like I really did not provide him a great deal of value, that I felt it was mostly, if not completely, due to the fact that we were too common to begin with.

Q: Did you ever had a conversation with him to check in if he thinks his learning experience with you were successful or not?

A: We continue to have conversations, but I have never asked him explicitly because frankly I think I would put him in a position where he might not be comfortable. If the answer is no, I do not think he would want to tell me that. So I have never asked that question explicitly, I think that if you were asking him the question, he would probably tell you that yes, he got some good stuff out of it. But again, I, from a teacher standpoint, I felt I was not at my best in that situation.

Q: The very last question that I want to target at is the evaluation, so in your practice how do you evaluate your decisions? So couple follow-up questions, I am really interested in some of the decision-factors or some of the important things that you really think they should be addressed or looked at when you are evaluating your decision.

A: So for those factors, I refer them to as a cued signs of weakness right where you say somebody is good in these things, but it shows weaknesses in another area. That can be very interesting. We do what we call consensus building. We never promote somebody to leadership based on somebody's viewpoint. We always work together as a leadership group to say, "what do you think of person A?" "what do you think we can come to a consensus?" So sometimes everybody will agree this person is great, and these things, and we tempt to focus on what can we do, what opportunities can we provide for them to work on that weakness spot. I guess that is another situation here that might not…I do not know if it fits in your structure or not, we do have this consensus building [structure]. It is not a singular autonomous individual saying "I am going to develop this person or this team", so we get to triangulate from multiple people on what the person needs. As far as those factors go, some of them are technical in nature, some of them are what we call soft skills. It could be somebody just is very blunt, they just do not have a very good manner when they are dealing with other people frankly. I used to be that way, some people might agree that I am still that way. There are some people need to learn how to deliver a message without upsetting the person that they are delivering the message to. Some people just need to have experiences in managing other people for work because they are exceptionally strong and getting their work done themselves, they are just not necessarily exceptionally good in having someone else do it and they just get the work done through others. As far as trying to figure out what to focus on, those are the types of evaluating [on] how we can give this individual the opportunities to work on these things. For example, we might put somebody on a six-month effort that forces them to get results through others, or they do not get the opportunity to do the work themselves where it becomes really really obvious that they are doing it. We could do something where somebody has to deliver updates to upper leadership or maybe an executive leadership, and maybe they have to work on their public speaking, or their preparation or things in that nature. We do evaluation in strengths and weaknesses, to identify which ones can benefit…even some strengths can benefit from becoming even stronger. Focus on the opportunity of training that the evaluation is seeking out.

Q: What kind of evaluation of strengths and weaknesses do you use?

A: I do not use any framework. I have never read any theories. I have never got experiences with models. I rely largely on my intuition, but we have also got our structure here of our consensus building that even if I can get some wrong take on somebody that would not matter, because I have got four or five other managers who are evaluating the same person.

Q: Are the four/five managers from different levels of employment?

A: It can be. Not necessarily but it can be. It can be the generally speaking, it can only be second line leadership and first line leadership but occasionally, if it is somebody who is going into a pretty highly visible position, then it might take executive approval as well.

Q: Thank you. I think those are all the questions that I have. Is there anything else you would like to share with me?

A: No.

Interview C

Q: What are the common expectations you usually receive from the clients when you respond to a training request?

A: I wrote down a few things. So first of all, the training needs to be relevant to the work the clients…to me the clients here are gonna be more internal employees?

Q: Yes.

A: Relevant to the internal employees expect to perform as their job duties. When there is someone comes to me with the request for training, the big thing is…does it have values to our company? And to their career goals? Also to the priority of the company? That is probably the main thing.

Other expectation would be the training needs to be timely. To me the best case scenario is the training occurs just prior to the employees start a new role or responsibility. Another case might be an employee been in a role for sometime, learning the basic of the job and then this could be a timely training to reinforce what they have learned, or give a more in-depth training. Being timely is a big part of it.

Other expectation would be training occur during standard work hours, usually between 8 to 4, Monday through Friday. Although there might be some exceptions depending on the type of training, where the training would be occurring.

Another expectation would be the employees would be able to utilize the skills learned. In the training and in their day-to-day job responsibilities, which goes back to relevant.

Normally for new employees, by the time they finish their training, they will be expected to perform basic functions of the job or the training, will continue on the training with more experienced employees, with continuous supervision with me, the manager, or lead workers. For new employees, give them the basic of the training, and reinforce that with on the job training, mentorship, all that sort.

Another thing is that I would be providing training for employees from another department. The expectation is that those employees will gain a better understanding of the work we perform, and as well as gaining a better understanding how our procedures, processes, things like that, that might impact the work they have to perform at their job. We may have some specific procedures we require. Part of the training would be, they can go back and perform their job more efficiently, because they know what is to expect for them from us.

Q: How often do you have to train people?

A: Actually not that often. So maybe for new employees, maybe bring in a new person maybe once a year, so the frequency of that is not very high. Probably more the training requests I get are specific skill set training, and part of the expectation on all of my employees is that they do sort of skill development continuously. So I will get request from them to do different types of training, whether it is specific to the work we delivering or can be more soft skill type of training.

Q: what kind of training do you usually providing? Or what kind of training do the new employees usually receive? Are those on the job or classroom?

A: Most of them will be on the job. There will be some classroom as well. So classroom will be around some of the tools that we have to use. An example of that would be service manage tool, where we do change management, problem implement management, so it is the tool we use for all that, so they may go through a classroom setting to learn that from the enterprise perspective. If it is specific to the work we deliver, it will be more on the job training, we will have a training plan on different things they would learn and see, and be more time spent with more senior people on the team.

Q: Perfect. So the second question I have for you is that, what are the objectives and goals you usually decide to achieve when responding to a request of training?

A: I kind of just did some brainstorming. So first thing the training needs to be engaging, and hold the employees' interest. If they are not engaged, or if they are bored, they are not gonna get much out of it. So it needs to be engaging. The other thing is to ensure that the training is ultimately benefit the company by giving the employees the skills that are applicable to the job. So for example, if I were to get a request for training doesn't relate or apply to the person's job, or if it is not part of the employee's development plan, they just want to take some training, I will most likely deny it, because it really doesn't fit the departments' goals and priorities. Every once a while, that happens.

Q: How do you measure those goals?

A: Which goals?

Q: Both of them.

A: so, for training being engaging for the employees, that is really gonna be more from feedback, employees' feedback. The second one would be…I do not know how I would measure it other than I keep track of understanding what their development plans are. I do have more things under this question.

Q: Ok.

A: another thing which is big, especially we are in a big expenses mode right now, does the training provide a significant return on our investment? So when we…somebody ask for a training, I ask is there in house training available? Versus travel for the training. Can the training be done on the job? Does the employee have to travel for the training? because that adds significant expense for meals, travel and hotels if they have to go somewhere else. From a return on investment, is what we get out of it worth the expense we put into it? So those are the type of things I look at for return on investment. The last things is that whether the employees are able to share with the training, or information from the training, with others when they complete the training. That is kind of my expectation when someone goes to a conference or goes to a training, that is applicable to our team, they need to come back and share information they have learned with the rest of the team.

Q: It is interesting. The original interest of my study was on ROI of training, but it is hard to do.

A: it is very hard to measure.

Q: Right, do you have any thought on that? Or experience?

A: Mine is more based on my experiences as oppose to how much value you get out of training. I look at it… for example, I send somebody to Orlando, FL for a week for a Microsoft training that is going to end up costing, say $5,000 for all the expenses. So I have to weigh that is the information they get out of that is going to in long run save our 5000 dollars? It is hard to measure that. It is more on instinct, probably the more expensive of the training, I will be looking to send in a more experienced senior level employee, because they can draw more out of that.

Q: and they can be the ones that are gonna pass on the knowledge to others.

A: exactly. It is very hard to put on a dollar figure on your return on investment. It is really based on experiences.

Q: Is there anything else on the question?

A: I think that was all for that.

Q: The purpose of today's interview is to…I am trying to ask for your stories as many as possible that are related to decision-making on training. I put together this Ring-Ring scenario, which you probably have a copy. In this scenario, if you were the HRD director, what would you do?

A: If a manager from another department call me wanting a training, the first thing on this scenario is I would get together with them and find out exactly what it is they are trying to accomplish for their training. In appearance that the training occurs before, what exactly worked well for them in that training? What did not work well? Is there really dig-in the requirements? Is there specific exports we would need to pull in for that type of training? do we have people who have been through this before to assist with the training? a lot of it is really probing them to figure out what exactly they need so we can build the proper training for them.

Q: Why do you think it is important to understand what the manger from the other department trying to accomplish? Why do you think that should be the first thing to do?

A: To me, you can go down to a path…if you just start off and start to build something, and then if you are gonna trying to put together a training without knowing what they really want, you can waste a lot of time and effort without doing that. To me, if you spend more time upfront learning what they need, you are gonna reduce the amount of time at the backend of reworking the training, or reworking whatever scenario they may want to be part of their training. so by spending a little more time upfront, you reduce the time on the backend a lot. I was here for testing for a long time, one of the things they teach you at testing is spending more time upfront, developing requirements, and what is the end results you want to get out of it. And if you can do that, you really reduce your time at the end.

Q: anything else you want to share with me on that?

A: I normally do not get a lot of requirement from the other departments like in this scenario. We do develop training for the enterprise department for all the company, but it is not for a specific group. It will be more for everybody. One of the things right now is we are rolling out Windows 10 to all of our 200,000 computers here. We have gone out and we have developed online training how to documentation, how to help documentation, that type of training to reduce the amount of phone calls coming in our customer service [asking] "how do I put a picture on my screen saver?" those types of things…lots of how to… what is different between window 7 and 10. So we develop training for the masses to help reduce that. That's a lot the type of training for people outside our department.

Q: You mentioned that for the training where the audience would be people from outside of your department, you would do online training. Why do you choose that?

A: For us and for the end user, it is convenience. It really does not make business sense to go out to put on training classes for thousands of thousands of people. You create once and put it out and make it accessible, and send an email out or communication on our internal intranet site, say there is an available internal training and go out and look at it. It is much cheaper to do that way, it is faster to do, we always leave the option that if they have additional questions, they can go directly to us.

Q: is this type of online training involve real people or trainer? Or it is mostly text-based?

A: It is more text-based, it is not interactive, it is more reading documentation. There may be some video example of things, we may have prepared some videos with narration behind it, but it all pre-recorded documentation.

Q: Great. Thank you! Now we can move on to the core of this interview. I would like you to think back over your experience with making decision to respond to a training request. Please recall a critical moment that you experienced where you think you made an effective decision and describe it to me.

A: The first one. I had a request for training in Orlando, FL for Microsoft training. Normally, I would send to one or more people to the training every year. As an organization, as a company, I think we end up sending maybe 10 people total to this training. So this year, I asked my team what is the value would this training be for our team. Because we sent somebody every year, by going this year, can we get some additional value? Is it worth on our return on investment, is it worth on sending somebody? The other thing was what was the value of training, say sending somebody [out of state] versus the value of deliver our day-to-day work that we were responsible for because sending somebody to this training, we are taking them out of my services for a whole week. Not only the cost of the training, I am lost productivity. So is it worth the value of that? In [the same time of] this particular training, this year, I am going to have several people traveling to another location to support our annual agency convention, we do it every four years, so I am gonna be short on people anyway. So our ability to continue provide our services of we promised to serve or deliver, would have been impacted as well. Taking all those into consideration, I made the decision to not to send anybody to the training this year. The other question that I has asked is that "do we have any alternative of this training?". we got some special training we do with Microsoft already that is unique to our company, so we are able to get some of this training any way without sending somebody for a week-long trip.

That is the first example.

Q: that is a perfect example. I just have two more follow-up questions. The first question one is I know you talked about different factors that led to your decision to not send your employee to that out of state training. Did you refer to anything before you reach the final decision?

A: Looking at the agenda of training, so I actually worked with my senior analyst on my team to have them look at the agenda for the different types of training [sessions during the week], what the themes for this annual conference would be, and really rely on them to determine the value of what we would get out of that training, so that would probably the main thing.

Q: that you refer back to?

A: yes.

Q: why do you think that is an effective decision?

A: I really feel like we were able to get the information we would have got through alternative means. I have to look at the workload we had coming up during the time framework of that conference. By now sending additional people, we still be able to deliver our service. I guess one way to determine whether it is an effective decision is the feedback from my team. None of my team really felt like it was a bad decision as well. Usually sometimes you would say "I am not gonna send anybody on it to a conference”, they may be upset or think that was…but everybody agreed with the decisions this year. It was worthwhile not to send somebody.

A: I got another example. I got a team member. My team does not really do security type of work, but one of his career goals and security plan is to get into the security-related job here. So he request to be able to get a certificate in security, to get certified in certain security…I am not sure what exactly what. Knowing that is part of his development plan and goals, I went ahead to approve that training, even though it is not applicable to his current job assignment or any of the work that we did. But what I…my thinking behind my decision is that our organization is very risk of verse and very security heavy, so security is one of the area that is growing and we have a need for a lot of talented people. This particular person has a very strong technical skillset, just not a lot of security training. so understanding what the need of the company was, and knowing what his long term goals were, I went ahead and approved it. Other thing is that it was not a disruption of his day-to-day work, so he was able to do the training without disrupting his current workload. Ultimately, it led to a selection for him in our IT security area, which met his career goals, his desires. He is a happy employee that they are able to do the type of work they are interested. And it also met our needs, because we need good security people. It worked out for the company. The downside was that I had to replace him. So it all go back to “let us go back to our training plans and train somebody new”.

So that was my another example where it is the effective decision-making although it really did not apply to our day-to-day work.

Q: Who is the provider of his security training?

A: actually that was a self-study. There were some online internal classes he also took.

Q: Do you have another example on the effective decision?

A: No.

Q: So let's think on the flipped side. What about some ineffective decisions you have made?

A: This is…I probably could apply this for several different times. So we had training on excellence on operations management. It is an enterprise effort and really help you to become more efficient to do your work, a lot of measuring…putting measures on a lot of things you do, timeboxing it, make sure you are doing it…a lot of quantitative matrix that go with your work. I had several people request that training, they wanted to go through that training. but for our area that we are in, EOM did not necessarily apply well, so we did not have clear results from the training in our area. Even though they went through the training, they understood the what is all about, what the desired results are, it did not apply to us. So after the training was taken, we really saw no real changes, no new application of that training to how we did our job. We kept doing things the same way. So the result of that training is more informative training as oppose to applying what was learned and changing the way we did work. I guess to me, allowing that, approving that training, even though it was informative, in a long run, it was not effective, because it did not initiate changes, we really did not change the way we did anything. We did not get any return on investment. Fortunately, the good thing is it was an internal-based training. what really was lost was just more time spent doing it. We did not lose travel time, we did not lose…I am sure there were some applications we can take from that training to apply on how we do our job, but for the most part, it was no change occurred.

Q: what are some of the changed you expected to happen after the training?

A: That was a good question. See that is probably the failure on my part because I did not have a lot of expectations. Kind of what I expect was more people go through the training and come back, [to say]”this is what we can do” and “this is how we should do things”. Maybe that was my expectation that we were able to apply something. But when we got back from that, it really did not apply to us. It is very hard to implement in the way that we do our job. EOM is very effective in a very ticket-based area, where a customer call in you have the ticket, you have to respond in a certain amount of time. You are measured on how much work you do, and how quickly you can resolve a problem for a customer, where my team is more…we call them the third-level team, where we do not necessarily work face to face with our customers. We are more develop type of work, we drive our own schedule, we drive our own end results. EOM just didn’t apply well with what we did. Even though it is good to understand why our company is doing this, it did not apply to us, so we did not get a lot out of the training.

Q: Did you conduct any type of measurement or evaluation?

A: No.

Q: I probably can apply that example to the training people take in the past. To me, that is probably the best example of ineffective training where people request training, and nothing really come out of it. We really did not evaluate the training and say “go ahead and take it”.

A: you said that training was…I would not say required, but suggested by your company for people to take it. They think everybody should take it because it is beneficial for whatever reason. Is it because that your company has implemented and it has been successful?

Q: Right. Some departments were every successful with it. Like I said the one when you have a set of expected tasks you have to be done every day, and you have this time box, or…that is where it is very successful. You can look at process and how you improve those process to increase your throughput. Things of that sort. It did not apply well to our team.

A better example is I talk about AJAL at the very beginning. This is something as we are going through the training now, our focus is better, we are looking at what is the end result, how are we going to implement it after we going through this training, we have exports now to help us post the training. again, that was a failure of EOM, we took the training and there was nobody to support when you are done. With AJAL now, we are taking the training now, we are learning how it works, and we have professionals. But they are very well versed in their process, in their methodology, and they are helping my team with their process continuously implementing this process. I think the big difference is we are more focused on what the end result, and how we are going to implement it. And it applies to what we do.

Q: it is more relevant.

A: exactly. Relevancy was the number 1 thing I have talked about.

Q: Thank you very much for sharing it with me. Do you have another example?

A: that is the only one I have.

Q: The last area that I am interested in is the evaluation of the decisions, in terms of how you evaluate your decisions, can you tell me—1. What are the key issues for you to judge whether a decision is good or bed? 2. What are the important things you always take into consideration when you make decisions? 3. Do you refer to any theory, model, or framework to help you evaluate your decision?

A: so for the first questions, the first thing I always do is to get inputs or feedback from my employees, or the people taking the training. I either do this immediately after the training or within our one-on-one time we spend together, to [talk about] “was it worthwhile to them?”

“did they get any benefits out of it?”. So it is a more informal way of discussing it. They had to share that what they gain from it, how they apply it, to the work that they do. So the input and the feedback for the person taking the training is probably the number 1 thing. I always [try to know] “did they think the training was worthwhile or beneficial?” sometimes I will get the feedback too “no”. which is good, which is I encourage it. We need to know whether it is beneficial, so the next person comes along with it “I really want to take this training” but it was not really beneficial the last time, maybe I will focus on something else. The final thing that I look at is that—did the training support the companies’ goals and priorities. So if it did not directly support where we are trying to go with our companies initiatives and goals, then it was probably a bad decision on my part to allow them or to approve them to take that type of training.

Q: Do you collect the employees’ feedback from conversations or if there are any written forms you use?

A: it is going to be more informal conversation. With everyone on my team, we have a monthly meeting for a half of hour, we sit down and we talk about what they did in the last month. Training is part of that conversation. Or they may just walk in the door and discuss it as well, I try to follow up immediately say after the travel for a conference, or some sort of training, to follow up with them fairly immediately afterwards.

Q: and then you would take that information to the next person when you are deciding if the next person need the training?

A: yes.

Q: how did you know if the training support the goals and the priorities of your organization?

A: to me, it is more just general understanding and general knowledge of what our priorities are. To me, knowing and being educated on what our priorities are, that is kind of how I know.

Q: so how about the second question?

A: the important thing is that if the training support our company's priorities and initiatives. Again I have talked a lot about this return on investment. Did we get the return on our investment of what we spend or develop the training or whatever to are we getting a return back. It is hard to put a dollar figure on it, but it is more based on intuition and experiences where we will get that. To me, we will get more return on the investment with on the job training, or working with an experienced individual to learn that job. For that types of training, I think we get more return on investment because they can turn around and actually start doing the job. The initial investment is low. So those are really the two things I look at.

Q: do you ever use any theories?

A: I do not. No models. To me, it is really based on my years of experiences as a manager. I got 32 years of experiences at my company, a lot of it has based on what has worked well in the past, what was valuable, what was the understanding of my employees and the people coming to the training or requesting the training, just what has worked well in the past, or what has not.

Q: when do you hire a new person on your team?

A: for me, it is when I lose a person. To me, we have not been growing, so if I have to hire a new person is when I lose a person. So most of the time, I have them [the leaving employee] to work on a transition plan, what needs to be done for this job, what skills will be needed, what I am doing right now, what are the things the new person will have to take over from them. So we are able to develop a training plan prior to the new person coming on board.

Q: great. Is there anything else you would like to add or share with me?

A: this is about it.

Interview D

Q: Ok I think we are good to go.

A: So answer to the question, scenario section number 1, the person wants to know about Kaizen, they had training before, but for some reason, the changes that they request are not sticking. I am asked-What should I do? I do have an approach to this and there is a number of resources about this. Robert Mager has several books on this, we talked about performance analysis. I also have a kind of cheat sheet, or…it is like a form, but it walks you through something that you should do when you get engaged from a request standpoint from a client. So I am basing a lot of my background or my answers with these two different pieces of information, and plus what I do know about performance analysis. ISPI is the organization that certifies professionals in performance analysis. So from performance analysis standpoint, we know that people request for training but most of the time, it is not cognitive gap, or a gap in knowledge. There might be something going on with the actual work environment, might be structurally within the organization that is impacting the performance. So you need to ask more questions of a client. Particularly when training is not sticking [when] they already had training before, that is usually an alert to say "you have gotten the basics and now it is not sticking, what is the problem?".

In this situation, I would probably want to have more questions of the client. For example, they mentioned about changes that do not last long, and I want to know "why do you think that is?" "Is it because people do not follow through on projects?" "were there project plans created?" "was there action list to the participants to say 'this is what we are gonna do by this date' and was that given to the participants during the meeting?" I will try to ask a few more questions to figure out why the training, or why the changes they had in the Kaizen was not sustained.

Q: Can you elaborate on the cheat sheet you just mentioned?

A: Sure, if you can hold a minute, I can show it to you. This is created in conjunction with the gentleman at Growup the Five Disciplines of Learning, and it is Jeffery something, I got look it up on my email. This is for KAM, but it is kind of similar. Basically, you have a business entity whoever you are over with… This is done in house, I would not give it to somebody, but you want to know who the stakeholders is, and that is what the first section, who you are dealing with…business owner, and people who are really responsible for the project. And the other section, section A, is about the need. This is where we ask, what business needs will be met. That is the first question because many time people want training, but it is not related to a business outcome. Tying it to business outcome helps you establish some revenue generation or some impact to PML because you are looking at from the business standpoint. We talk about specific indicators of success, because knowing what that is helps define the end goal. You say successful-what does that mean? Like this Kaizen, we ask earlier during the first time we did this, "what do you expect to see after doing this Kaizen". In that way, you are agreeing with the client [about the end goal] because it is not for you to define, I can say whatever we want to be expert in Kaizen methodology, but the client might not want that. The client may just want to know… they might just want to help something to help people to solve the problem in my business. They do not have to be experts, they just have to be able to utilize the tools. You need them to state that because it is not your perspective of success, it is their perspective of success. That is why you asked that question.

Then you ask about what roles are being impacted, because you want to know “who are the learners”. Are they managers? Are they line people? Are they employees? Having that insight will help you prepare the materials and prepare the solution.

Then another question we ask is “can you explain how employees are performing now?”, which is important because “are they doing Kaizens?” “OK, they are doing Kaizen, what is missing? What is happening?” or “they have never experienced it [Kaizen] before?” If they have never experienced [Kaizen] before, [that means] you usually start with beginners.

The other thing you ask “what will employee be doing better or differently in the workplace in future states of employees’ performance?” so you look at their current state and future state, basically. “Can you identify the employee group who is currently performing at a desired performance level?” so maybe there are some blackbelts, or lean practitioners in the organization, who are modeling the behaviors. I can go and take a look at what they are doing and replicate that for this group. That is what we are looking at, it is ideal performance.

Then defining what the performance it is, what consequences from that performing expected levels, is very important to know, because if it is not consequential, then why we are doing this. If it does not matter, then why bother to train people doing this kaizen process. “What are the particular barriers to success?” is also important to know. Is there some resistance? Is there other tools available? Once they learn, were they able to practice this learning?

Then transfer climate is section C. There are several other questions too, for example, “is the performance gap attribute to knowledge and skills?”, which is important. We want to know if it is knowledge or skill deficit. We can kind of figure that out by the request. This is more skill and knowledge, both.

Transfer climate. We want to know the executive support, business advocate, “what support will executives, supervisors give their direct reports?” Will there be transfer discussions during the activities? Will they help and support people recognize people who are performing well? And post training, what would they do? Will they give them the environment to practice? Ongoing coaching, etc.? “How do learner peers and associates support them?” so going into the environment and the support from peers.

This is all in my head and I am spelling it out. These are the questions I ask myself when I talk to somebody. All of these questions, you might not have to ask them. You might just find one thing, such as “OK, when will they use the learning?” could be a question, because they might say “not until next year”, so you are not gonna train them right now, or you may have to have refreshers. The other thing we have is about job incentive, and a lot of things like that.

The other thing we talk about is change management considerations. Sometimes that is something to think about. It may not be, but we put that in there. And here I have performance support because even though they are trained, they went through this Kaizen, is there a job aide? Is there a reference sheet? What do you help them to remember to reinforce the concepts? What is that [the reinforcement]? Asking that question too will help people. Then project specific things. “what is the reason for knowledge transfer?” so basically why are we doing this. “why do we need a kaizen?” “Ok, we need a kaizen because we have new service we want to figure out the best way to lean it out.” Ok, I get it, that is the end goal. Then I would ask “do we already have existing content?” because that is always a question before you design new product. Sometimes there may be ongoing kaizen training in different areas of the company, and you wanna refer that person to someone who is already doing that.

The other thing we ask is “what is the completion date of the training?” “When would they start the learning?” these are logistical things that goes beyond. You know, when we are talking to the client, getting that information just helps the whole thing go smoothly because you are in consultation with them. You may ask what the next steps are logistically. These are all logistical questions to be asked.

Then we might draft the pilot project plan, it is also going to be something we do. We try to list the key team members, roles and responsibilities, and then we get into measurement plan. I am showing you my process and this is what I go through. This is my methodology.

Q: This is great and it align with what I learned from the classroom, but it is in a very practical way to bring everything together.

A: Good. The other thing is data collection. When people go through the training, they do not know how to show something is successful. Ok, we say we are going to do smile sheet, but the client says that no this is not what we are really looking for, we want to know if the changes are actually implemented. We want to see the evidence of that, the frequency of occasion that the changes are implement is really our measurement. So then we know we are going to have to do observations. We are gonna to come up with a plan for observations, a checklist or some kind, surveys perhaps. But this helps us to think about the measurement plan.

Then we also talk about after-action reporting, in other words how actually people are going to learn. How would they deliver lessons learned? What performance indicators will help you? We kind of know that already, but we will ask that question again. What kind of knowledge transfer effectiveness are expected to be in the evaluation report? Do you want it in writing? Do you want a meeting? Do you just want an email? Then we will get the approval, and some other possible sources include the knowledge we already have it. We may decide that this is not training at all and we refer to the person to HR, to performance CI which is continuous improvement group, these are blackbelts. We might need to refer them to IT, we might just suggest something else. At the end, we will take notes.

Q: do you do this every time when people put in request?

A: This is very linear. In a real interaction, you may use a bit of pieces of it. Sometimes, if they are clear what the client wants, then you do not have to dig into so much, but you should be thinking all beyond that. You should be thinking about define success, you should be thinking about business impact. Those factors should be in your head. How you ask questions could be different, but you want to make sure that those questions are satisfied some way in a discussion. So to answer your question, I can use bits of pieces of this as needed. It is not really linear, it is written linearly but you can skip around or you can decide but you should cover the main points, such as what is the need, connected to the business, how you measure, how you define success, what some logistical things you need to think about and deliver the training.

Q: how long on average did it take you to figure out what the clients are looking for, and basically fill out this form?

A: it can happen in more than one session. Initially, it is much to ask these questions, but you may start off asking “what is the need?”. I think getting the needs right, and finding out defining success, are the two most important things you want to do first, because you want to find the needs and you want the clients to agree with that the need really is. You know, “why are we doing the kaizen?” “what do you expect to see?” and the other question is “how do you define success?” I think those are more front questions. Then the other question might be "who are you training?" That can have a lot of implications. Follow-up meetings can be a lot more detailed. "who is doing this?" "can you tell more about what you expect to see?" or "is this what you thinking of?" "Here is a program we already have on kaizen, is this what you are thinking about? Why or why not?" so you need to start having more conversation. You start with some of the basic ones, like the need, and again what the client expect to see in terms of success.

Q: This scenario was made up to let people think about what they need to do to solve this problem.

A: That is good. You started with something every simple, as long as you have that framework in your head, I think you will be fine. I put this here because we may know this in our heads, but for someone who doesn't may not understand all the intricacies of defining what the request is. I put it here to help to find more, and delineate more, and writing.

Q: Who are the people to use this form?

A: This is fore instructional designers, and people who normally get design requests to create something. It also could be used for managers too. For me, it helps because you may forget something, even as pre-read, when you talk to the clients, you may not even have to ask these questions, but we should know the process, we should know some of the things you should get information for. It will jog your memory to remember that. This is kind of like a check list at some point. It is performance tool.

Q: What are some examples of the training requests you have received in the past few years?

A: One I got recently is regarding knowledge management. It was a general question about how we use knowledge management in finance because they have a lot of content, and they have a lot of standard operation procedures, work flow documents, performance support, job aides and things like that. So the question I have is how you keep them up to date and organized so people can find them. I do not know if that is really a training request, but it was certainly a request for expertise.

Additional questions for training might be that I have are mostly software. Sales force wants to ask me about how you use Microsoft dynamics. They came to me to ask about how to put the training together for Microsoft dynamics. That request was different because it entails people who already know Microsoft dynamics, hiring them and giving them a template and sample materials so they can create their own.

Other request of training is not just like training, it is more requests for expertise. That is a little bit different. For example, we have to qualify engineers. They ask “what is the best methodology to qualify engineers?” That is kind of a journey from understanding what they are doing now, and finding out what evaluation tools are currently used, and what is gonna changed, how do they implement the program, how do they communicate about the program, etc. it is more program implementation request for expertise.

Other training one that I got I think it was request for design thinking. There is an actual need for design thinking and people want class on that. I struggled with it, they are classes on that. I think Coursera has one by University of Virginia, and that is really popular. But I do not know if you can teach people that. I think you can give them strategies, it is like teach creativity. How is that possible? I think I can give them some ideas, like how to cultivate their creativity or even design thinking, give them some ideas. But make them an expert with design thinking after a class, I do not think it is realistic. I think understanding those goals are important, like what people want about design thinking. Another question is “why do you want design thinking?” When you are doing that, you need to apply it. I think it definitely helps because it is not one size fits all. A lot of people think something you do is sufficient. But you may have specific needs. So I think understanding what they are going to do [with it] is important.

Another request that I got is I have gotten is for Oracle. Oracle is an enterprise software and they need to do an upgrade. During the upgrade, people ask question about how we are going to give the skills to the people who use it, what we do in terms of the training, what they need to know, etc. Here is a communication plan we use. We send this out when we do training.

Q: so will it be sent out before the training is set up?

A: Before the training and after what you have decided what the training is, and I will have communication plan.

Q: Will you be willing to share your experiences with receiving training requests when you worked at the hospital? In the healthcare industry?

A: Sure. There are a lot of requests here like finance or software trainings. We had training on performance management, how to use that performance management system and that is more like how-to videos. What else do we get…compliance training. Sometimes like corporate ethics, compliance, we have to fill out one every year and go through dos and don’ts, which we should do. You sign at the end and get a code of conduct brochure in the mail.

Before then I was at the hospital, I used to do a lot of system training again. That was learn how to use the electronic medical record system and that was a lot of training requests, because we had a training environment in the house from medical students to hospitalists and physicians and laboratorian positions in the clinics as well as in the hospital, that was the nurses and people in LIL, like your x-ray, radiology, all different laboratorians. That was huge because you train so many different people in different roles. We receive people in the hospital's concierge, or people that receive new patients, show them how to register new patients and all that.

Q: wow I can only imagine.

A: Yeah, even the food service people. Because they had to go into the system to provide the diets if you were diabetic or could not have solid food, you have to indicate the type of food you can get to a patient in the system. So a lot of people need training…helicopter pilots. They have to land on the hospital safely, so you have to give them guidelines on what to do, what to look for, things like that.

We also did learning management training because prior to get to training, they have to get into the learning management system. We had to train people on that, how to use the system, have the courses in, how to do the administration of the system or report system, etc. We had training because we moved into a new hospital, we had to train people how to wait, do wait theorying, where do you find the emergency room in the building, where do you find registration area, where the office is located, where the elevators are located, where are the stairs located, where is the emergency section, you know, so it is wait theory, which is mostly random to the hospital, we walked them through. Prior to that, I worked at Abbot and Abbot we did a lot of lab…[trainings] for labs. We have certain equipment that took measurements of any specimen. A specimen they have certain temperatures that they have to be in for example. We have to control the environment, so you have to know what conditions are you testing the specimen under, so we have these databases that you have to fill out the information and probe that information, so how to use that software is important. Cognos is for data warehousing, we have to teach them how to do that. We did a lot of combined training in terms of what the FDA recommends in terms of compliance. Prior to that, I was at

Grainger, we did sales training. A lot of sales training and in most of where we teach them how to use their customer relationship database, how to use their mobile business intelligence applications. You have to learn how to use that application to find out what is the needs of the clients? what they order before? what is their current capacity of inventory for them to approximately sell? are they short? are they full? So you get this business intelligence before you see the clients…We teach them how to use our catalog system because we have a lot of steels that is product steels. Thousands and thousands. So you had to know how to find those steels. We taught them that knowledge management of the steels. We taught the materials safety because there are some products that there are requirements for safety, so you have to know the materials.

Q: I want to dig in some details about the requests and your thought processes on how to request to certain requests. Let us just start with the first knowledge management training that you mentioned. Who was the individual or who was the company that put in the request?

A: Vice President of Finance.

Q: Can you walk me through the process that you used to respond to this request?

A: Vice President, he is my boss, [started] about this knowledge management request. I did not have all the information but he forwarded me what they are currently working on, what some of the questions they may have. We had a meeting with him, before we had the meeting with him, I tried to dig around a little bit, I talked to some people in finance who were working there to see if they knew anything about knowledge management, or if they have any questions or insights. I did not get much from anybody because they interpret me working with him. But this is what I know how to do it. When you ask people in the organization when I get a request, I asked people "have you experienced this?" and your experience as a learner, like this Kaizen thing, ask somebody in the field, not just the requester, but the person in the field, “What has been your experiences with Kaizen?” “What do you think needs to be improved?” So then I come back and talk to the client, I have better idea of what problem might be. So in this case, I was trying to do with him but I was not quite successful. When I met with him, I went over the problem with him again, he did not explain to me what he think the problem is. I kind of explained what might be, what would be a quick win. You might not know the details, or the solution might be, but you want to make the client to feel that you are listening so you look for the easy things that you can do, and easy thing could be “let’s get together” which is with him, listen to your people, so I can find this problem more if you can some people I can talk to. and then we can have this meeting and we can experiment more. Do a deeper dive to what we can probably do, make some quick wins, so I did that. So he is going to come back with a meeting. He is going to find some people for me, then we are going to have a meeting. What I might do is bringing other people in who have expertise in this particular area, so this content management and not… because he says knowledge management, but it was content management. My hunch is content management is what he needs, I told him this. But I keep it open mind, until we talk more, we do not know. That is how I look at it. But I was able to put there something for next steps when he is ready to make next steps, so we are ready to work with him. Some people said they want training, but they are not ready. You know they have an idea, they are just not ready until maybe next year. You might have to find the budget. I have people plan to ask about things and a week later they forget about it. We had a database where we kept all of our request. This is when I was at Abbot and we looked at the requests that they asked and one that they were actually satisfied, and we found out a lot of them were still open because people never came back or never follow through. So that is very interesting.

Q: Do you know why they did not follow through with the training?

A: These are my form that talks about having a subject matter expert and sitting by an expert is very critical because we may want to design a class but you do not have the person with the knowledge to design it, you can’t do it. Typically, they come from the business. I have been there really ready to free up somebody who is at sales and who knows the system to help create the materials. Then you know they are not ready, they are not committed. That is just one example. It can be other examples too. Time. Time for people to train. Maybe it was not immediate need at the moment. The thing about it is that whenever there is a performance issue, generally speaking, I have done some research on this, people think it is a knowledge gap. It is Rummler, I believe it was Geary Rummler from ISPI, wrote a book. What he said is that I think 75%, something like 80% of the requests has nothing to do with training. I also have practice black belt [of] lean six sigma. I took that because not to be a practitioner in six sigma, but to understand the process because a lot of people has had requests because of broke process, or something like that. It is very rare that it is just the person does not know. You have to look at other [factors], environment, the tools, the procedures, the management, what is missing? It is not always that the person does not have knowledge. Not that easy. So knowing that, like the gentleman that I want to do the knowledge management training [with], I felt more so that you needed strategy around managing these contents.

Q: So like you said, it is content management not knowledge management.

A: Yeah. They are related but if you do not have content management, what is the point to have knowledge management? Because you are not going to find knowledge anywhere and you are never going to get to the point.

Q: Besides talking to the client who put into the request and also talk with people in his office, department, did you discuss this request with some of your staff? Or your work team members?

A: Yes. I usually do. Particularly if we are thinking about…Typically we have weekly meetings and we would talk about the requests that came in. Doesn't mean that we are going to satisfy them but we will bring them up. Say X amount request came in, if we are going to actually solve this problem or address those needs, we will send somebody. But each week we will come up and talk about the requests or something we have. We have a list of requests, a list of projects ongoing, and it is like a status report we give.

Q: When you are trying to respond to the Vice President of Finance's request for the knowledge management training, what were some of the considerations that you had?

A: The thing that I want to know was what has been done already, and I want to understand the problem from this perspective. What was he looking for? Fortunately, he gave me some background information. He sent me some meeting notes that they had of current and future state, and that helped me. Looking at that was good because it gave me an idea what the problem was initially. The other things include the process, what they are thinking of, what we are thinking of, that kind of thing. And also he looked for quick wins, because one thing you do not want to do with the client is to ask too many questions, because it sounds like even you are listening, they felt you are not listening. Typical business types, they want efficiency, so you do not want to make them feel like this person asks too many questions, all

I want to do is get this done. Trying to make the meeting with a quick win, then continue to investigate particularly what they want.

Q: Did you use any formal or informal guidelines?

A: No I let him decide. Whenever you are ready, pull me in, because I am working on his timeline. If they are really interested, they will follow through. That is how I feel. If it is really important to you, you are going to follow up. You do not want to be the one that always is pushing for something. It is so easy for training to be the solution, one to oppose your solution on the client, and you do not want to do that. You do not want to owe the problem because if it sustains and they are not willing to put the effort to do the right things and keep it going, then you will do the training and people will forget about it, or they walk away.

Q: Because they did not really care…

A: Yeah they do not really care, they are not really committed to it, so there has to be a partnership.

Q: Is this an ongoing project?

A: It hasn’t started yet. I think it is ongoing in terms of we have meetings about it.

Q: What about the training request for the Microsoft Dynamics? You were saying that this training request was different from others because what the company is thinking is that they are looking for someone who knows the software, hire them and give them templates and samples so they can work on their own.

A: Yes in this case you need people who know this software. So we hire trainers who know the software, and we just give them our templates, so they had to look the field of the company. That is what we did. They brought expertise to us.

Q: Can you remind me who put in this request? Is this someone in the office?

A: Director of Sales.

Q: Did you meet with this person to find out more information about this request?

A: There was initially an email about this request, and then I asked more questions. I had a meeting with this person, a follow-up meeting. I sent them examples of some of the templates we had. I also sent them an instructional design guideline because everyone designs differently. There are certain standards we have so I wanted to make sure that the clients had those. So I sent those to him to get to potential vendors who are doing the trainings for us.

Q: What questions did you ask him?

A: One basically was who is going to the assignment? What would they need from me besides the templates? What else might be needed? And then we had a meeting with the vendor and myself, we talked about what the needs were, we sent them templates, we asked questions that would be helpful, what question do you have? We asked about what they are planning to do in terms of the training plan and developing the materials. Once that was satisfied, we took over and began doing it, there were ongoing touch points to evaluate what was done. The director of sales was the person who decided there were some expectations.

Q: The whole idea of hiring someone that knew the materials and those people became the trainers. So basically this is a “train the trainer” program?

A: Yes in a way, but it is train the trainer with another vendor.

Q: Do you think this decision/response was effective?

A: If you want to get going quickly, the problem is…usually what I tell people is after the initial training, you need reinforcement. The reinforcement is typically performance support tool like job aids up to their practice, go to people or it can be something else. Go to people, you know, just people who coaches, [people who can be] asked questions. You have to build that into because just having a class, or labs, we still have labs, after you get the training, there is somebody at the lab. If you are going to a vendor, once they finish a contract, they are going to leave. So part of the process should be that you build super users in your organization. Super users, or coaches, even the master trainers, you should have coaches, so that after the [trainers] leave, you still have someone that can ask questions [to], and can help, particularly software because they are not going to remember everything. When they are stopped when they at work, who are they going to ask the questions? So part of the training process is that you need to think of, not during the training alone, but also after the training, what happens? So from that aspect, I do not know how well that was done. It might be ok, but I do not know. There is another thing too, you know, this is where it shows we have lessons learned. Limit it to the knowledge management. What I have been doing lately is after the training, we have this program, basically it is like a design thinking course. It is more than design thinking, you are actually developing what they called MVP, minimum variable product, or a service that this does not have. You have an idea in a unique way to do design sprint.

Q: Design sprint?

A: Yeah designing this new product. But what we did for the training on that, we had something called retrospects. In the retrospect were a way for us to do intrusive design, because when we did it, we came back and we said “How do we improve it?” “What went well and what did not go well?” Having that kind of feedback mechanism, you have continuous improvement. And we have done that with the sales training, we found better ways to improve what we have already done. There are little things that you learned. It is part of my practice now because I see how effective it can be to improve something, and particularly new things. If you approach it from an agile point of view for training, this is what I am going to do with that finance [training]. Start with an experiment, or pilot. Do not make it the actual. Do not tell them this is the end of course. Start with a pilot. Small people. Small impact. Do one section, maybe an hour, see what happens, find out what you find out. Do a retrospect. Then you will find out more how the participants thought about it, how the client feels about it, what can be improved, what went well, what did not go well, and you start actions after all that. That way you have the client…first of all, you are giving them something right away, you would know what I called “scruffy” which means it is not perfection, but it is in a format that they do not mind changing. So a lot of times people do in design is they get request and they make this perfect e-learning course, flawless pictures, flawless navigation, they work hours making sure it works well, and someone was asking “what the heck is that?” and they put so much efforts into it, they do not want to change it, and they get hurt. They start doing all that, they make the client wait for this perfect thing. Start with prototype, start with something quick and dirty.

Q: Draft.

A: Draft and get you to defect the draft. That way no one feels like I put all this effort in this and they do not like it. That is my new approach now. I start with draft and I start with experiment. Prototypes so that we learn through the process. And I find out what they really want too because [I would say] “here is what I think it was.” “No that is not what I wanted. Let us think about that.” “Oh…” and then [we can make] change. But I have not gone so far down to the rabbit hole that I can not get back up and make a change. So you do not want to do that.

Q: What are some of the forms of retrospect? Is it a survey?

A: I can show you what it looks like. It is not a survey. It is a meeting with the learners, participants, stakeholders, managers of the program, we meet together and we go through the whole story. I can show you what looks like.

Q: So it is like a focus group?

A: It is like a focus group and people talk through it. I love it. It is my new tool. Because I did it. I tried it on this training. We improved it every cycle. We added the suggestions and we made it better and better and better. The client feels good about it because they can see the changes and they took part in the changes. It was not just me saying "here is what you need to do." They were part of the process.

Q: usually how small the group is?

A: It depends. It usually has everybody in it. So this is one I did. This is the first one actually. We brought the stakeholders in. We have the executive summary. So we talked about the product synopsis. What are we trying to do here? Executive summary is just for people, so they do not need to read the whole thing, but what we found out from this learning [is] we need better communication plan. We need people to experiment more. We need the leaders to do something and to have the decision model ready to choose people. We also found out that people, more employees should participate to make it a better program. This is the change in communication. The XX are the executive sponsors in the program and make it easy for people to participate. We also list part of the objectives. We asked, "have they been met?" this is another way to come back to the client to say, "Ok this is what you wanted to do. Was it accomplished? Was it partially accomplished? Not accomplished? What do you think?" and here you can see some partials. The greens are the ones that were accomplished. But this is another milestone, confirmation of the milestone. Then we talked about the project schedule. Here is all what we did. This is very important because a lot of people do not understand the journey that they took, and we show them the journey that you have done, you then see how all the pieces fit in, and [make] you think about this is all the process that I went through, and I can talk about each one of these parts and pieces. Here are all the participants. I usually list all the participants. We have a vendor this time helping us facilitate. More participants including executive sponsors. Here are all the other participants. Then we say, “what went well?” and we listed what went well. These are just the top key insights. We talked about how and why this model was going well. This was the key learnings, and this is very important, because the key learning is the insights you get out of this. We also talked about advice for future. You got these key learnings, what did we learn from this? Is there actionable thing we can do in the future? Have a dedicated staff, have champions, have enough resources to pull the program of. This is another one. We kind of break it down more. The context. Key learnings and advice for the future. Then we go “what could’ve gone better?” It is kind of similar. We set the scope of the process, or problems. Then we go into the context again. The context is for people who…if you have never read this document, you have never been through the process, then you get the context, you will know what we are talking about. Why is this so important? Then again key learnings and advice for the future. Then we came up with next steps. For the next steps, we just listed different milestones and get people to get them done. And that is it.

Q: Great.

A: So we did a number of these to establish the experiment and keep integrating with the retrospect. Through that we get a better understanding [about] what the client wanted, what the learners wanted, what the sponsors wanted, because we are all involved in this retrospect. So in a sense, this analysis continues. It was not just a start, we still are continuing asking those questions. That is my new approach now. Because you can not get all upfront…sometimes they do not know how to answer it, but as you go through all these experiment, fail fast but fail with something that does not make a big impact on people's time or their business. You learn from it and then you can grow and improving. If they can go through that process with you, you come up with better product.

Q: It is very practical. You just put together something really quick and you test it out.

A: Something to do in the software business. If you look at Google spreads, they kind of tell you about it. You can do this in one week. It is hard to set the experiment in one week because you need to get people ready, but you could do it, if you technically said "this week we are going to experiment the training program. We will have the week to just do it. We will get together at the beginning and at the end we will have the lessons learned retrospect." You could do it. I think it is just preparing it, preparing all the materials.

Q: Did you use this retrospect form in the design thinking training?

A: This was not for design thinking training because they are about learning by doing. We taught them strategies, but they will learn the strategies while they are solving the problem. They have a project. A real project. They have to get this MVP [done]. When I teach design thinking, I always think we teach the same way. We have people, within this training, we have to have a product. I will help you get to the product by using design thinking, but design thinking isn't the end goal, because if you do it that way, it is…we are out of context. I want you to be creative, well creative about what? You see what I am saying? It has no context. The other thing about this kind of word when you say creativity, imagination, they are constructs. They mean differently to everyone depending on your culture, depending on where you come from. It can mean so many things. Instead of trying to unpack all that, give people experiences, or they might approximate what that might mean. “It seems like design thinking.” “What is that?” It really can be anything. So you have to give them a framework in context to apply that skill or the knowledge. Then they begin to understand it and it becomes more contextual. That is why I do not believe just stand up and talk about design thinking. People say “what is that?” some people will go for and talks all the theories and people will sit there…I do not what is that…

Q: For something like that, creativity, innovation, design thinking, how would you measure that?

A: Exactly.

Q: If you want new ideas, I can give you new ideas but that doesn’t mean it will work for A, B, C situation. Right? That is a difficult topic to address. What are some of the projects that you gave to the learners?

A: Well because we have a special problem we want to solve. One of the problems was fakeness. How to stop fakeness? You have to come up with some concepts with how to stop fakeness. When we do it on the first day, we bring in experts who know about fakeness, or their organization knows about fakeness. They listen to that and then they get together and think about what we can do to find a solution, and then they do research, that type of thing. And then they will come back and get together to think about the journey as customers in navigating the site about fakeness. We may have to consultantship fakeness. They come up with different solutions and at the end of the week, we put that into writing about what that is, and give a presentation, like a pitch, we call it a pitch. They pitched it to the executives. So it is an interesting journey, but it certainly has the application of design thinking because they are ideating, they learn from each other, they are using different design strategies, and the learning [result] is that they solve a particular problem.

Q: and this problem has been happening in their organization in real life in real time?

A: yes. Something that is important to the organization. It is not something we have them to do, they [feel] “what is that?” [something that] doesn’t have any meaning, but I am doing it anyway. [if it is done this way] it will have meanings, something they can relate to. They expose the fakeness but they did a good job finding out that they have people come who are experts, can talk to us about the problem, define the problem is part of design thinking. You got this problem. What is it? How does it affect people? What is its impact? What is the context of the problem? As for the start of it, this ideation about defining this problem, and then think about what will be a good solution? What will be the customer’s journey to that solution? From the customer’s standpoint, what would they be experiencing? Will they be looking something? Touching something? What is it they are doing? So this whole ideation we use a standpoint to [get to] design thinking. It is an empathetic approach to the problem. We are looking at it from the customer’s eyes, that is design thinking. The thing we used in training, we are not trying to design something for us, we are designing something for the business. We should. I know a lot of people design for themselves, but if you want to be effective, they have to use it. It is not you design something and they are not going to use. They have to use it. Then you have to get the requirements of the customer. What are some of the pinpoints? What are something like their motivation is changing? How can we support this? This is what the design process takes you through.

Q: Based on my experiences, our office teaches leadership development and we provided training programs on communication skills, system thinking, change management and innovation. At innovation, there is usually a lecturer who talk about theories for three hours, and the students will be given a bag of junks to create sort of product. At the end of the program, since I design the survey and the assessment, I saw students wrote “it looks like we learned a lot about how to be innovative, and how to be creative. I just do not remember what they are.” Others were like “we talk about innovation is important, I just do not know how to use them. Where is the application?” That is the problem from the survey responses.

A: That is the problem with the application. They do not remember it because it does not mean anything to them. They just sat in the class.

Q: Exactly because they can not use that for solving real problems.

A: That is why we do it this way. They actually solve problems they care about. It is important, and you can have executives look at your outputs. All that drives motivation, they would apply what they learned.

Q: If we can do things in this way. Of course, all the theory, all the articles are important, but other than just introducing them, we need to find a way to tie them with real problem solving. As you said, you gave your learners a real project based on a real problem where the executives are going to look at their final products, actually judge the results. It will help the learners stay motivated, and it also has a real application in their work. Again, we are in the process of revamping the curriculum of innovation. I just think we need to put more thoughts on the application piece.

A: Let me talk about that with you because I do want to design something for innovation. I am asked to do it. My boss works for U of I. He teaches the MBA program, he teaches business innovation. But we are going to make one here, but again personally I think just talking about innovation…and then when we talk about it, I am thinking about maybe inspiring more, maybe it is giving people examples of innovation and asking "how would you apply it?" or maybe this is a small, a mock project that they do, or they bring their own projects, and they do it. Maybe it is a case by case basis where a business entity, like a software business, they want to change a product. Their old product is not doing well. How do we innovate that product? Perfect time to teach innovation because you have a real issue, and there is no reason you can not bring the people into the process, they do not have to be software engineers. They can be from HR, they can be from project management, because when they see the problem being addressed, they can learn from that. Just the process itself. So I think if we can take sample applications, like you said, where this thing can be applied, the occasions to apply innovation, something real. Real world situation and bring other people to observe or participate. I think it is another way to help people learn.

Q: To have some hands-on experience that they can take away with them, not just the knowledge they probably will forget after they walk out of the door.

A: It is true. The other thing that I found is that it is not so much they learn. They learn those techniques by collaborating, bringing out the ideas, they learn that, but they also learn some other things too due to the experiences of applying it. They learn what they do not know. They will have more questions. When they are doing it, they say "I never thought like that." Or "Now I get insights by my own stuff how I am going to apply this or use this because I am using it now and see how it works." So it is a different experience all together. That is kind of thing I like to see people having, more experiential as oppose being talked to. Some of that is good, you just have to be careful that they are partners in the learning that it is interactive. It means to be engaging as oppose to be passively. I am thinking about it too. I do not have it fully baked, but the process I am telling you about, experiment, iteration, retrospect, experiment is the thing I am using because it works. It really works.

Q: That is a lot of great information. Thank you for sharing with me. Is there anything else you want to add?

A: I want to show you this needs analysis that was done in the hospital. It is wonderful and I do not think too many people do this. This is with the IT people. What they did is they went through each application change, to task, and they put that application suite, type of change, this is what type of change is, and degree of impact, considerable, minimal…then they have here, [about] what is changing, then they talk about the basic application, and then [if] training needed, and then what type of training, so this is an example of how request would come in, because the IT folks will take a look at it, and they come up with this sheet and they decide "is this something we train on?" or don't. Then they will guess what the training might be, it does not always come out like this. For example, something is just email, it is just knowledge, right? Just let people know the change. But some others are e-learning, a lot of these is just email. Interesting. But the point is that they went through each…this is a long thing…each and every piece to say what they are going to do with it. I have never seen this before. I have only seen this at the hospital, but I like it because if you do this for a lot of occasions to figure out what to do… this is mostly upgrade. But it is cool because you have the requestors and the training folks to decide on some methodology. It might not come out like this but this is just a start. This is a lot of stuff.

Q: Yes, and you said the type of training was decided or guessed by the requester?

A: By the requestor. This was the IT people, but they have seen this before, some of these might be existed, like this handout, might be existent, this is might be just an update. This is for upgrade. Upgrade is a little bit easier to do because you already have existing materials, but the point is that this kind of sheet, this kind of details is a good discussion point, right? Look, you have meetings. So something is just meetings, and they have here “no opinion.” I like the detail in this. This is a lot of stuff, but to be this detailed in needs, I have never seen things like this before in anywhere else. Here is “none.” That means you have to go back. They know something has to be done, but they do not know what [it could be]. And the list goes on.

Q: What is the timeframe on this?

A: It did not tell you when, this is probably something that is missing. But at least you have an idea. The degree of impact I love. This shows the important stuff. You can sort on this and find out what you should be really concerned about. I want you to see how much it has been trained on. It is very involved extremely involved, because you have so many roles. Surgery. What happened in the surgery? What happened to the drugs? There are so many aspects of a hospital because it is a complex system, and everyone needs training. It is huge.

Q: Each year, there are new medical school students coming in, there are always new people coming in. Nursing students…

A: Yeah. Plenty of upgrades and people. A lot of things happen. Let me show you something else. This is the planning wheel. This is from six Ds. This is their planning wheel. They say [when] business needs met, what would people do differently after the training? How do we know? What are the criteria? Something similar in that form, but they just put it in this graphic. This is an example of task analysis.

Q: DACUM?

A: Kind of like a DACUM analysis.

Q: Do you like this way of analysis?

A: Yeah. I am taking an AI course at XXX university. One of things they look at is what can be automated. So for example, if I look at this, what can be automated from this job? This is process custom request. Provide options. Definitely can be automated. This will be maybe. This may require [human] work, but it could be [automated]. This is for the person who actually is doing this. So you can manage this, taking out and just automate these pieces. From that aspect, this would be perfect because a lot of people, they do not know what to automate. They want to use AI but where? When we are doing analysis or collecting data, there are perfect opportunities to automate. This whole thing can be automated to be honest. This can be a reason for that. You do a process change, this would be a good thing to have. I do not think a lot of people know how to do that.

Performance support. This is something I was trying to show people. A software training, you have it here, a class, it can be anything really. But this is the post learning support. Learning can continue with these things. This listed stuff that people can have. Coach support, super user support, go to users and peers, job aids…GUI, is like if I could not remember how to do a step, I can have a wizard to tell me. I built it into the software. I do not do all the steps, but I click on this, it will help to walk me through all the steps. It tells you what it is, what the purpose of the icon, online documentation, user guides. But what I am saying is, if you think of it, most people stuck here but there is a whole lot stuff happening here.

Q: So going back to the Kaizen example, sometimes it maybe the after training support.

A: User support. Yeah the after training support. If you can have a job aids, or a reference guide, or coach, it will be helpful and you do not have to redo the training.

Q: If you do it for the first time and it did not work, and you do it again, it will not work again.

A: No.

Q: Thank you so much. Do you have anything to share with me at the last minute?

A: No, if there is any additional information you need, please let me know.

Interview E

Q: Do you have any questions about the interview questions that I sent to you? Anything that is not clear?

A: No.

Q: The ring-ring scenario here is to set up an example about what scenario I am looking for. For training professionals, they will get request. They will have someone from the organization ask them to do a training. This is a prompt to describe that the situation would be. If you were that HRD director in that scenario, what would you do? And why would you do that?

A: The best part of the scenario is the tell me more section. I think it is important to fully understand the issue before you diagnose and offer a solution. One of the best example I dealt with that…you ask to come up with some training request, that was an issue though, there is an increase in Illinois in production of ethanol. Ethanol is gas with corn added in it, in Illinois we were challenged because we thought there would be more fires of ethanol gasoline, which is different from fire from regular gases. So we focus on building training programs to anticipate that path. The problem we actually saw, the calls we got was, there was a higher number of accidents on farms because farmers will stock piling the corn, waiting to the price to go up, waiting for the ethanol demands to increase. So we were confronted with an issue where there was a training need that was not what we anticipated. We thought ethanol is going to lead to more firefighting classes, but ethanol led to more classes on how to rescue farmers that were trapped in grains. So we had to first understand why that was happening. In the fire services, we typically do not look at economics factors very much, in this case, the farmers were waiting sell the gain, because they thought it was going to be more valuable in the Spring than was in the fall. But the farmers were getting hurt, because they are storing it and weren't familiar with how to store it. So we thought we had to come up with a training program with firefighting on how to rescue someone who's trapped in the grain building. We also [cooperated] with the farm bureau of the state to help educate the farmers on how to not get into trouble in the first place. That was a new area for us. We not only responded to what our immediate customers needed, but we also took on a step further to their customers—to the farmers to help reduce the incidents from happening in the first place. If all we have done is giving people what they ask for, we would have created a class that did not meet anybody's needs. We would have trained responders to deal with the problem, but it would not reduce the incidents of the problems in the first place. It would be like a hospital training, everybody has to deal with it, treat people with the flu, but did not offer free vaccines. So we took that approach we wanted to have both, deal with the responder problem, but also go to the communities and prevent that problem in the first place.

Q: Can you walk me through your thought process on why do you decide to offer preventions?

A: The fire service offers prevention in a lot of areas already. We do it for teaching fire[fighting]s just to remind people not to leave the stove on…if you are on Facebook, sometimes between now and thanksgiving next week, somebody will share a video about not dropping a frozen turkey into a boiling pot of oil, because it freezes up. Fire departments do a lot of messages like that, but they typically do not create their own messages. What we did is we plugged the same concept of public education to a different risk of problem that we are presenting, because that allowed us to create a program for audiences that we did not typically talk to before. If we want simultaneously to prepare the fire department to help people, it also reduces the need for that help in the first place. If I can teach you a couple of things that you do not start with house on fire, the fire department does not have to go put it out. It is an idea that the fire service starts to embrace it to be more proactive, and prevent emergency as much as possible, instead of just being reactive and dealing with the emergency when it happens.

Q: That is great. Do you think this is effective? Have you implemented it already?

A: Yeah. We started it about five years ago. We now are doing everything from rebuild prompts, train firefighters, and when we go to train firefighters around the state, we asked the local farm bureau to come help. So the farmers are interacting with firefighting before there is an emergency, so they get to know each other better before there is a problem, and possibly prevented a problem.

Q: That is a great example.

A: I also like your example here because the manager from the other department wanted to tell the HRD professionals how the solution should be implemented, and I dealt with issues like that also. The [city's name] city in Illinois, the police department had encountered an autistic young man who was holding a knife. They did not understand how to interact because his autism, and they shot and killed him. So someone went to their audit man who went to their senator, who introduced a bill that all firefighters, all police officers, should have eight hours of training on how to deal with emergencies with people with autism. Great idea. That is equivalent with this paragraph "The food was great and let us schedule a two-day session". So the legislator introduced the bill that they thought they are going to fix the problem. My job was to interact with these legislators and to help them understand another course next week is not necessarily the best solution that we have to understand all of the issues. In that case, in Illinois, you are not required to be certified as a fire fighter, every community sets their own rules and their own training process, so to require every firefighter to have eight hours of autism trainings was going to make these volunteer communities could not have their fire department any more. So my counter-proposal was to listen to the legislators, understand what their concerns were, and I proposed a voluntary program that would be available online, instead of 8-16 hour in person training, and that compromise was acceptable for the legislator, so we wrote up with online program—an one hour awareness class—for emergency responders, just giving them general information on what it might be like to interact with somebody with autism. That was enough to take this item out of the legislator process and not get a bill for that would be awkward correspondence…I had to leverage my experiences as an educator at the university for many years, and my ability to interact as a fire fighter with these legislators to take them for what you identify here when they thought they had the perfect solution, and help them to agree with something that is going to be a better kick for the audiences.

Q: For that one-hour awareness online training program, I am just curious, how did you come up with that solution?

A: When I met with the legislators, I asked what problems they were trying to solve? What is the end state that they desire? What they wanted was the emergency responders to know more about autism. They did not care about the particular training course, they cared that there was some training available. And what I could explain to them that the way that they are going to require it is going to hurt fire departments, make them resentful, and move them away from the good. They wanted to hear a solution about how they can get closer to do this, so we worked with professionals they identified to create the online program, and we hosted it with fire departments throughout the study. That allowed us to keep tracking who took the training, and allowed us to report back how successful the program was, to show them we were meeting their goal, but we were doing it with our methods instead of their solutions.

Q: How successful do you think this program was?

A: We were able to train just over 400 firefighters, voluntarily in the first year, which exceeded our goal with 200 for the first year. Well we can’t draw a line between this training and no other fail incidents with autism, there hasn’t gain large scale of reports. I can’t say correlation equals causation. We have also seen that this program lists resources where you can go for more training, we have heard from places that offer additional training, that people have been interested in that. We have offered a four hour in person course in addition to that online course that we have offered through the past five years.

Q: We can move on to the next question. Do you have more examples like that to share with me?

A: Fire trucks are really big. We had an individual that drove the firetruck into the side of the building. It happens more than you think. Because most of the time people are rushed to get into the firetruck and go somewhere. We identified after that we assumed that all of our part-time staff have been through the firetruck training with the fire departments, and we were not providing it for them. So we identified that to better limit our whisk into people damage our fire truck, we have required training of our trucks even if they have been a fire fighter for 40 years.

Q: so, it is going to be like a standardized training? Everyone has to take it?

A: We took them to every one of our fire trucks. Everyone is different. What we saw is a decrease in damages to the vehicles because we make sure that everybody knew what they were doing beforehand. The other thing we found that we did not expect is we saw a decrease in reporting problems that were preventive. But people were able to learn some unique things about the fire trucks that they would not have known otherwise because it is different than what their usual fire trucks. So that allowed us to reduce the minor damages and inconveniences because the staff was trained on the frontends instead of assuming they know how to do it because they are fire fighters somewhere else. Originally our staff felt like they should not have to do this, “I know how to drive a fire truck. I do not need to learn how to use yours”. Now it is one of our more requested trainings because it saves a lot of in the class, because they do not look silly in front of the students because they do not know how to do something. Because they learned this specifics on the equipment we have. The fire trucks are not all the same. Every year, there are different features. We have been training them on what they are going to use, not just generic [information]. It helped my staff to look more professional in front of the students and decreases damages downtime because people are more interested in learning and not just assuming.

Q: how was the training presented? Was it a in person training intervention?

A: It was in person, but to go through some of your questions. We identified there was a need for training internally, and we had to understand what all of the related problems were because often times the problem that someone brings you is not the problem what you need to solve. This is our very first cold weekday this week and there is a problem with the furnace at IFSI, but the first person that realized that there was a problem did not tell me there was a problem with the furnace. They said, “my office is cold, can I get a space heater?” and then the second person came and say "my office is cold, can I get a space heater?" So I went to their offices and found out all of them were cold because the furnace was not working. I fixed the furnace instead of just giving everybody a space heater. But making sure you got the right diagnosis, that is where before I started at the university, I worked as a nurse in an emergency room. Figuring out how to make sure you are treating the correct problem, this is part of my training for my nursing degree. I have brought that into my work at the university. For question 1, you have got to make sure you are fixing the right problem, and the problem that somebody tells you they have might be the problem you face. It might be a symptom, but not the disease. Making sure you ask enough questions first. It helps make sure you are fixing the right problem and [getting] the right solution. When you are trying to change behavior in an organization, you have to consider a number of variables that can make the change happen. If we go into the bathroom, what sign is going to be in that bathroom? There is a sign in every bathroom in a restaurant in Illinois. All employees must wash their hands before they return to work. That sign is there because that is part of influencing employee behaviors. One of the things we are dealing with now is we have learned that smoke has carcinogens in it, and fire fighters absorb those carcinogens through the skin on their face in work. So there is a higher risk of cancer in firefighting than in other organizations. One of the things we are doing is we are trying to change fire fighter behavior and make them use a baby wipe after they come out of the fire. Huge change to fire fighters. One of the ways we encourage that is we put up signs, says "remember to wipe your face". So just like the sign in bathroom, it is an environmental cue or a prompt to remind people of what their right behavior is. So making sure the strategy is there. If you are talking about organizational change and development, sometimes it is a behavior problem, but the environment in the organization rewards the wrong behavior. If I reward you as an employee based on how many customers you see in a day vs the quality of the interactions you have with the customer, how are you going to spend your time? Are you gonna have better relationships or more relationships.

Q: If you are just looking at how many people I interact with, I would just rush through talking with people instead of actually spending time and building a relationship with the customers.

A: You get the behavior that you reward. In often times, the culture in an organization is set up to reward behaviors we do not want. Roughly 100 fire fighters are killed every year. 25% of those are killed not at a fire, but they are killed driving there than driving back because they are not wearing the seat belt. Every fire fighter knows how to buckle a seat belt, but because they are punished if they do not get there fast enough, they start cutting points. So they will not put their seat belt on because then they can get dressed while they are driving. That gets them there faster. If you are driving and you have to get somewhere quickly, how are you gonna drive differently?

Q: absolutely go faster.

A: You go faster. You might not stop at stop signs. You might not stop at a red light. All of those things contribute to fire truck accidents, because if we only focus on getting there quickly, and not getting there safely, we are rewarding the wrong behavior. So we also try to influence firefighters to make sure that before the fire truck moves, the four of us of the fire truck crew, we all have to hold each other accountable and make sure our seat belt is in. So we have to focus on safety over speed, not speed over safety. That is a significant change compared to how fire departments focused before. We knew how to measure how quickly you got there. I can time you, but I was not factoring in that you might get there quickly but cut corners can make injury occur.

Q: Do you often work with your team members, employees when you are trying to discuss the training request?

A: But sometimes may not be a training request. It is as simple as are going to tell me what they want. I have to unpack what they want and ask questions to make sure what they want is what they really need. A great example how someone helped me was I know how to use a saw to cut a square in metal. I wanted a circle, but I always do them in squares because I did not know how to make a circle. [To make] a circle you need a torch, [to make] a square you use a saw. I know how to use a saw, I did not know how to use a torch. So I was asking for what I thought I can do, not what I wanted. A lot of the requests were coming in the same way. “We need a square cut mechanics”. “Ok what are you trying to do?” “We want a round opening to look like a hatch.” “Then why do you want a square?” “Because I donot know how to make a circle.” “I will figure out how to make you a circle, and we make you a circle.” We get a lot of requests for “I want you to add this to this to simulate” nobody tells this is wrong. “What do you try to simulate?” “I want to simulate this.” “Did you think about A, B or C?” If someone thinks they know exactly what they want, then being comfortable about and asking questions and make sure that what we are going to give them is really what they need. We had projects where we did exactly what we were asked for, and at the end, it was not the desired results, because what was asked for was not what was needed. But we gave them what they wanted and still was not right. In one case, we spent 30,000 dollars giving somebody what they asked for, not what they needed. And then had to spend another 20 [thousand] to take what they ask for and make it what they need. Once you spend that much money extra, it is easier to get people to slow their thoughts down next time, so that they can be comfortable that one hour discussion can save that tons of thousands of dollars. You have to have trust in the organization and the HRD practitioner has to have a status in the organization or they can slow a project down to make sure it is right. I am an executive. I am, out of our 900 employees, I am the third senior already, I have been there 19 years. There is no executive that has been there longer than me. So I am able to slow a process down to make sure we are thinking through. I was given a project in September that I was told that was going to take 3 months and costs 50, 000 dollars by people who wanted it. I took it back to my guy and said "what do you think?" they say it is going to take 9 months, and 90,000 dollars. Because I am an executive, I was able to say let us get everybody around the table and talk about whether both were the same thing differently. When we left, everybody that said three months and 50,000 agreed that it is going to be 9 months and 90,000. That is where we are going to move on. But if I were a junior person in the organization, we would have started down the long road, but as an executive, I have got the latitude to call a time out and make sure the right people are around the table, so we can spend hours to talking with prototyping, testing to make sure we got the right solution, not just the quick solution or the first idea that came to mind.

Q: so, do you think power and authority play a big role in decision-making?

A: Equitable and being able to discuss with someone else has the right answer. I have to be talkable about this. You can't come to me and say three months, 50, 000 and I say "no, you are wrong". Instead of saying no because of this, I have to say "yes, we can do it that way, but we can not have these features, and we have to cancel these three projects and you are going to come to work on Thanksgiving and Christmas", so you get the person to be a partner of the discussion, not a "I want this" "You can not have this". A lot of what I do is to facilitate both discussions, to help people understand each other, because in any organization, you are going to have… let us pick Motorola [as an example], the company who makes cellphones, radios. They have engineers to make products that did not work with fire fighters. Motorola sales people were hearing from fire fighters that the products is not right for us. The sales people will tell the engineers and the engineers will say “no”, we think we are right. I worked with Motorola sales people to bring Motorola engineers to here in Champaign, dressed the up as firefighters, and let them experience the problems that their customers were having. It revolutionized the engineers’ concept of what the problem was and what the customer needs. Everything they knew about firefighting came from TV and movies, so they did not know that radios have buttons like this, but if you are wearing fire gloves, which are like ski gloves, you can’t push little buttons. The engineers did not understand this, because on TV, nobody wore gloves when they were punching the radio. But once we made them use the products in the environment, it was an eye-opening experience. One of the courses I took for my doctorate was transformational learning. It was based on this idea—sometimes, you have to have a disorienting event to learn. [This is] the learning theory proposed by Jack Mezirow. We were able to introduce that for these engineers. There is a number of companies that sell items to firefighters that come to us once a year from different parts of their company, so they can have this experience that their customer has. And it helps them change how they design products. It goes to the first question. Are you solving the right problem? Because the problem that someone brings to you might just be a symptom, not a disease.

Q: In order to find out what the right problems are, what questions do you usually ask?

A: That is where having the experiences comes into play. It is less about my position in the organization, and more about that I worked as a firefighter, so I have credibility with fire fights. Someone who was not a fire fighter could not have done my dissertation research, because they could not get the fire fighters to talk to them. I was able to get into the culture and interact with them in a way a researcher without fire fighter background would not have. I can say “that is a great idea. we tried something similar five years ago before you got here, and here are some of the issues. Have you thought about this? If so, how are you going to avoid this?” Maybe the answer is “Yes, thought about all of them, here is why they will not be a problem.” But it gives us a chance for us to have a multi-faceted dialogue instead of having one person says “we have to do this one thing this way, and that will fix everything”.

Q: What other things did you consider when you trying to decide how to respond to training request?

A: I tried to ask all of these appropriate questions via the right people in the organization. We had an HR hiring process that is very antiquated. It would involve the person who wants to get hired to fill out a paper application, they give it to me, and I have to fill out the paper hiring request and give to the HR person. I could not tell where it was at. So if the HR is waiting on the person I wanted to hire or a piece of the information, I did not know that, I just knew this person was not hired yet. I heard that other people in the organization had the same experiences as me. So I got myself, several people that hired folks from other places in the organization, our HR staff, and our IT department around the table, and said “Here is the problem. We need an electronic system, we need to be able to see where somebody is at in these steps. We need to touch papers once, and not have to make copies for each other. We need one central place where we can upload it. ” So we mapped out, with everybody around the table, “here is the steps and the process. Here is who’s responsible for each step. IT, go make an online solution that does this. How long do you need to do that?” “We need three weeks.” “Great. Take four. In four weeks, we will come back together and see what you got put together. What are you going to need from other people?” “We need to know where all the hiring documents are from HR.” “Great. HR, give them that.” “We need to know which positions are going to be hiring for.” “Alright, program guys, give them that information”. “We need a budget to do this”. “OK, how much do you need? And I will go find the money and allocate the funding”. So it is about to get the right team together to make sure you have built, what Carol White refer as a high reliability organization. There are things you know about designing training programs that I do not. There are things that I know about my organization that you will not know. If we are talking about implementing a technology based solution, maybe neither one of us are the expert, so we need to find somebody that it is. It is like making a recipe. You have got to make sure you have all the right ingredients around the organization to get the best input in the planning phase, rather in getting somewhere quickly and raw, we can move forward deliberately that these work won’t. We used to have a say “we never have money to do it right, but we always have money to do it again.” I have tried really hard to change that, and make sure you ask more questions upfront, spend more time planning, so the execution is more efficient.

Q: just going off this example, how did the online electronic system come up? Who came up with that idea and how?

A: I did. I oversee such a diverse work group. My Master was the first global HRD online programs. I embraced technology more than the people that are older than me in the organization, and I also believe that no one has to fill out a paper work more than once, but we should put the information into a database, and move it around. I should not have to copy an application, give you a copy and I keep a copy in case you lose yours. We should be able to use technology as part of the solution. Very often, I look for making sure someone from the technology group is at the table when we problem-solve. Just to make sure that if there is a technology solution, they can identify that, and make sure that somebody that handles my scheduling at a lot of meetings. Before all those students be reached every year, the thing we ran out of first when we were training people is parking spaces. Then we ran out of classrooms. So I make sure that I have one of my facility people that manages parking, anytime we have a meeting before we started talking this and that. Their job is to raise their hand if there is going to be a parking problem. Somebody else's job is to raise their hand if with their experiences, there is a better way to do something. A lot of organizations are very hierarchical, you can not do that. There is a plane crash. There was a Korean Airlines, where the first officer knew that they were going to crash and knew they were going to run out of fuel. But he felt, he was the subordinate to the captain, he did not directly tell the captain "we are running out of gas so we are going to crash". He used very passive language, like "have you checked the fuel status?" things that never challenged the captain's authority. As a result, plane crashes killed people, because there are barriers between the communications because of the hierarchical structure. We tend to be very flat. It is encouraged in the organization that anybody can talk to anybody else. If you are the newest fire fighter, and you have an idea you need a vehicle for, I will go talk to the mobile guy and check out a vehicle. We encouraged that kind of idea development, but everybody else is also encouraged when there is a good idea, bring the right people at the table to get the idea developed as good as you can upfront. It requires a significant amount of cultural change and executives modeling that behavior to make people comfortable. So executives need to be more collaborative than confrontation. You also have to sacrifice enough of your ego, you know you do not have all the answers. Sometimes even you think you are completely right, ask someone that might challenge you on it to make sure you are right. I met with one of my peers that I do not get along well, straightly tell him three things I was doing that do not directly influencing him, but I want him to know that I am going to. So that he knew it was happening, so somebody in his group saw what we were doing and overreacting he can say “No no that is not what is happening.” It is that flat communication-it is not traditional in most hierarchies.

Q: Do you do test a lot? For example, going back to that electronic hiring system, did you try out other solutions or alternatives, and then find out the electronic one is the best one?

A: Good question. Similar to…have you taken a curriculum design class?

Q: Yes.

A: So you know the ADDIE model?

Q: Yes.

A: I am active at the Associate of Talent and Development. That is the professional [association] I am still partaking. I go to the conference every year to find out what the fire services is going to invent five years from now. So it helps me to see what is happening around the industry and bring solutions back. An example where that helps is I learn about ADDIE being replaced by successive approximation. So instead of mapping out all five steps, then all your development and all your delivery, successive approximation says get one module done, pilot test that, get feedback, improve it, then start the next one. You do not build the whole course and then deliver it, you pilot test as you go, successively as you develop. I try to employ the same thing when I solve problems. So we do not go from “here is the problem, here is the solution” and we have to come back to it. We schedule typically a minimum three meetings, an initial planning meeting, and anywhere from 1 to infinity middle planning meetings, and a final meeting to make sure that we fixed everything that we thought we were fixing. That allows us to use that approximation model and make little adjustments along the way instead of going all the way down and fixing 10 things, we might stop 10 times and fix one thing each at lower cost because we fixed it early.

Q: Can you give me a specific example on how you implement this pilot testing idea?

A: I used the plot when we were developing [the project] that everybody thought it is going to be 30,000 dollars in 5 months. What we did is we met with the people who want the plot, and we have them tell us what you want me to do, because originally they just sent us pictures of part of this house, but never showed us the whole house. So we sat down with them so we could understand what they want it to look like and we could offer some suggestions on "what if we try this?" "OK let's try that and if it doesn't work and we can try something else." It is about having a dialog to get you to your goal instead of a serial process for "I design it, you build it, somebody else uses it." You are all involved in each step and we are interacting all throughout the process. So for those middle meetings, we get together once a month, one month period to go over the timeframe, to show them what has been happening. If for the past month, not a single thing is happening outside of the ground, everything happened inside of the building where they are making doors and windows. So for the people are not part of the project for waiting for it to get done, it looks like nothing is happening, so we have to let them know "no no we have done all these stuff over here, come take a look". So just to help they understand that just because they do not see something happening today, it does not mean we forgot about them, or we do not want them anymore, or somebody else is more important. We let them know that their project is important, here is what we were doing, and if there is a delay, let the leadership know we have spent weeks fixing it, so why are we behind on this project and we are going to make it up too. It is about interacting with the customer, we know it is internal customer, managing their expectation, so you can under promise and over deliver. It is always better to get something done faster and cheaper, but a lot of time, you do not know what the cost or the timeline needs to be, unless you have the past experiences or have done in the past experiences. There are 300 buildings on the University of Illinois campus, and that is 300 buildings in 150 years. That is average a 2-building a year. I like the construction of the building. Most people in the university will never do that in their careers. I know things about how to build a building at the university that only 10 other people on campus know. The problem is I might not build another building in my time at the university, so there is a lot of high-specialized knowledge that I learned it form building a building, but I applied it to all of my other projects. If I know that just because I haven't done something before does not mean it never been done before. So I have a network of people across campus who I can reach out to and say "I have this problem" and these people are outside of my organization, mentoring vs. coaching, or I can say "I am dealing with this problem. How have you seen it solved?" "College of Education has an online program. Here is what they do". Our online fire fighter training program is modeled of the College of Education global HRE program from the late 90s to early 2000s, because nobody else on campus was doing that. So rather than inventing completely by ourselves, we reached out to Education and said "we hear you doing this. Help us learn." That requires people to sometimes sacrifice their ego to admit that they do not know things like this. That can be difficult.

Q: When something is done, for example, you put together a training and then you implemented it, how would you go about evaluation? How do you find out if it is successful?

A: We do that in a couple ways. One is, we used Kirkpatrick's level 1 and 2, for student feedback. I wanted to use 3 and 4, but you do not have a good way to do that yet. [It] might be very difficult, because you might be a student for a week, and then you go back to your fire department, we do not have [the capacity], in our organization, to follow up with each one of them. We received feedback from the instructors, and we often get feedback from the employer of the students. “Did the student come back to you with better job skills?” That is close to level 3, but we can not call it that because it scares the fire department sometimes. We only do it with some of our longer classes, with new hirers. A lot of our classes are tailored to national standards, and we use our staff to ensure that we have covered everything in the standards. So often times the content validation happens before the delivery, to make sure all the required subjects are in there. What we measure afterwards is how we delivered the subject. What we started implementing in the past five years is “should some of these contents be moved into a one-day format?” We make it into an online learning module that people can participate in 30 days before the class, and not have to spend a day in classroom in Champaign. Because firefighters typically work one day for 24 hours, off for 2 days, work the next day, off for 48 hours, so they are on 24, off 48. So [for] a five-day class, they might have to take off 2 or 3 days to come down. If I can move 2 of those days into an online one-day format, and spread it out 30 days before the class, and they only have to come down for 3 days instead of 5, that means their department saves hotel, a little bit of money. For fire departments, if somebody goes to training, somebody gets paid overtime for fill in that position. So if I can shorten how much time they have to be here in Champaign for training, that is shorten how much money the fire department has to pay for that individual to come to training. Often times, that overtime cost is the highest cost associated with training the firefighters, not the hotel, not feeding them, it is getting somebody to do their job while they are away learning. These organization they really do not have that [money], the opportunity cost for the training.

Q: Thank you for sharing with me. Those are all good data. Do you have another example of the training request you received in the past?

A: Only a different sort of example. When they came from another state organization where they wanted to have firefighters trained on how to put out fire in houses, we train to put out fire in fields and farms. It is a little bit different. If your houses are on fire, you always want to put the fire out. But if a field is on fire, you might just let it burn because it is not going to across the road, or because it is going to run out of form to burn so you may not put it out. You have to think firefighting differently when you are outside vs. inside. My organization is called [me] to figure out how to do this training. We said “sure, here is what gonna cost.” We were told “Great, figure out where to get the money.” What I did was that I found out how much money the federal government was giving to Illinois to conduct this training, and I found out that only 10% of that got spent on training. A lot of the rest of it was spent on people who managed the money. So I went to one of those people and said “I need some of this money to do training.” And they said “we do not have any money.” I said “Nono, from my free information request, I found out you spent this much here, this much here, this much here, so you got that money somewhere, here is how much I need.” They gave me twice of what I asked for and said “do not come back again.” So the hard part was finding the funding and having enough of the fiscal understanding as an executive to know where the funding issue is. Especially in government, there are a lot of we call “unfunded mandates.” After 9/11, airports had to have greater security. The government did not give them any money to build security barriers, but they said you have to do it. Have you been to a home football game?

Q: No, not at U of I.

A: Well we have our stadium, and first street, Peabody, fourth street, and Kirby. We have a lot of party here, and party is here. So when we do our threat assessment, one of our big concerns is somebody can put a bomb in their vehicle, and drive to one of these areas. So what we did it is we had to put out barriers so somebody could not do that with their car. We put out barriers filled of water sometimes, sometimes use police cars, use police officers with rifles, so if somebody is not slowing down when they come in this way, they can shoot the driver. That is one of the three biggest threats to our home football game. One of the ways we manage that is we had to figure out without increasing our budget, how do we erect these barricades. So concrete barricades are hard to move and very expensive, so we found we can get plastic ones that are hollow and then fill them with water, and they have the same vehicle stopping power. So sometimes you have to be creative with your solution because often times you will be giving a mission especially in training. Everybody thinks training can be done for free and right now. You have to have enough gravitas as an executive to say "it is going to take time and it is gonna take money." You have to have enough track record to be able to say "it is gonna cost this and it is gonna take this long." One last example. We have 160 AED defibrillators here on campus. If you are ever at Illini Union, on the first floor, on the stair whirls, on the east side of the building, they are equipped with AED defibrillators. If someone's pause stops, this is the device you take off the wall, put the pad on their chest, turn it on, and it tells you what to do to help that person. We thought we had 120 AED defibrillators in the university, but nobody was checking them. So I went to the chancellor's office and said "for 5000 dollars, I can tell you how bad this problem is." And they said "lawyer, is this a problem?" and the lawyer said yes. So they gave me 5000 dollars to do the study. And then I had to go back and say “ok. You gave me 5000 dollars, I now need 70000 dollars to fix the problem because none of these have been maintained, they do not work.” That was two years ago. This year I had to go back to say “I’d really like to add more AEDs on other parts of the campus, and here is what that is going to cost.” So so far, I have the university given me almost 120000 dollars that they did not want to give me because I made the business case that the cost of not doing this is much greater than the cost of doing it. I can show you something on my phone here. All of the defibrillators on campus are in this map. So the closest defibrillators from where we are now is the Illini Union bookstore on the first floor, and this is what it looks like. So working through one of the student groups that I oversee, we mapped every defibrillator on campus. We check them all once a year. Some of them we check them every 30 days. There is a picture, and if somebody has a heart attack right here I can tell you to go get the defibrillator where I am starting CPR.

Q: This is amazing. Is it an application on the phone?

A: Yes, and it is free.

Q: You developed this too?

A: We found somebody who was using it, and we did the work to input all of our defibrillators.

Q: This is amazing. I have never paid attention to those.

A: Most people do not because we are young healthy people. 70% of the people with heart stopped outside of the hospital, by the time they get to the hospital, it has been to long for them to get aestivated. If more people on campus knew how to use this and how to start CPR by the way, we have a much better survival ability. We were recognized in February by the National Collegiate Emergency Medical Services Foundation as a “HeartSafe Campus”. We are the first college in Illinois, the first university in the big 10 and the largest university in the country to train 5% of our campus population CPR every year. We were recognized with that award last February. Tomorrow night we are receiving an award from the professional fire service institute for our work with mapping defibrillators and training people, developing the maintenance program, and all of the things IFS does. So someone has a cardiovascular on our campus, we are more likely to be able to help that person. These are things that I have subject expert matter knowledge of because I was a firefighter and a nurse, but the organizational development and the strategic HRD part is because of my education from the College of Education. Anybody can teach CPR, but integrating CPR strategically into a system with 58,000 students, 20,000 of which change every year, with 160 defibrillators, and people not having classes in the same building more than twice a day, there are so many variables that make us should not be able to do this. But for something somebody gives us and we could not, we ask them questions so they help us figure out how we could. For all of these strategic HRD and OD issues, solving the right problems, involving the right stakeholders, and managing your time and money, because you only have three resources-people, time and money. Everything you need for a project fits in one of these three categories. You gotta be able to articulate and manage people, time and money to do something.

Q: What makes you want to do this in the first place?

A: Because I knew that 70% of the people that had a heart attack outside of the hospital died. If our community has program like this, that number is much smaller. In cities like Seattle where they train… they do 100 CPR events a year free for the public. They have one of the highest cardiac survival rate in the country. Our last 3 cardiac rescues on campus were all awake and talking before the ambulance got here because somebody started CPR right away and used one of these AEDs.

Q: How do you plan to educate students about this?

A: We received funding this year from the Illinois student government so that we are going to be training people at the alcohol and the substitute program that all freshmen have to take and we are going to train all freshmen hands-only CPR and they are going to be told about this app. If you cross on the quad today, we have our training ambulance out there. That was the same people who helped me do this. This is national collegiate EMS [professionals] that on quad to teach people CPR. We are doing research into the 10 minute CPR class as effective as the four hour CPR class if people will remember 30 days later. Nobody in the country has ever studied that. We are working with Carle and the university to figure out, if you are walking by and I teach you CPR, [will] you remember 30 days later? Nobody knows. So we are doing this study. That is part of educating people. We had added to the E-week this week. We do about 30 hands-only CPR for clubs and groups on campus every year. But getting to incoming freshmen, and we are also in discussion now with the fraternity and sorority groups, to train one person in each sorority and fraternity how to do CPR and [that person] teaches everybody else. Training is a force multiplier. As a trainer, I have to be comfortable that if I can teach other people what I know, I can serve many more people than I could ever reach out in person. I do not put out fires any more, actual fires. I trained participants in training, 6000 people a year. So even though I do not ride on a fire truck, coming to your house and spray water any more, I am doing that 60,000 times over as a trainer. I have to make sure that my satisfaction come from that. I have to make sure that I do that job well enough that I get the credibility to people. All of these little hearts that you see, somebody has to walk up to this every… here at the henry building, somebody has to go there every 30 days, and make sure that the defibrillator is there. Those people at the Henry admin building need training every year that they have to go to to keep up their skills. We have to get people to do something they do not want to do, pay money they do not want to pay, to be trained something they do not want to go over. That is the problem with every training organization. And they want it to be done now for free, and do not take anytime to do it. You have to have HRD at the executive level to be able to articulate those concerns. All of your questions are critical and valid to making sure that you match the right solution to the right problem. But if you are the new person in the organization, and you are not in a place in the organization chart where you can make these conversations happen, you might be forced to do things you think are wrong, because the non-inclusive decision-making process left out your voice. Many organizations want the quick solutions not the right solutions. They might to [fix] quick solutions five times to finally get to the right solutions. And that is where strategic HRD make all the differences in the organization. It is cheaper to get it right the first time than to get it right the third time. Once you change the culture to the flavor of the day kind of mentality, and your questions kept you that, "hey we start doing this and now it is not working so well" because a manager felt like we all had the training therefore the initiative is going to work. Do you know how many people are dying in the U.S hospital from the sickness they got after they were in the hospital? Every year, in the U.S., the number one cause of that is providers not washing their hands. And a lot of issues we talked about is not about not having skills, is about people in the hospital haven't get comfortable telling each other, asking each other, "did you wash your hands?" or modeling the right behavior. "Before we go to this next person, I am going to wash my hands. Do you want to join me?" You can not just send out an email and says everybody needs to wash their hands. You have to have a strategy, you have to have an implementation plan, and somebody has to beat that drums every day and make sure that the change keeps going. Otherwise people are going to fall back to what they have always done, what is easy or what is rewarding, even if it is not the desired behavior. That is where strategic HRD make sure that I am not going to do that 2 day class to give you what you want, we are going to have weekly meetings, and you are going to tell me how it is going. I am going to coach you on how to make sure this process works. Your manager is going to get a 3rd day, not just the two days, about how to support the people. We are going to meet the boss to make sure that you have a budget that allows you to reward your people. If we see 50% improvement in hands washing in 30 days, as evidence by this, everybody is going out for a steak dinner. In 6 months, for this goal, everybody is going to get a jacket. You make money for some of them incentives, and you have to make sure that the incentives match the amount of sacrifice that your employees have to make. That is getting off tax, but it is about that strategic HRD situation. But HRD has to be at the executive level to make those things happen. When I tell you what I do, I talk about I oversee a trucking company and fire truck and an IT department, but really what I do is strategic HRD. It is getting people to do work that is better for the organization, individually [and] in groups, within budget, had a schedule, and people talking to each other to solve the problem. If you were to have a special school at my facility, the very first meeting you schedule, you do not get to pick who comes to the meeting. We have a set list. Your first meeting, here is who you invite, and it is somebody from every part of the organization. So they get to know what you are doing and ask questions relative to their subject matters. Many places do not do that. We are comfortable being inclusive.

Q: Thank you. You have shared with me a form. Can you tell me a little bit more about how this form is used in your organization?

A: Yes. This form applies to a situation we did not talk about. It is for when one of our instructors thinks they got a great idea for a class. What we used to do is “go work on your idea and we will pay you to develop it.” And we would get a variety of responses from people. Sometimes, people have to repeat their work over and over. Maybe it turns out that they had a good idea, but it is a quick 5-minute video. It is not a five days classes they taught. This is a tool like a hammer or ranch to get them to articulate their idea, and make sure that they have done a job task analysis to justify what the courses all need to be. This thing goes back to a small committee that prioritizes this in a grand scheme of all the classes we offer. We have a partnership in China with Chinese people arm force class. So if you come to us and say “I want to deliver a training course” and this is what I gave. You put your own idea together, you break out what is going to be included in that class and then come back to our group, and we say “we already have a higher rise class, did you look at the curriculum?” if you say “yes I did and here is what I took from.” Somebody else might say “China does not have the same building codes than we have in the U.S. did you consider that in your presentation?” You might say “yes, I consider the local building codes for the provinces that I will presenting in as well as these modern worldwide codes that China does not follow but we can help them understand why these codes are important.” Once we had that planning meeting, you will get an Ok to develop your class. But we will tell you here is what we need to be a curriculum program. We need terminal objectives, we need middle objectives, we need a student handout, PowerPoints, references and this is what right looks like. We can partner you with other subject matter experts as well as our curriculum subject matter experts, so that if you are the expert in Chinese building codes, you do not have to know about U.S. building codes. We will have that first in public. If you do not know a colleague that works with fire fighters in tall buildings, we will have that back in Chicago work with you. If you do not know how to write an objective, we will have somebody there that knows how to right objectives. The person who designed this has a Master's in HRD from U of I. It is the same kind of strategic HRD implementation. So that we are spending more time in the planning phase, and less time with paying people to develop something that is a wrong fit. We might have somebody work for 120 hours, 20 dollars an hour, creating garbage, because they do not know how to spell, or turns out that they just had a bad idea. We just had fire officers from Hongkong coming to us. We trained all the chemical response team in Hong Kong. When somebody gets promoted to be an officer over the head of the chemical response team in Hong Kong fire departments, they come to Champaign for three weeks. We train them on how to teach our courses to the national standard. They then go back to Hong Kong and train their fire fighters. We have been doing that for 10 years now. When I have been to Hong Kong, their courses look like Illinois courses because we share our training model with them, and Hong Kong is western enough to make it work. We tried to do the same thing in Guangzhou province, it did not [work] because not being exposed. Hongkong was a colony of the Great Britain. China was not. So Hong Kong has enough of the colonial infrastructure that their fire department is civilian not military. Mainland China is military not civilian. So the same types of training did not translate that. When we learned that, I am on the next plane to Langfang meeting with the professors and people from the Chinese arm force police academy to understand how the training fire officers in china different from training fire officers in the U.S. That was in 2012. We now are having people going to Langfang twice a year, deliver classes, because we learned how to apply this process to the demands of the Chinese military fire department.

When I was prepared to go to China, and I am reading all these statistics, the population of the United States is 300 million people, the population of China is 1.2 to 1.5 billion, so the margin of error, the number of people we do not even know if they really exist in China is the whole population of the United States. Just getting my head around that. But it was such a neat opportunity because in China, firefighting is a military function, where here in the U.S. is civilian. Learning how that system is different, somebody is going to be a fire officer in China and they will have that job for four years, not 20 like here in the U.S.. and you are not going to start out as a fire fighter, and then become an officer. In China and most of Europe, officers are selected separately from firefighters. So that is another difference that we have to make sure our classes have flexibility. But knowing how to ask right questions was critical for making sure we solve the right problems. I can't just take a class from Champaign Illinois and deliver it in Chicago, or China. I was in Doha, Qatar, doing a training program, you gotta make sure that your class matches the audiences. In a lot of times, companies see the money from doing international training, but they do not want to spend it and getting in trouble for it. We have been doing training in China since 2012 since my first visit, and it is been very successful because we took the time to ask the right questions upfront. So it is literally an international strategic HRD problem that I applied from what I learned from College of Education here to be able to sell it.

Q: What are some of the challenges that you came across when you were doing training in China?

A: The first thing is getting the right instructors and making sure they understand that the audiences not only speak a different language, but the audiences come from a completely different cultural background. So our librarian was born in Hebei province, and she has a

Ph.D in library sciences, she put together a 3 hour course on "This is China". So before we send anyone, they go through that course. Then the first time you go to teach for us in China, you are not a senior person. You have to go once as an observer, once as a junior trainer, and if that goes well, you can be a senior trainer. It is almost in an apprentice manner to make sure you understand what you are delivering. We have to teach people how to work with the translator. If I have a three-hour class and three hours to deliver it, I am not going to get it done. I have to learn how to chunk my information to allow the translator to tell and adapt. So we have to redo our presentations, and often times translate the slides in English and Chinese, that means slide 5 in this presentation might be the slide 10 in our English-Chinese presentation because we have to break the information down all into small segments. My first time going to China I stayed on the military base. Going from a U.S civilian to being a guest of a communist military, very different experience. No internet, no wifi. We were given one hour a day to go to the computers. I am pretty sure everybody on the base had access to my Facebook. So we knew we could send emails and we had to make sure our staff knew that. Now we send them with Apple products, because Apple products could get on the Wi-fi in the facility we use, and still being encrypted if I encrypt it. So we know that is not detectable and the information will not be covered. But we have to learn that. After lunch on the military base, you do not do anything between 1 o'clock to 3 o'clock. It is the chance for the officers to write their reports, it is a study time built into the day because it is nap time. We have to schedule a class around the culture we are going to, not the culture we are coming from. When I went to Mumbai to deliver a presentation, that was the first place I learned that 6:30 means somewhere between 7:30 to 8:30. The concepts of punctuality are a lot different. When I went to Canada, I can not sit down and say "Let's talk about this." Or Mexico or South America, we would spend 30 minutes [on] “how is your day?” “how is your flight?” “Is your significant other doing well?” “Do you have any kids?” We are going to make a human connection before a business connection. Often time in U.S. we focus on the business connection first, and then if the business connection works, we will get to know from person to person. Most of the cultures reverse that. Making sure our instructors know how to adapt to the culture they are in is critical. It is important of knowing your meal time must be worth it, that your breakfast to dinner is going to be evenly dispersed. Or the military base we stayed at, our welcome reception where I drank more alcohol than my entire sophomore year, because that is how that military culture is. Telling individuals how you look like you are drinking and how you refuse without offended. You have got to prepare all of that because you do not want to lose your international relationship that you have been building for 6 years, because somebody got drunk and misbehaved. There are a lot of aspects to deliver the training that if I was going to send you to Chicago, I may have to do a little bit of that, but I do not have to help you acclimate to a time change, I do not need to send you to Chicago three days early to get on local time so you can be functional.

A: Yeah you do not have to tell the social norms…

Q: Chicago still has some, and there are something in Chicago that I think China makes more sense than Chicago. When you are doing work outside of your organization, and it is in that HRD realm, as a HRD professional, we know to look at the whole person and the whole company whereas fire fighters can be very problem focused. “You said go to teach how to use this equipment, I taught them how to use the equipment. I talked too fast, I did not let the translator catch up. I did not translate my slide. I talked through lunch time. I kept them away from their family.” Maybe you went through all of the slides, but you did not deliver the training in a way that the customers have been thinking. That is where the strategic HRD function decides the rest of those. I love it. I get to use different stuff of different classes in my Master's and Doctorate's programs every day.

A: I can tell how well you are combining your classroom learning experiences with your professional career.

Q: The field I work in of fire fighter trainings is very small and specialized. The things that I am doing are very broad. If you look at as what I do is strategic HRD, not making sure the toilet works, it is all about focusing on the bigger strategy, not the output. I do not design training programs, I help the training programs somebody else designs are what is needed. I do not fix fire trucks. I make sure they get fixed in the right way. We have got other part of the organization. We have 7 full time people to just do curriculum and testing them, to deliver our texts statewide to international standards. We do things in our office that other states their fire fighter academy do not do. We have more students every year.

Interview F

Q: Thank you for being agreed to be interviewed by me! My study is about managers' decision-making process when they respond to training requests. Do you have any questions about the interview questions before we start?

A: I talk to other learning leaders about this intake process, or request process. I will tell you that at [my organization], we have a much more sophisticated intake process than most other companies. That also as your company as larger and more mature, by the way, size is not the only indicator, for example, Google and Facebook, I actually know people from there and their request processes are not mature, so they are still kind of in their start-up phase. When I took my team at my current company, they are still very start-up. We have developed somewhat sophisticated processes for managing our decision-making around what I call intake. Essentially intake meaning a request comes in, somebody actually has to make a decision, how are we gonna make that decision. We put a lot extra hours on that, and much more so than other companies have.

Q: That is great. That is what I am looking for. I envision that different companies have different processes in taking in requests and approving requests and implementing those solutions. That is great. If you can give me some examples or just elaborate on your experiences with going through this whole decision-making process, that will be great.

A: Just even start with your example, by the way, we actually have…I will talk through how I would respond to your example, just to talk to it generally. Because any time somebody calls us with a request, we first try to ask a chain "is this a performance issue?" "Is this a situation where we need to bring somebody up to performing at a certain level? Either because they need to know procedure, they need to have awareness of…maybe regulations? Or maybe they need to build professional skills or leadership skills?" we first want to make sure that "Ok this is a performance problem" and we want to make sure that training is part of the solution. So as an example of something where that is not true would be a situation…by the way, the situation, this particular request, I am not sure that training is the solution. I guess I am not even sure that is a performance problem yet. I would ask a number of questions to try to understand what the need is, and really uncertain that this is really a training need. Because sometimes people, it is sort of that wheeler skill, there is other reasons for people not performing than training. So there is a little bit of test—"is it because they do not know something?" "Is it because they are lacking the skill" or "is it because some other reason?" so just an example would be someone at an organization that request sales training from me and upon questioning, I learned that the product that they were trying to everybody to sell, there was no incentive to sell it. So there is no compensation to sell that, and there was compensations to sell these other products. So I am not sure it is a skill problem at that point, it could be a problem with incentives. I don't know if you have heard Gilbert's environmental model, but there is other reason that people do not perform besides "I do not have the skill". So you want to make sure it is actually knowledge or skill that is getting in the way of performance.

Q: How would you investigate if it is a performance issue? How does the investigation look like?

A: Sometimes is really simple. If the organization is rolling out of a new process, or if [they] are trying to get everybody align to this new skill, it is actually pretty simple. So, we are going to be rolling out of a process in the organization, a problem-solving methodology. We know that not everybody in the company knows this problem-solving methodology, so we know there is a lack of knowledge and skills around using this problem-solving methodology. So, it is pretty easy to sort of see that there is a skill gap. Because it is a new initiative, it is a new skill that we were trying to develop. Otherwise, if it is not obvious, and I would say it is probably obvious like half of the time, that if it is a skill or not a skill [deficiency]. Sometimes it is not. So I had a call one time, where an organization called me and they may complain about the high rate of defects that that organization had. On the surface that it might be a skill. That might be a skill deficit, but you do not really know because you do not understand the reasons for the defects. You kinda need to get the underneath of the defects and explore that. I look at the analysis process as peeling back the layers of the onion, and you keep asking yourself "how would I know?" "How would I know that?" dig a little deeper and try to get the data. Actually, a lot of times the things are working the wrong way with people and maybe training is the solution, but training will not solve the problem. So in this defect situation, for example, yeah there might have been a little bit of skill gap, but there were some pretty significant system problems that prohibit people from doing their job correctly. We can do all the training we want, but If somebody is not going to think about the system, it is not going to help. We actually did some of the analysis of the defects, like "oh show me those defects and let me see them. Let me see what is going on." "Can we talk to some people who are doing this work or overseeing this work?" That is all part of the analysis. One thing that I found it is interesting is…I have a team of learning consultants, so there are about 8 learning consultants at [my organization], and we have all of our training centralized. Unlike other companies where most companies they have functional training going on in the business units, and leadership and professional development happen centrally, but at [my organization], everything is centrally. So I have a team of learning consultants and they are responsible for intake for the whole company. There are processes that everybody has to follow, but the piece of it of asking the questions and getting underneath the particular situation, there is more of a science and you can't really process too much. You just need to actually understand learning, you have to have a little bit of expertise to know that you are asking everybody the right question. But you are always asking questions and understating things like what the size of the audience, and get understanding of how board the need is, because the last question that we asked is that we want to know "is it a performance problem?" "Is training part of the solution?" and if we say "oh it is part of the performance" and "yes training is part of the solution", the next question is "is this worthwhile for us to do?" We work at a training organization and if we were to say taking every request and follow up through every single request training, we were have to be two or three time the size as we are now, and it would be completely depend on how great it would work out. It is just not feasible or possible for us to take ownership or responsibility for any kind of skill deficit in the organization. So at some point, you have to have a view of "when does it make sense for us to do?" That is where we have a, what we called "business case process". We have a form. I can actually send you something on both. Other companies do business cases. I have met many companies and they are usually really mature learning organizations. The business case and opportunities kind of identify "what is the problem we are trying to solve?" "What is the business need we are trying to meet?" "Who is the audience?" "Who are all the people that need to be involved in the solution?" I would say it is two parts. One of it is understanding the current states. The second part is understanding how we are going to solve for this?" There is some scoping aspects and implementation aspect of it, but there are also just understanding like "what is the problem we are trying to solve?" "what is it that we need to help people how to do?"

By the way, the other thing is, it is not only if it is worthwhile for us to do, [but also about] what else it will take to be successful. For example, if a consensus needs to change or a system needs to change, or something else needs to change, we try to make sure we capture that in our business case documentation so that is part of the change plan, and [make] them realize training is one small piece of the change plan ordinarily, it is not the [entire] change plan. What we do is based on the breadth of impact. We do make decisions on whether we are gonna fund it internally, or not. There is kind of two different ways, and it is back to what I said before. If it is training, there is usually a return on investment. I think ROI, when we talk about training ROI, assuming that the training is effective, there is almost always ROI. Whether there is ten people or 20 people, training is a relatively cheap solution to a lot problems, so you usually can get return on investment. It is not enough to say “this part is to test ROI, let’s do it”. By the way, there is a lot of time people will mentally think and I am a strategy person, because I am a strategy person, it is not enough to say “there is a return on investment” because you actually need to look at, if you were a finance person to manage portfolios for your company, just take everything that has return, you have to select the things that have the highest return, because you can not do all of those things. That is what we were trying to do is trying to be really selective and only select the things that actually going to drive the organization forward, so that problem-solving example that I just brought out, that is something that has super broad impact on the organization. There is 17, 000 people. We would be teaching everybody how to use this problem-solving methodology, providing it is successful, it would have significant return to the organization as we could cut problem-solving time in half, we can probably come up with some faculty envelope, big figures that would tell us the [financial impacts]…I bet that ROI is 100 times the amount we spend on that training. The training would not be that expensive to create. Let’s say that the training cost 50,000 dollars, so to say that we got a half million dollars return over the next three years from teaching everybody to solve problems better, that is probably gonna happen. By the same token, you might have something where the return is 20 times, we will do that, if you have something that can be 100 times, we kind of have to navigate two things and [need to think] how we navigate that. So what we do is once we decide there is a business case, there is a return, we actually make a couple of decisions like “are we gonna fund this?” or “are we going to do this?” or “are we going to decline to do it because we have too many other things going on?”. Usually there are two ways to look at this, one is there is relative comparison where we are looking at all of our projects that year and try to get a sense though, “is this more important than any of those [other projects]?” and if it is, we should do it and maybe we should make a decision about not doing something else instead. Or if it is not, we might go back to the requester and say “I think this is a worthwhile project, however, we are full at capacity with all these other projects. Would you like to fund this?” They do will. Usually we have them work with a vendor and they will be self-funded. What that does is to keep the most important work centralized and give the businesses decision whether they want to invest additional effort and money into the solution to what they are trying to do. By the way, we are usually more often than not, saying no to the things that have really small audience and do not have regulatory touch points. Something as regulatory touch points, even if there is 10 people, we have to do it because we can have hundreds of millions of dollars of fines. If you are under regulatory scrutiny or if you have any consent orders against you, it is crippling for business to tap regulatory findings. So anything with compliance touch points, we do. Anything. So there are some ways that we know what to do things.

Another thing that we do is that we actually look at our strategy. We actually have a strategy defined or all the types of learning that we do, and we have a lot of off-the-shelf learning. When a request comes in, we look at “is this something we already provide?” It might be just a matter that we might just need to point them to those solutions that already exist. So this is true for professional development and leadership development. We have a strategy for professional development right now, and I am just giving you an example. We have seven learning portfolios. One of them is professional development. We have to have a strategy for our learning portfolios because again you could be doing anything or everything with training. You can teach anything to anybody, there is always some kind of skills need that somebody has. What we do is that we decide we are not going to teach all of the professional development skills, because we do not have skills to teach everything to everybody. Instead what we are going to do is we are going to focus on capabilities that are going to drive the business in the way that is the most aligned to the business strategy. We do a need assessment, an organization-wide need analysis. This organizational needs-assessment for the professional development portfolio we do it every couple of years. We look at "what is our business strategy?", where we are trying to drive, what are the key skills that are sort of inherit in that business strategy? And then we talk to the leaders throughout the organization to understand where they are trying to go, and what skills they think will be needed to help them meet their business objectives. We do surveys, we do focus groups, we do interviews, lots of things to get lots of data from all the business units, and then we consolidate and roll out that data and we identify the top 3, 4, or 5 skills that we need to drive development of. We just did that, but I do not remember them off hand. One of them was change management, and one of them was problem-solving and we end up focusing our catalog on really driving deep deep knowledge of those skills. We focused on that and then we also offer, what I would say, the top 5-10 what we call "individual development needs". For example, a lot of people have problems with high-quality presentations. We consider that to be one of the things that we want make sure that everybody has access to, is the ability to get additional training on high quality presentations. However, if somebody needs training on [certain topics], maybe we offer eight things that we are helping people with, and those four key capabilities, but somebody might have some situation or problems or developmental need that we do not address, they have to do external for, because this is what I would call "individualized or personal [needs]". For example, if somebody wants to become really good at using the statistical program, that is sort of very individualized skill, unless [it is] for using across the whole organization. Specific individual looking to specific things, we would suggest them to go external because we have done a needs assessment and we identify the key skills that we need to support, from that we determine what our core offerings are. When people sometimes come to us with request and say “I want to build problem solving skill on my team”. We can help direct them to the offerings that already exists. That is core things we offer. Every learning request that comes in, we identify if it is “core, critical or unique”. Once we understand it is learning, [we asked ourselves] “is it core [skill]?” Core means this is something we offer already. Critical is when there is a huge change in the organization or something that has been going on, and it is critical for them to have the training, but we did not anticipate it in the needs analysis, [which lists] something that is core to the business. That problem-solving will be a good example. Let us say the business is rolling out a new complaint handling system. All of the skill building that we will need to do around that new system will be critical, because we are rolling out this system proxy enterprise. Another example, we actually roll out a new banking platform over the last couple years and that banking platform was integrated with our credit card platforms, so that was critical. It is not a core skill that we already offer off the shelf, but the critical training need we need to address. The third category is unique. Unique is this is something that this organization has an unique need for that nobody else really does. There is a lot of sort of notch needs that people have are unique, and usually that is the work that we don’t do. That is another way to understand what we do and what we don’t do. I will pause here and give you an opportunity to ask questions. Like I said, we have a really sophisticated thinking about this. I have done a lot of thinking about this personally my team is responsible for onboarding and all the training that is going on in the organization. We can’t do it all. It forced us to put a lot of thoughts in how we decide, and what we do. Moreover, I want to make sure that there is 130 people in training and development, I want to make sure we are doing the most impactful training to the organization. If you just take requests as they come in and you do not have a strategy, have some proactive thinking about what you want to do, then you are constantly reacting and you are not doing anything that is meaningful. I think most of the training department operates on a solely training request process. Because we have a strategy in each of our learning portfolios, we always have this ability to triangulate the requests with our strategy, and make sure the request is consistent with our strategy, because our strategy do tell what we are trying to drive. I can send you a doc of the strategy in one of my presentations, if you look at the notes, you can learn a little bit about how we think about strategy.

Q: I have done a literature review on determining training ROI. It is something that many people think unrealistic to do for training. What is your opinion on this issue?

A: Every situation is unique, because you have to make a whole bunch of assumptions. We did an exercise with my team where we did some sort of back envelope calculation of our ROI. So we start doing it in all of our business cases, and we actually stopped. This is why because we found out this is always ROI. It is just a question of if it is 50 times, by the way sometimes you can easily say it is 100 times ROI. Training is not that expensive. It is relatively cheap for an organization, especially for the size of [my organization] and the scale that we can get. It is relatively inexpensive. But you actually need to look at what the cost are if you do not do it. Like for a compliance situation, let me just give an example of anti-money laundry investigation. We have a team of people whose job is to investigate potential money laundry issues. There are accounts that are flagged because its suspicious activity. If they do not do their jobs properly, we can get fined and we can be put under consent order. A consent order costs a hundred of thousands of dollars, just in potentially dissent fines. That has nothing to do with getting out of the consent order, which extends beyond the training because the regulators come in, we have a whole bunch of people that have to respond to the requests from the regulator, all the reporting that we made…It is a high effort. [For] the return, we made a lot of assumptions like how much would a fine cost if we were fined? how much would an exam cost for every additional exam we might get? what is the cost for the business if we can not get acquisitions? The fed really climbs down on you as an organization, you can not borrow money, or you can not borrow money at the rate you normally could borrow money at. Because all these that sustentions, you are not operating illegally, the cost could be, let's say, a billion dollars. You could probably itemize it. I gave you one of the most costly example. If you look at what would be like for getting a fine. What is the cost for a defect. We actually know some of the defects too for the field. All of the agents on the phones there are regulatory touch points on a lot of activities that they do. So we are rolling out training related any one of those regulatory touch points, the value of that, for every single time, I will give you an example. Every single time that an agent does something like reopening an account that was closed because its suspicious activity, so if an agent were to reopen it, one single charge went through that account after it was flagged for suspicious activity, that is 275,000 dollars for every transaction. If an agent makes an mistake and inappropriately reopens an account that should not be opened at the first place, every time that person makes an transaction and uses their card, it is a 275, 000 dollar fine. So the regulatory stuff is really easy to figure out. We have actual real numbers of what would happen if somebody makes this error. So that is easy. But what about problem-solving? The other example that I gave you. That is actually really hard to put your finger on. You have to make a lot of guesses to put some ROI around that. I will answer one of the questions you brought up later, let's just say you make a bunch of assumptions like this is how much a problem cost. This is how much the cost to not solve a problem, or this is how much it costs for the company if we do not solve the problem. You actually make some assumptions. Or maybe you say we are gonna solve problems quicker, and how much do we gain from solving a problem quicker? How many problems do you have a week? How many problems do you have a month across 17,000 people. So you are making a whole bunch of assumptions about how much money you saved by solving problems quicker. But I will tell you something that if we were to say if the training in the organization were to take credit to that return on investment, whose job is actually roll out problem-solving across the organization, we have a centralized lean group, we are not just rolling out of the problem-solving training, we are doing a whole bunch of stuff to make people better problem solvers. So there is a holistic change approach-only one of those things is training. From an ROI perspective, it is really difficult to say training is responsible for the ROI, a whole bunch of other things could be responsible, partially responsible for that ROI. That is why I think people do not do it, because at the end of the day, your decision about whether it is worthwhile or not, it takes a whole bunch of assumptions, just this sort of wild number by the time you are done with it, the change in the organization is not all attributable to the training. There is other stuff that goes on. If it is a process change, there is other things that go on. When you roll out a process change in the organization, by the way, let's say we roll out of a process change in the field, I will give you a really good example. Freeze-it. Have you seen commercials for freeze-it?

Q: Yes.

A: You can go to your app. So we have to train all the agents on freeze-it, so there are 4000 agents that all have to know, really basically understand how it works, so if they get questions about it, they can answer. We have to train people on this kind of changes incessantly. What is the ROI on that? How do you figure out the ROI on teaching all the agents to be able to answer questions on freeze-it? It is pretty hard to take a stretch as there is any ROI from the training. I mean, there is definitely ROI on the freeze-it functionality, customers love it. Most customers can figure out how to use it without help. What would happen if one customer called, and by the way, we are talking about customers who are not very tech-savvy, they can not figure out how to use the buttons on their phone, or maybe they need to know more. So I think the return on investment on actually training agents is really really tiny, but we are still going to do it. Maybe we are still going to do it because it is unacceptable to us to have a customer call and the agent not be aware that we have this functionality, or understand how it works. Now that said, something we still do not train, we say "oh actually that is a communication [issue]", we will communicate to the agents. So we do make a decision [about] if it is a communication [problem] or if it is a skill [gap], but I will tell you there is probably a lot of stuff we end up rolling out training for, it is probably difficult to justify the training based on ROI. It really isn't ROI, it is about maintaining our brand as the best customer service. I actually do not put a lot of value on ROI because of that. I just think it is not programmatic. It does not really help you with decision-making.

Here is the thing. Nobody is really doing ROI well. Have you met anybody that doing ROI well? You are just guessing. It is just like this really big guess. At the end of the day, I think that is why strategy is a better means to the end. The part with strategy is that learning department is already equipped to do this. Most companies do not have learning organizations that goes into their strategy. I know this because I actually have been presenting this stack that I am going to send you on learning strategy, I presented it at CLO exchanges, I presented twice already to audience of like hundred people. Every single time, I ask people to raise their hand, do you already have a comprehensive strategy? Or even just a strategy? Nobody raises their hands. Big companies are in the room. The room was full of people from fortune 500 companies, [but] they haven't thought about it. I have kind of unique background, because I studied strategy and I am doing learning for really long, but ROI is guessing where strategy actually helps make sure to drive to the outcomes that you want to drive, and helps you prioritize the work that you are doing. ROI does not help you prioritize. So if it does not help you prioritize, by the way, it will be really costly. The more precise you want to get with it, the more costly it will get to figure out. To actually do the follow up and find out if you actually met the ROI, that will be costly too. Instead, there is a question you have to ask yourself is that "do I want to allocate that resources to be calculating something that maybe is not my best way of prioritizing?" and "what [do] I rather [to do] instead?", understand how I drive and improve problem-solving in the organization, or how I am ensuring or meeting regulatory obligations without spending as much time in training, so there are other [ways] that coming out of the strategic standpoint that is going to actually help you identify "if I am doing all the right things, what are the business matrix that would tell me that I am doing the right things?" "what is the business results that I would see?" let's spend time measuring that. I would rather do that than measuring ROI. The business is not going to care [about your strategy], you have to actually communicate to the business stakeholders in their language, in their terms and things they care about. ROI [of training] is not what they care about, The ROI of the training initiative. They have numbers that they are trying to drive. I should be as a learning leader, more concerned with trying to find out if there is a way to help us understand how we contribute to driving their numbers. That is a way better place for me to have my staff spend their time than on trying to calculate something that is not meaningful to anybody.

Q: You have mentioned that you and your team of learning consultants, you have received a lot of requests from everywhere, and then you have to prioritize the requests. What are some of the factors that you consider when you prioritize the importance of requests?

A: What happens is that we actually look at a couple of different things like the audience size, the urgency. We rate three things: audience size, urgency and impact. It is somewhat subjective, to be honest, but it is all high-medium-low. From that, we get a sense of what kind of funnels to the top? We actually stack that with those projects, internally sources, or sometimes it might be work that we say that it has to be done externally. There is a question "who is going to pay for it?" all the time, and a lot of times, if something is really important, we can get the funding for it, so I am not usually worried about that if something is really critical to business, we usually can figure out how to fund it, but we might go to external vendors too. So everything goes to the top, we were like ok we are going to do this, what can we staff inside? what can we maybe go to an external vendor? Something is like a small audience, or low priority, or low impact, it is probably not even be on the list. That is probably where we would say "is it worthwhile for us to do?", we probably would have gone back to the requester and said "yeah it is 20 people, there is not enough impact for this project for us to actually do it" because we do not have capacity to do all of this project. What we typically do if it is something smaller, the more notch audience, we would say "we have a vendor you can use, we are just going to connect you with that vendor", and they can acquire training from that vendor. If it is in the medium place in the packing order, we often would say that we can maybe do that if we have capacity, the truth is, I will tell you that as we have increasingly to work on more and more strategic projects, we do not have capacity for other stuff. It is actually really interesting that we have gone from and shifting from a solely request based process to one-man involved to being thoughtfully, planfully, strategic about how we support the business. Most of our work involves many many people and it is multi-year, and very high effort. In return, [we focus on] big change, big organization support, but we are often not doing a lot of the small requests. I say that, but there are things that like I said, we have to do anyways, such as regulatory touch points, or we have to make sure that all of our field agents are up-to-date on processes that affect their roles if they have to develop some skills or something like that. That is really low effort though for the most of the part, so we either focus on that really low effort, low impact stuff that we have to do. It is not low impact, we actually consider that high impact, but we are kind of staying away from that kind stuff of low impact that we do not have to do, [if] there is not a broad problem that is not gonna be solved if we do it. That is our pipeline management process. By the way, before we adopt that pipeline management process, it was sort of like who can get to the design team first with the request. That was the work that we were doing. Whoever can call the design manager first. When I started, I saw that, I thought this is not the way to decide what we are going to do, the team actually come up with the pipeline process.

Q: The other question that I have is on the problem-solving project that you have mentioned many times. I am interested in knowing that what forms of training on problem-solving did you use? Did you use classroom training?

A: This is part of our strategy. My team works with the business partners to come up with a solution. They look at understanding like what the resources are available with the requester, and how involved the requester want to be. We actually for the problem solving, the only thing that the training and development is doing, which by the way, that is not the whole learning strategy, sometimes the business is doing something too, but the training and development department, all we are doing is to rolling out e-learning that covers the methodology. Have you ever heard of Dmaic? You can google Dmaic to give you an example of problem-solving methodology. Step 1 to define the problem, Step 2 to measure the problem, step 3 to analyze the problem. It is like a model, but we invented our own model of course. The business [departments] already all know the problem-solving method, but what happened is we rolled out all these different methods, now we need to get everybody on the same method. So what it is is like to tell everybody you have already known how to solve a problem, we are changing the model. But that is not the only part of the learning strategy, because what we have is lean approaches in the businesses, what they do is that they attended problem-solving sessions that were happening, we have regular problem-solving sessions, and they are going in and coaching. They are getting sort of real-time feedback on the problem solving. We are actually only in this case teaching the methodology. But I will tell you because I rolled out problem-solving training elsewhere, when I was at GE, GE actually rolled out a simulation, we did a classroom simulation. But that is different, it was not just about the model, we needed to dig in the skills that and get people to be less lazy. You can follow up a problem-solving methodology, if you are not rigorous about it, [you are] not to get the right answer, but in the healthcare setting, if you have a problem, you have to really get to the solution. The simulation was about driving the right level of rigor, and quite frankly was about failing. Driving people into failure situations, so they realize when their investigation is sloppy, and uses inadequate tools, they are not going to get the right solution. That was actually solving a performance problem, where we had inadequate investigation happening. We kind of look at what is the most efficient solution for what we are trying to do, in the GE case, like I said, it is high cost. If they make the baby warmer, and the baby warmer is not working properly, you have to know why. On the other hand, if you were just trying to make sure that everybody knows the same methodology, that is different. That is not super deepening in terms of skill, I do not know if you know bloom taxonomy?

Q: Yes.

A: It is more level 1 and 2, that is problem-solving at [my organization], at GE, we are looking at level 4 and 5, application and synthesis, and we really need to be able to drive really deep skills. So just different approach.

Q: Whenever you make a decision, for example you have a request coming in, you finished all the preparation, investigation and figure out a response to the request, whether you say no or yes to the requester, do you ever go back and evaluate your decision?

A: That is a really good questions. I say we do not have a formal process for evaluating our decisions, but should we have one? Probably. We do have a more ad-hoc process around it. If we would roll out this problem-solving, in our business case, we have specific matrix that we consider this is what success means, or what “it is done” means, so for example, training everybody on this new problem-solving methodology, the project is not done until everybody has been through the training. Complete means we trained everybody, and we can see are we getting better from problem-solving. There are different ways that we actually have survey data that we can actually look at, we can probably understand whether or not people can solve their problems better. We can look at that data. But if there are some problems that is getting flagged, like people are not taking the course, then we will have a problem-solving session on it. You will get flagged, like people are not taking this course, or people are not applying this, and we will end up doing problem solving and trying to figure out. From that, we might identify that we make a mistake somewhere, if the mistake was in our decision-making process, we might actually ask "can we fix that decision-making process?" or is there some other opportunity? But I am also trying to figure out that, when I think of the huge project, I have been in [my organization] for many years, but it was interrupted I went to [some other organization] and come back, but during the time I have been gone, I feel like there is historical changes I missed. For the past many years, I am familiar with all of the training that [my organization] has done. Is our decision-making process perfect? No. In fact, I think we see where we were spending time and efforts on things that maybe do not have impact, we are able to flag those things. But there are more broadly problematic individual requests. For example, all of these procedural updates to agents, we spend a ton of time and efforts on those updates, and there is a question [if] there is a more effective and a more efficient way to get that out there, than all these training. We have efficient training for that kind of things, but just holistically there is a better approach. Is there a way [that] we can deliver more value? We have so many different kind of learning and development that we do, that is why when we look at it by portfolio, it allows us to look at each thing by portfolio, and [make sure] we are doing the most important work. Sometimes [we felt] like we are not doing the most important work, we are doing this, we need to be doing this, so we can shift into doing that. We do not have a formal process around it, but our strategy helps us to make sure that we are doing the things we are supposed to be doing, and helps us identify the things that we should not be doing.

Q: That is great. I think that is all of my questions. Is there anything else you would like to share with me?

A: No.

Interview G

Q: I am more interested in the training and development aspect of the firm. With your level now, you have definitely been involved in the training and development effort of the firm. Can you tell me more details about how training and development look like in the office and what is your role in it?

A: Everyone starts at the CLA, the first thing we provide is called career coach. First part, because you are brand new, you do not really know anybody you were assigned that career coach. At any time, you can switch career coaches, so we kind of have a pool of coaches between each office. Just because you are in a certain office, it doesn't mean you have to have a career coach in that office. I coach someone that is in our [other location] office, for example. A lot of time, you are coaching someone…you do not have to be close them, but sometime, it makes it easier if you are close to them or know them, their schedule, or working with them, just because you can kind of give them more guidance, more specifically how they want to grow in their career. From that, you basically meet with them at least quarterly to really discuss their career, what they want to do. Really trying to make it as open and honest as possible, with that also, that is why you want to make sure who they are with in that meeting, and they feel comfortable, because in some cases, like XX who is our Partner in charge for example, him taking a first year associate does not make a lot of sense, because that first year associate is going to be like, “whatever you told me to do, I will do it”. That will be very overwhelming to be like with the Partner in charge of the firm and you are brand new associate and [if you were asked] “where do you want to be in 5 years”, and you will be like “I do not want to be in [this firm] for five years” or “I do not want to be in public accounting for 5 years”, whether you know that or now, really, that will be a hard conversation to have, or it will be a little bit hard to guide that person. But if that person can be with a Senior or maybe a Director, to answer some of those general questions, [make] them feel like they can ask the questions. I think in lots of cases, someone is your career coach doesn’t mean you can go to someone else, like XX is my current coach now, but he was not the one I started with. I kind of get transitioned from another Principal how I worked with a lot, she was a great career coach, [but] just seem like at that time, after I have been here for several years, how about we do something different, and you now will be with XX, because with your role growing in the firm. It just makes more sense that way. It depends on if you do not like that person or you do not want to be with that person, but [it is about] what makes sense for your career. So it is really someone like I said, someone you can talk to, had that open, honest conversation, if you do not feel like you can have that with your coach, then you probably want to get a different coach. Because like I said, we want people to feel comfortable and talk about their career. At [this organization] we are really a career building firm, help with them [the employees] with a lot of things, I think that is true. And the fact that I know I have seen in my own career, but I do feel like we are not just saying it to market it. It does truly happen in what we do. Is it perfect in every office? Probably not. But I feel like especially in our office, it is very strong, because we want people, and again, we say people in general, but if you are a good employee, we do not want to lose you. There is a lot of different things you can do at [this organization], and there is a lot of different opportunities at [this organization]. Just because you started doing taxes, you decided that this is not my love to do taxes, it doesn't mean there are not other opportunities out there something else you want to do. So just being open and say "Can I try something different?", I feel like it is really good. Making those meetings as a priority is important too. I know there are requirements that actually tracked within [this organization], on that you had those meetings, and I think that is good too, because if it is like you can have a meeting, or if you can not have a meeting, everybody gets busy, you know? It is someone's career, and you want them to know that it is about them, and it is focused on them. I know that my meeting with my coaches, obviously I did coach and I have people that I coach, I always take it off-site, that is what it happens with me. I would always take them to lunch, and just off-site, even I have a Principal that is doing my [coach], I know that she is always busy, I [say] "we do not have to be outside, we can just do it here." But she [will say] "no, let's just go to lunch". And really it will be all about me in that meeting, I can ask all the questions. Just because they take you out of the office, you do not have people looking at you, or you do not have your phone ringing, or your computer going off, just really making them feel comfortable on a setting where you do not feel like there is any pressure or "can we make this meeting hurry up because I got another meeting". You want to make sure that you are in a setting that was good, and a time that was allocated and makes sense. It was not a 15 mins meeting. It was like an hour or something at least to discuss whatever I had, some feedback points that maybe she had, or maybe just kind of say "what do you [have] over the next few months, or the next few years? Let's set some goals, or track progress". Just things like that that you feel like there is accountability and also with you because that is you have to do something honestly to grow your career, just to kind of have that 1:1 feedback share and really make that a priority for a staff person. Especially in those first 2 years, that is really key. Anytime you start brand new job you do not know, and there is a lot of different things. You just do not know coming out of school what you want to do. You have no idea, maybe you have some idea of what you want, but then when you actually get into the reality of it, it can be different. So I think the more open communication you can have with a staff is good. Like I mentioned, my role is I coach others, with most of my coaches, I meet with them more frequently than quarterly. We do not necessarily talk about career things in those quarterly meetings, mine were more kind of managing what they are working on. Because again, like I mentioned before, it takes a little bit to get to use to all those managing because you always got something going on, something that passed that you need to wrap up, and something in the future that kind of going on. That takes time to set it in the way and keep that, so I meet with my coaches at least weekly, just say "what are you at on this? We are at the deadline". They are not just working on projects that in here, they also work for others, even for people in other offices, I may not know every single thing that they are on, or every single deadline that they have, so I want to make sure we are all accountable, and they know "I need to make this priority week and I can wait on this for a couple weeks". From me being a coach to someone else, I just need to make sure that those meetings happen too. I think both of us need to be accountable to make sure it happens, and coming in ready. My role is that I need to be a little bit more prepared for the meeting, showing, talking about where I am at, what I am doing with me have growth [responsibility] in the firm, what proposals are in the loop, what presentation do I have, things like that that kind of going on. Really from that standpoint, just kind of taking in any guidance I can have on those things.

Q: what other types of trainings does the staff at the CLA receive?

A: A lot of it is going to be on the job, just because a lot of it is hard to teach. Just because you look at one bankrupt, well the concepts of bankrupt are the same, but they are not going to look the same from client to client. You can't not be like "here is an example and let's go through it all before you go out", it is really a lot on the job training. But we do have, especially for our beginning staff, we have a few days out in Minneapolis where we all go. That is what I used to think a lot of fun because you get to meet other people from across the U.S. It is more like a general training, [including] things that they need to know conceptually. We have a lot of forms that the firms uses, so those are easy to tell where those are. But for some things you gotta do to learn it. Some of that, like I said, is more on the job, once you are starting and we put you out there, when someone else to help train you, so you do not confuse, but just have someone else that supervise and help guide you. That is more of a CPE or continuous professional education that goes on. You have to have 48 hours [of CPE] a year. At my level, I do not have a specific training that I go to, we have a lot of webinars, we have specifically people in our firm that have that high level of knowledge of everything, so they will do a lot of webinars, or trainings for us to make sure we get all of our certifications that we need to stay on task for our licenses. Every year, we do have by industry training. Some days are webinar, like a whole day webinar, or other days we have to go out to Minneapolis. This year is a webinar, and next year, I will go to Minneapolis. You do not have to travel every year just a couple of days, so there is a lot of information in those couple days. That kind of get you out of the office, seeing people that you do not get to see all the time.

Q: how many people do you coach currently?

A: I currently coach 2.

Q: Those are the people that do not work on your team?

A: They do sometimes. The one that I have right now work on a lot of my stuff, but they also work on things for other people as well. Most of the things that they are working on, I am kind of involved and in the loop, but there are a few engagements that I am not involved in. Based on the timing of the year, I may or may not know some of the clients more than others. One of them is a government person and one's primary is non-profit, so for the industry focus, me as a coach [of them] makes sense, because I know what they need to do and their career, how to get to the next level, and I know what their specialization, what they need to know to get more specialized in their industry.

Q: How long have you been coaching these 2 people?

A: 3 years. I have some other coachees in the past, but they moved on to some other coaches, like for example, one I had for probably 3 years, she has been insurance but she moved out to outsourcing, it did not make sense for me to be her coach any more since she switched her service lines, so now she has an outsourcing coach. Somebody that works more with her. I do not know much more details of that to coach her to get to the next level in outsourcing position, where somebody as an outsourcing coach, they will know a bit more about what it takes to get her to the next level there.

Q: For the current 2 coaches that you have, can you describe how the meetings usually look like with them? Do they go to you to request something, or you decide on what they need to know and what you have to tell them?

A: Sure. A lot of times is just me giving them feedback, "here are the things that have been going well". I will give my feedback, since I work with them specifically, and I will get feedback from others, just to say “I am about to have my coaching meetings with them, are there any feedback that you hear about?” sometimes you just get feedback from people throughout the engagement, and I write those down and I take that to know what I need to talk with them. I tell them “this is what you have been doing very well in. Here are some areas you can focus on, a few growth areas that we can work on”. Sometimes we have a set of questions that the firm will throw out there, and to keep that discussion going, if for some reason, you have somebody that does not like to talk or something, but I have not ever run into that. More or less, I ask them for their feedback on how things are going. Good, bad, anything that they feel like is a concern, they feel like they need to let me know. Just give them an opportunity again to be outside of the office, that helps too. If you were here, you may think someone else can hear you, and you just do not want to worry about that. I always at the end to make sure that we talk about their career to [discuss] over the next quarter, what do we want to accomplish? Usually with my coachees, I know some coaches might be different, but with my coachees, I try to give them goals, depending how old they are, how long they have been in the firm, their position, etc. I try to give them some goals, like “now you are at the senior level, you need to be focusing on a few areas. Let us make sure we are focusing on those and track those. When we meet together, we can see where things are going”. So we will talk about that, talk about the goals, and talk about career and give them an opportunity to say “last time we talked this is where you think your career was going in this next quarter, this next year, in five years”, if anything changes. Just to give me an idea of what they are thinking and to give them opportunity to say things changed, or no the same. Things can change to people quarter to quarter, year to year, you just want people to know our career building flow chart is not set stone. Just because I chose manager [path] today does not mean

I have to be a manager. If I have really decided that I do not really want to focus on marketing any more, I just want to focus on my clients and grow with my clients. At some points, I think I got this. I have been in the manager role, I think I know what it means to be a principal, now after meeting with a lot of my clients, I really would rather be a CFO at a non-profit. At some point, if I make that decision, it doesn't mean the two-week notice, but it means I had that discussion with my coach "[this organization] is great, but I really want to be a CFO in this one non-profit. They do not have an opening now, but I know their CFO is going to retire in the next five to 10 years. I want to say at [this organization], I want to continue what I am doing. But in the future, that is my goal". It doesn't have to be a specific place, but somebody wants to be a CEO of a bank, I will use that one. "That looks like the coolest job. That is what I want to do. Give me as much banking I can, and maybe build my resume as much as I can so that I can be a CEO in that bank when the opportunity arises". With being the Alumini path, we would like to know that so that we know this person is not gonna be here forever, we know we probably got three to five years, we can help build their career, they can help us train other staff. We can plan it out and get to there. We can also help them to get to that position. So just have those discussions are good because again year to year, things can change, with families, also, talking to people with moving as well. We have people moved to here from other offices, and we have people moved to other offices, or people move and come back. Things change in people's life, you do not want people to feel it is a hard conversation if they do have things they want to talk about. Once they do transition, it is an easier transition. As much open communication we can have, that is the most we talked about, current what is going on, current progress on somethings, and their career in general.

Q: I do see the importance of goal setting, and I think it is a very good practice. I can imagine when you are talking to people, especially when they just started their career, most of the time, you might hear the answer “I do not know”. How do you deal with situation like that? How do you guide new staff?

A: The newer staff, their goals, are really more engagement focused. On every engagement, someone is given a budget of hours, what do we expect this section to take? If you are testing a bank acquisition, a client might have 3-4 bank acquisitions. We may say, it is going to take you an hour, or it should take you an hour to do all this bank acquisition test. They are usually pretty clean. There are not a lot of stuff. Whatever the case could be. Some maybe four hours. What I am trying to tell the newer staff to focus on engagement by engagement in your budget and areas. Meeting that budget. For some reason, something might be out of wrack during that year. All of sudden, we know in the past, the client is always good on this, we never had an issue. But all of sudden, bank acquisition and trail balance do not agree. Then stop. Do not try to fix it yourself. It is really just communicating to them, take ownership of that, definitely learn everything as you can because there is a lot of things to learn. Just focus on that engagement and meeting the goals of that engagement, because if you are doing that, that will get you to somewhere you need to be. If you do not understand something, ask questions but really for someone that is brand new, it is really to just tell them to take it all in, learn as much as you can, ask questions, look at the different engagements that you are on, the different types of engagements that you are on, see what you like. Do not focus on the client. Because the client, being the CFO or CEO, whoever you are talking to, you may absolutely love that person and they may be fantastic to talk to, you may get along, but at the end of the day, if you do not like that industry, it is not going to be good for you to be on that audit for going forward, not meaning that next year. So when you have to be a senior, when you have to choose an industry, all that stuff. I like doing government and non-profit, that accounting is a little bit different, more or less the government is than the non-profit from a regular corporation. There are a whole set of standards you have to go by. It is really just telling people to be open minded to trying everything, you gotta try a couple at least, to understand what is going on, if you like it, if you do not like it. But I do not really set specific goals with them, because I feel like that is not really something that makes sense at that level. In the second year when I was an associate, by that time you have to show that you are ready to be a senior. Before you are in that senior level, you need to show you can manage jobs. You are getting things out timely, keeping management in the loop, there is different things you have to show. It is easier to do by that time, you know what is going on, you know what is expected on you. For someone new I would say that I would not set something specific, just like what you are on, focus on that. For someone who says "I do not know what I want to do", I think that is the perfect opportunity to say "great, get any opportunity as you can". Especially if you are just started, I would say be on as many things as you can, try as many different things as you can. It is a little bit strange to someone just come in and say "I want to do manufactory". I ask a lot of why in that case. Many times, someone doesn't know unless someone tells them. At U of I, that is what they push. Obviously that commercial side is really big. If you have not seen this variety of things, you did not know these opportunities that out there, then it is great if somebody says "I do not know what I want to do" then there are tons of different things for you to try. We want you to try as many things as possible any ways, even if you say you want one thing, for example manufactory, it is only really busy one time of the year, or a few months of the year, I would say. Think about what you like to do, talk to the people in those professions currently. Somebody that has been there longer probably know the good, the bad. I enjoy going talking to my clients, but someone else like to sit on their desk all day and crunching those numbers, that is not what I want to do, but it might be fit their role a little more. Someone like me could rely on those type of people. They can give me that research, and I can go talk to the client about it. Just getting people in their roles and what they like to do, again, this goes back to just being open and honest about what you want to do. At the end of the day, if you are not happy about your career, you are not gonna want to come to work, you are not gonna be happy when you are here, you are probably gonna get out bad work, because you just do not care or you are not involved.

Q: If I understand currently, this office runs on team-basis. As a manager, you probably manage a team of certain number of people. How many people do you manage currently?

A: It varies. For every engagement that I have, I may have a different team. We are scheduled in the office not all together, but we work with a lot with the other offices in the area. In lots of cases, I probably have a senior and an associate, so I probably have a team of two [per engagement]. For some of the bigger engagement, I probably have a team of 3 or 4 under me. And of course, we always have a principal, or a signing director above me. Usually there is at least 4-5 people involved in a process. Sometimes maybe a senior, me and a principal, which is three, sometimes is more than that, depending on again the size of the engagement because you may have multiple pieces of the engagement. You may have certain team members working on one, certain members work on another. Probably on average, per engagement, a team of 4-6.

Q: Common sense wise, when you have 4 to 6 people working on the same thing, they come from different places, they have different education background, they have different levels of learning abilities. Whenever you see they have some sort of skill deficit, or knowledge gap, how do you deal with that situation?

A: Nowadays, I am not out there as much on a day-to-day basis as seniors are. I try to tell my seniors "if you are seeing an issue, we need to address now versus the end of the audit. So I try to tell them to watch for that. Me as a senior, when I was in that role, still now, because I still obviously train, I was trying to be open and honest with somebody, especially when I was reviewing the papers and I see some issues. We leave comments—everything is electronic. If something is wrong, I will leave a comment that says "can you update this?" If I see a lot of those, it is really my responsibility to take that person on the side and say "I think we are missing conceptually what is going on here". Again especially with a newer person, I am not saying they do not know everything, of course they have their education and they had straight As, but they do not know everything at their first job. You understand what an asset or liability is, you get the basics, you do not know how to audit it until you actually do it. I try to tell the senior, what I would do before, is sit down with them before they work on something, explain it. Most likely they will not have any comments [after that]. You still have comments every once a while, which is fine, but if they are seeing a lot of issues, or the comments are coming up, you have got to just sit down, that means, not doing it in front of [other] team members, but just take him on the side and say "I have seen this for a few times recently unfortunately". They do not know they are doing it wrong until you tell them they are doing it wrong. You can not get mad at somebody if you never told them they are not doing that right, because they can not learn from it. If I am seeing an issue, I just pull someone from my office, or out of the client, and say “I want to make sure that you feel like you are getting enough trained on this, because I am seeing issues”. I am trying to put it that way, not to blame the person that is training them, but to get an idea of “does this person feel like they can talk to the person that is next to them?” or “do they know what they are doing?” it is an issue of them truly not understanding. If they do not feel like they can ask questions to the person sitting next to them, that is a totally different issue than they do not understand it. If I can explain something to them, they get it, but if I explain something to them, they feel like they get it but they do not, feel like they can not ask a question, that is another issue. If you can not ask a question, and someone explains things to you, you are not going to question what they just told you, and you are just going to do the work assuming it is right. There is definitely a few different ways, obviously depend on the person too. But in most of the cases, I would just try to take them on the side. We also do feedback evaluations. We are trying to do it as much as possible, especially with younger staff, newer, just that they can get their feedback quicker and they are not going to engagement to engagement. If they are doing something on one thing, until someone tells them to do it differently, they are going to do it in the same way. It is going to continue to be an issue, until somebody says “we need to check on this, it does not seem right” or “are you sure about this?” I am trying to make it not just me saying you are doing this wrong, this is an issue you need to fix it. It is more an open communication like “I have seen this, how are you feeling on this?” “What do we think the issue is?”

Q: If that person says “I do not think I have been trained properly”, how do you address that issue?

A: if we are currently out there and we have a client, this comes up and I will ask “what you have been working on?” “let’s stop. Let’s start again if we were doing it”. “Let me come over there and let me go through this section with you”. Going through that and make sure that person understands what it is that they need to be doing.

If it is after the fact, if I do not know who was the person in that unique engagement, I would ask and I would just say “if you do not feel like you are getting trained, are you asking questions? Are you getting answers?” how is that communication occurring? If you feel you are not truly getting helped, then I need to go to that person and that person’s coach to address that issue. I will try to get the information like if they have been supervised or if they have gotten enough training. Depending on the relationship I have with that person, if that is somebody that I coach, then obviously that is a coaching issue that I have to bring it to them. If that is somebody that I do not know really well, because there are probably two sides of every story, I may go talk to the coach “this is the feedback I have gotten. Have you heard about this feedback before?” vs me just going directly to that person, I do not want to say that person is wrong, they may say they have been supervising correctly, others might be think they did not get the training that should be given them. You need to get both sides of it. When it is someone that I know they are doing a good job in training, I have been seeing other people in their training or I have been out there seeing them train, I will try to get all the facts before blaming someone. I just want to get to the heart of the issue. We have that came up before, people say they are training [others]. Some people just do not get it, someone takes longer than other people to get. I have some seniors that expect someone to get it the first time they tell them, that probably is not going to happen. Just because you tell them once, does not mean they will remember it. If you have that personality that you do not want to say more than once, then it will get hard in public accounting. You will get somebody under you, who can get quick while some people can not. Just because they do not get it quick, doesn't mean they are not a good staff person, or they are not gonna be good, just means it is going to take them a little bit longer. Most people do not take the first time you tell them. They can be straight A student, but when they are on the job doing it, it is just going to be different. There is not a book they are giving you with all the answers. You have got to research, you have to ask the questions, let I tell a people, we are a team. We have got to work as a team and if we do not ask the question and we do not work together, we are going to have a problem at the end. So we are going to help each other out to get the job done at the end of the day, to give a quality audit for what I focus on. You just need to get to the heart of the issue and figure out what is going on.

Q: I can see all of this happen in a more informal way. Is there any formal evaluation process?

A: There definitely is. Usually when there is large audit, we will do a feedback form, about what went well, what did not go great, [identify] opportunities, etc. That is a little more formalized documentation. If there was like I said for some people there was a consistent issue, and there was definitely a point to where that person is probably no longer should be working here, then HR will get involved in that conversation. I do not know much about that HR stuff, I haven't have to luckily deal with it to a point for me to be involved in it, I just know it at that point, HR gets involved, and then more documentation has to be done. So there is a newer staff they are just learning, we have conversations in an informal manner, we are not documenting anything. If the issue continues, that at that point, we will get more these evaluations, have this documented, and then getting HR involved at the point "now we have to have a discussion on—this probably is not working well". There will not be just a fire, unless something bad happened, it will more or less be “we have got to this point, put you on a 30-60 day PIP [internal warning system for performance issue]. At this point, we have talked to you or let you know that there has been some issues, and we are going to watch you for 30-60 days. If it does not improve, the result will be you leaving eventually”. Like I said, I have not been to that meeting, so do not put me on that exact process, but basically that is my gist of it. If somebody really has to have that conversation with something being warned, unless something really really bad happened, obviously at that point, there will be a hard cutline.

Q: What about a person that works under you, and they identify some of the learning needs themselves, and come to you “I need training for this” or they request a specific training? What is the process on that? What is your response on that?

A: Depending what it is, I would go to kind of the leaders of that industry, or the technical area of that [request], just get them set up with the right person. Or if I know where the resources are myself, I can say “start with these”, a lot of stuff is on our intranet, if there is something out there that I think they could start with first, or if it is conceptually stuff, we have some on demand CPE that they can go to do some of the additional training, if for some reason, they just need some basic training on how to do a single lodger, the details of a single lodger before I go out there, vs. taking up somebody else’s time, not that they would be mad about, but vs. having someone explain every single thing to them. I would say “go take this 4 hour CEP class, go through that process first and then let me know if you have any more questions”. Just depends on what it would be, the good thing is we got a lot of good resources out there, in a lot of cases, you are trying to find some answers yourself, before just going asking a question [to others], but in some cases, it is easier to just ask a question. I would say probably between those, either me going to find the person or the intranet and giving them the CPE that is probably the main things.

Q: Has that ever occurred to you?

A: It is a good question. I know that single lodger comes to my mind because I have someone is going to be on single lodger in the future and did not have any background on them, so I know about those trainings. In some cases, I may or may not know there are trainings out there, I know that we have some basic training and we are trying to give staff just started too, [including things like] “this is an account”, “this is the risk of an account”, “this is what it looks like”. In most cases, you are doing the same tasks, they just look a little bit different from client to client, industry to industry. In the heart of it, you are probably doing the similar thing, it is just where the risk for that client and how they have been done, so I would say it came to my attention before. It is probably not super often unless I already know. Again, a lot of staff is more on the job training too. So lots of time they will learn from doing it, and may have more technical questions that come through that, vs. just conceptually “I have never done that before, so let me try it”.

Q: Have you had anyone that came to you and specifically request you to be their coach?

A: Yes. In the past, we had it. We have someone that specifically chose me to be their coach, because they want a different perspective, and also a female perspective. It is being different from a male to a female perspective in the business world, especially with family and things like that. She has been transferred to our Minneapolis office, but that would be one person that ask me to be her coach.

Q: What did you say to her?

A: I was happy to be her coach, but again you kind of have questions too, because my goal as a coach is to give her career advice and it is more challenging for me when I do not work with that person at all, or that industry at all, or that service line at all. So I have to be a little careful and let them be open and honest again, saying “I can give you advice more on a personal level, and a general level, but to get you on that next level, I might have to go outside, not just me, and to get more input”, which means me bringing another person into a meeting for example. So sometimes when I have another coach, they would bring in another coach, just because that person is helpful for bringing in more insights on “what I want to do in this firm?” “what I want to do about my career?” just have a little bit more insights. That is where I have to say “I might have to bring in another person, are you comfortable with that?” Just depends on what they want, but trying to be real with them in a face that my job is to grow your career, whether be here or you leave, that is fine, but I can only do it to a certain standpoint where I really have to get feedback from others. You are always getting feedback from others in general as being a coach, but to truly get that feedback to get them to the next level, when I do that work myself, it is a little bit more challenging. That was pretty much all we talked about. Most of our conversation is more general, because she knew she can go to another [person], again just because I am your current coach, doesn’t mean you can only talk about your career with me. She knew she had this relationship with other people, she can go ask those kind of questions too, she felt comfortable doing that. But she just want a different outside perspective, and more female to female discussion vs. going to some other people.

Q: Now I kind of have more understanding about the coaching practice and the on-the-job training practice. First of all, I think those practice was set up by the firm, not by you individually, do you think those practice is successful? Or there could be something that has been done differently?

A: So I know I have tweaked it. Obviously, the firm gave us guidelines, things we have to do it, [such as] we have to have a quarterly meeting since there are documented after they occur. They have questions that you can or you can not ask, someone else from the firms they are watching you do all these questions. So I know from coach to coach, it is a little bit different. From what I have seen, and what I used as being a coach, what was basically showed me and my coach relationship, I felt that was very positive, so I try to do that with my staff, because I feel like if it works for me, it was a good way to show others. So I have just been doing what has been done for me. I felt like that is positive. Obviously, I tweaked a little bit for each person, not everyone is going to do exactly the same as another person. You kinda have to learn their personality and what they are doing, but overall I feel like what the firm gives is good guidance. I think it comes down to the coach though, taking the time with their coachees, understanding the true responsibility of being a coach. Not everybody in the office is a coach. Just because they are principals, doesn't mean they are coaches. Just because you are manager doesn't mean you are a coach. People raise their hands to be a coach basically, obviously they are evaluated to make sure they [are qualified]. Not like a formal evaluation, but people know someone could be a good coach or not going to be a good coach, basically. It is just more of making sure people understand their responsibilities. We have different coaching CPE, where the firm is trying to say "we want this to be a little bit more standardized. We know lots of these are going to be conversation, but these are the things you should be talking about at least". So a lot of things I talked with mine are things the firm wanted to be hitting on, making sure they are in our conversations. I also personalized it for me and how I verbalized too to my coachees.

Q: How much do you think that is helpful for the coaches to maintain or have better job performance, when they have someone on the side to help them and guide them?

A: I think it is extremely good because like I said before, if they do not have someone to tell them they are doing something wrong, or something well, we do not need to just give [negative] feedback on people are not doing something well. We need to give feedback all the time. Or there is something they could be doing differently. It helps them and their career. I found that people really care, do want that feedback, so they will ask for it, because lots of time it is not just people are doing it to give feedback, you can request feedback. You should be requesting feedback. I think it helps people. Everyone wants to feel good, so everyone wants to know when you are doing well, just help you. If you really care about your career, and you want to know how you are doing, you want that feedback. I tell people I want that feedback. Sometimes you get good feedback and sometimes you get not so great feedback. But if you learn from it, again people want to be successful. You want to be careful about how you say things, you can not be like "here are all the things that you did wrong. Let's go over it". You talk about things and as you know people more, as you work with them too, you understand how they are. I take criticism because nobody is perfect. I want that feedback because I want to continue to do better. This is my job and this is what I care about. I obviously want to do a good job at it. I think it does. Some people you just have to be careful about that criticism. You learn from that by giving them criticism, but for the most part, the more discussion feedback you have, they feel more comfortable coming to you if they have issue too.

Q: Does it happen frequently that people come and ask for feedback?

A: Not as often as you would like. I feel like we used to have these forms, almost all the time, they have to fill out if they are requesting feedback. There is not as much of that now. We are trying to get it more especially for the newer staff. It is just so critical to give them feedback. I try to tell my seniors when they are out with them, or you have got to give feedback. You have to. People do not like to hurt people's feelings. You are not, you are helping them. If you do not, then I do not want you to come in and complain it to me that they are not doing something right, because my first question would be "did you tell them that?" and then they say "no", then I do not want to hear you complain about it, because you did not tell the person. You can't get mad at them if they do not know they are doing something wrong. It is not fair to them. You have to have a discussion with them. If they do not know, they can not fix it. I think this should be something still needs to be worked on, because in most cases, if you do a good job, you want the feedback. But you know you did not do a good job, you are not going to go and request that feedback. There is got to be a better system in place. We used to have the system, we just do not have it unfortunately right at this second. I think the firm is still working on it. The old tool was a little bit too much, so they are trying to fix it. I do not want to say it was an overwhelming form, but there was a lot forms and it takes a lot of time. You need something that is a little bit quick and easier to get that feedback to them.

Q: What is the expectation on using that new tool? How many forms do you have to fill out every year? Per person? How detailed you need to go to?

A: Right now it is quarterly as it is requiring. It is about 4 questions. The one that I was talking about, we want it for every engagement, these are more just for the quarterly discussion. We ask some general questions before we start. It really depends on the amount of details that someone wants to put in there, so make it open-ended a little. I always put a ton of details in there, because I want my coaches to know as much as possible about what is going on. Some people might just put a sentence or two again that just shows the level [of performance]. So in some of the meeting, we have to look at it a little bit more. The formal evaluation is quarterly.

Q: If you look at the Ring-Ring scenario question, what would you do if you are that HRD director and why would you do that?

A: They have been trying to implement it. There are small incremental changes almost sounds like you could take one step at a time, I know we have Lunch and Learn sometimes, sometimes when you give people things to keep them focused. They are paying attention even though they are eating. If they have tried to do the whole day, and it does not make sense, because it gets overwhelming, depending on the steps and the goal to decide what makes sense. If it makes sense to learn a new one every week, or learn a new one every month, and then from that, what I think that have been worked for us, is get everybody a post card, while they are in the session, while they are thinking about it, what could they take from that? For example, we start lunch and learn with a service that [this organization] provides, something that maybe we do not have someone in the office that directly does, but once we learned about it, you brain starts to think “will that client work?” ”will this client work?” and you think this client might work, and you just write down their name as you are doing it. What happens to those post cards is that they were taken by another person, and you can always keep them to yourself, but another person takes them, and hold you accountable to them. What they will do is they will take the note cards, and they will make another meeting and say “you have written them down. Have you thought more about them? Do you see how this would work?" In this way, we get those goals and clients on those note cards, get somebody else to hold that accountable. That would be probably what I would do. I will just try to make those changes.

Q: So you said [this organization] has already been doing something like that now?

A: Not like a training, or something [formal] like that. But what we do from a service perspective, we have so many services. I think I know a lot of them once I went to a training in Minneapolis on our services, because I am part of a team for our region with some other national team. We were trying to get more consulting services out there. You learned about them, but again you forgot about them. We had something held like "think of a client that this A service could work for. Bring him back". We also do some Lunch and Learn we have one next week. We have our IT guy coming from [another office]. [This organization] does a lot of cybersecurity services and testing for clients, or non-clients, just learn more about the service. Even though I personally will not do that service, I can at least let people know we have this service and get them in touch with the right person who actually does it. So we do Lunch and Learn just for the fact to get knowledge about this service, think about clients this service can help, fill out this post card off our head. Some people have a lot of clients, but for the most part you have your client in your head when you hear the key word. So you can write them down and give that note card to that person. That person will follow up with you and "ok this month you have to contact this client. You have to get this on the calendar. You have to give them a call". You are setting goals for yourself and you are making it happen. The client may say "no thank you" and that is fine. You do not have to do anything further. But it just reminds you to keep that at the top of your mind vs. you get all of this information one day with all these different things. You do not want to get too overwhelming either, it doesn't make it hard or time consuming to put in the efforts.

Q: How is that person, whoever comes in to speak to the group, be decided?

A: It varies. Sometimes one of us might just use that person and ask if they want to come in and do a Lunch and Learn for us. Or sometimes that person was just in talking with the Principal in charge, or someone else in the office says "we just did this project with you and it was really good. I am sure you are out there in your office to tell people what we did, but do you want to do a Lunch and Learn with us in case there could be another opportunity someone else thinks they may not think of?" Pretty much non-formal way of set up. Because it is not all the time and when we think there is something comes up, like this big cybersecurity one. I know I did a client one already, but our principal thinks this is a good opportunity for a Lunch and Learn for the staff, so that everybody can understand. You are not the expert, but you know what could be dangerous, especially if something comes up with a client. Just giving people that education about what services we do. I want to make sure I understand a little bit more about it, because I have to talk about it. I am the one that taking it to the client, I better know enough to entice the client, or if I hear a problem, I can say "we do that service" vs. "I do not know. I think we have an IT team". Just sounds better if I know what is going on.

Q: How was the format be decided? Why did you guys decide to do a Lunch and Learn?

A: It is a good question. In our office, we pay for the lunch. I think that entices people to go. Some offices call it "brownbag" lunch, so people bring their lunch. Our office is just small, so we can pay for the lunch. Imagine in the DC office pays for people's lunch, that is going to be a lot. So it entices people to go by just giving them lunch. They are going eat lunch any way. It is also not in the early morning, or in the early afternoon, or it is not super early, before lunch people are hungry, or after lunch, people are tired, or before the end of the day, people want to go home. I think it is just in the middle of the day, something that people are going to take any way. It hits all the good area of the time of the day to do it.

Q: Thank you so much. Is there anything else you would like to share with me?

A: No.

Interview H

Q: Can you tell me a little bit more about your role and responsibilities in your organization?

A: Previously I was the global director for a relocation company. I had a team of 10 around the world literally. I had trainers in London, Bangalore, Singapore, Hong Kong, Canada, all across Canada, we have several, like 5, in the U.S. We have offices all around the world. My role was to develop training for all levels in the organization, all divisions, and for global consistency. We had four operation systems that we manage. My team trained to all of the systems as well as all of the soft skills, new hirer orientation, management with leadership, pretty much everything else that came along and fit into one of the operating systems that we were using. So it was very comprehensive, started with a team of two, 10 years later, had a team of 10 globally.

Q: That was very impressive.

A: It was great. It was wonderful experience.

Q: What are the four operation systems? If you can share.

A: That means, four different internal systems. It was the specific software that managed the specific relocation process. For example, if you were relocating from the United States to HK, let's say. My team trained our relocation counselors on all aspects of that relocation.

Whether that moving employee would need language training, visas, work permit, we manage they move household goods, all of that, help them finding school for their children. In order to manage all of that to multiple countries, we had an operating system for each region, so there were four total. We trained the counselor how to use the system, as well as how to work with those relocated employees and their employer. The processes, the communication, as well as the system platform, they entered all the data.

Q: How many counselors did your team train on average each year?

A: Average every year about 200.

Q: Because we also were expanding into India, about four years into my role, we acquired an office in all of the requirement and the permits etc. to open an office in Shanghai. That created a whole new hiring process as well. We hired a lot of new employees, they all need to be trained. We also managed the Canadian government business. They had 34 offices across Canada, so each of those offices had counselors that include the military if you will, all across Canada. We had very large audiences. And we opened an office in Bangalore, the 7th year of my 10 years there. And again, of course with the whole opening the office, hiring all new staff and counselors. We had training every month because the system changed every month. If a new client came on board, their policy was different, and required new field or new actions in one of the system, we had to retrain those counselors because it changed for everybody. So it is an ongoing, huge responsibility, we spent 90% of our time just on system training.

A: Thank you for sharing that with me. On the interview questions that I sent to you, there is a little scenario—Ring-Ring scenario. What would you do if you were the HRD director in that scenario and why do you think you would do that?

Q: At first, I would try to understand why it did not work. What was the initial goal-I would go back and take a look at that for this particular group and just a side bar, Kaizen, my background also includes six years with McDonald's corporation. I did management in leadership training with them. Our training department, we were small department, because in McDonald's and many large organizations, each specific group has their own training. We were real estate and construction. But our model was Kaizen, consistent and continuous improvement. So I thought it was interesting that when I read your scenario, I was like I know what Kaizen is.

But I would do an assessment first. I would maybe even have some 1:1 discussion to solicit some of the individuals who took the training previously, find out what their takeaways were, going back and looking at what the goals and objectives were as well. And I would try to see how was the training delivered. Were there opportunities for them to practice whatever they do? What the direction was? Do they have input into some discussions? Perhaps? Or was there strictly just information overload kind of thing. Was there just information sharing? Or if there were some behaviors that they were trying to change, or have the participants adopt, etc. so get a better feel for what it was, and what is missing. What exactly did not transfer over that this manager thought these participants should already be aware of? And then I would go back, and I would create some filling the gap, so I will do a little bit of previewing what this training is for with this group, and I would do a little looking ahead, here is where we are going, so in today's session, or however long the training was, here is what we are going to cover. And make sure they were really clear about what the goals and the objectives were to begin with. So I think there may be some assumptions made, maybe something was not clearly explained, it could have been, in often times, it could be the way it was delivered.

Were they classroom training? Was it virtual training? Was it e-learning where they independently taking the training on their own? Trying to find their modality as well as then how it was designed. There is a lot of information about this, in an old study, I do still rely on this study. There was a study on what really matters in how training is designed. It does not matter if it was classroom, online, e-learning, virtual video conference, it is the design of the instruction. So making sure that is well designed, the goals and the objectives are clear. And the goals and objectives had been be agreed upon by the stakeholders, which sometimes there is no evidence of that. Sometimes there is a request, and there is no evidence until the analysis is done to make sure that. just the individual who requested it may have the requirements or goals or needs, but other stakeholders involved maybe down to road, or connected to this group, they may also have some input that may affect what those goals and objectives are. But I really want to take a close look on how it was designed and what the initial intentions were, etc., and go back and see where the gaps are.

Q: From what I just heard, you want to try to find where the problem is, find out what their initial goals are and what has not been achieved. I have a follow-up question on this. Have you ever come across a situation like this? That some individual from your organization that you have trained before come back to you and say I need to be retrained.

A: Need a refresher? Yeah. We have and it was more related to the system training we did. That was generally because something in the system has changed, and it is actually quite interesting how this evolved. Changes that happened in the system that was not known. The IT group that made those changes initially was not aware that when they changed fields or strings or documents in one of the systems, it affected all four. Until that became common knowledge across all the IT teams working on these four systems, we often have people coming back and say "whenever I go into check the contractor in that system, it is either not there or changed, or fields were missing". It took us sometime to back track and finally realized the IT group working in those screens were working in the same training platform that we were in. They would be making changes real time, and we could be in the system training, and it would change when we looked at the screen. So eventually what we were able to do was to create a training environment that is static, so it did not change. But then also we partnered, I had two members of my team, partnered with IT and work with them to communicate when those changes would be implemented in the system, so we could do once a week an update session. One of the counsellors will use the system to let them know those changes that have occurred. It was very cumbersome, there was nothing we can do to stop the changes from happening, but it did significantly improve motivations for the team, reduced their frustration and improved their performance because now they knew what have changed and what to look for.

Q: I think it was gonna be helpful to let them know there would be something different and they can be prepared.

A: It was pretty shock for them. Some of them had to go in every single day for every file they have entered, and something had changed. You could imagine when you worked on something that had been constantly changing, how frustrated that can be.

Q: Moving on to the next section of the questions, I think my goal here is to collect examples from your experiences that in your organization when you received training requests from your colleagues, or whoever, basically in your organization. Can you please describe some of the requests you have received in the past? What are they? Who requested them? What are the significance of the requests?

A: There were two projects that came to my mind immediately. One was our new hirer training. We did not initially have new hirer training when I started with the organization, we were quite small, about 800 employees. We had not gone global yet, we were just nothing. And as I mentioned, we started moving into the international realm, opened new office, we moved to Shanghai first, then Singapore, Hong Kong, we continue to grow to Bangalore. As we started growing, particularly internationally, it was really clear that we needed to first of all, be training all these new hirers, and who we are as an organization, what do we do, where we located, who are our leaders in the organization, how are we structured, etc. Who are some of our major clients. I actually reported to the CEO and the president of the organization, the leadership team. So I had really terrific opportunity. That does not happen often for training directors or training managers to have that level of connection. I was fortunate in that. But I also had the opportunities and very good working relationship with our operational managers globally. We started to grow, I immediately was able to create a relationship with them. I would reach out to them and talking about what your needs, how large your team is going to be, which clients you will serve. So we started to put together a nicely comprehensive onboarding new hirer training. We customized for each region. So we had an Asian version, an European version and a North American version. It was consistent in content first, of course, we looked at each region and customized for those locations, who were their clients, who were their leadership involved with these, etc. That was a large scale initiative. It took us about a year to get all of the curriculum consistent, and it was on our training calendar every single month. So the first week of every month was a new hirer orientation week. We built in all of the information that the new hirers need, [such as] where you find information for HR, did you get your equipment, etc. all of that. But then we started overviewed all of the course content they will be taking in the following month. So it is a great way to get them oriented with the organization, as well as their team because their team is also global. So think about you are stationed in Shanghai, but it was a global client that you are servicing, for example, UL, UL could be our clients, they are locating people all around the world. We would have a team member in Asia, in Europe and in North America. They have never met each other, but there were working on the same client. The counselor in Shanghai might be relocating a UL employee from Shanghai to Northbrook. Those two counselors are working together to help that employee to get from one place to the other. So our global training allow them to know each other. We did our training virtually for them, so they can talk to each other, and get to know one another. So that was one of our approaches to make sure we are globally consistent, and it connected those employees to one another. Those requests would come from…first they came from the leadership, my leadership, our president, the CEO, and then the specific [training] for the team would come from the operational managers.

Q: I learned about virtual HRD in classroom but never heard it in practice. I think it is very fascinating.

A: Well it worked very well. I was very pleased that I had a wonderful team. We would train… for example, myself and my team members as well, but I do not want to use them up all night. We often once a week, we would train a session live from the US to Bangalore, and live to all our Asian offices, all on the call at the same time. So that they can get to know us. We also train North America, Europe live, or our London offices, because you know, we have knowledge differences depending on the year. We actually did an video conferencing with both offices so we could see each other. And it was great team building and it created a very strong powerful network.

Q: When you are putting together training like this, what did you take into consideration? What factors did you have to consider when you put together like this?

A: That was a great question. Certainly, you have to think about the time, time zone differences, so making sure that everyone can attend. It required cooperation on both end to adjust to those times. Language differences. Often time, certainly we were working with our Asian offices and our Bangalore office, [there are] some significant language differences. It was an English-speaking organization. Everyone was speaking English but when it is not your first language, it could be very challenging. Certainly, the employee relocated have multiple languages. One of the requirements that became that our counsellors needed to be bilingual, whether it was English and Spanish, English and Japanese, or Korean, whatever those language requirements were. That was not the initial requirement, but we found that it became necessary the larger we became and more countries we work with. So certainly, language differences, time differences, and then cultural preferences as well. What will be the best time of the day for training with different individuals, what are their expectations for the relocation. Some culture wanted you to handle every aspect, every little detail, other wanted you to just manage the move, and let me know when we were done. So everything is in between, right? And then we have to look at the consideration of the client. What were their preferences and requirement in working with their employees? Really the HR function, promotion, international opportunities, assignments, what type of assignment? Is this short term? Long term? How do you acclimate those employees to that new location?

Q: what about leadership? What expectations do they have?

A: Their expectations were the training up and running, global consistent by the end of the year. We did a fairly comprehensive survey at the end of each session as the evaluation of the learners, to make sure they acquired the information that they were expected to acquire. But that was more during the training at a particular course. For the new hirer onboarding training program, we sure had to make sure that everything is covered, including additional needs, additional topics they wanted, etc. These I would report it to leadership. I did monthly dashboard to our leadership team in every month, and reported it on the results of survey, the results of the observation of the new hirer onboarding training? The feedback we received and how many sessions we held? The constant feedback when you designing an instruction and as you delivering it, are we always asking questions, re-evaluating how are we doing. Because your perception might be we are doing great, but Bangalore is a long way away, Shanghai and Singapore, long-way away, I would connect with trainers there to see if they got what they want, what they see in the classroom, what you heard from your participants, what else did they need. So we were constantly performing another…for that Kaizen, for that continuous improvement.

Q: For this example, I only have one more question. What formal or informal guidelines did you use to help you decide how to put together training?

A: that was a good question too. In every design work, you need to do your analysis. Did some meetings, you know, 1:1 meetings with operational managers. What will be looking for as new hirer onboarding training for your team? What topics do you think should be covered? So it is kind of an informal survey to get us started, then put the training plan together. What topic would be covered? How often would we deliver the training? What are we anticipated the numbers of participants to be? How that training would be the overview of all of the courses to come within the reminder of that month, where we look at the staff back about how they do their job?

After doing the informal assessment, then we put together the training plan. Here are the topics that we heard you say you thought you needed, so here is what we are planning to deliver, outlines of each of the courses what would be included in that topic. Send out to the global operational directors and managers to get their feedback. Send to the leadership team also for their perspectives and their sign-offs. Once we had that, any changes, additions, etc, then we started designing and writing the training.

Q: Do you have another example that you can share with me?

A: I do and it was a litter messy. This was a request that came to me directly from our IT department that worked on all the different systems, and all the changes, etc. It was a very confidential project at the beginning for about two months. We met privately because they were moving a large portion of the relocation process—the accounting portion, that the counsellors to respond to before, all of that, like expenses management, all of that was moving to our Bangalore office. But the counsellors did not know that. It was kind of unique in that [way]. First of all, it was confidential. We have to be very careful, just myself, one of my team leaders, who managed our technology training. We were the only ones on the call with this project group led by IT and trying to figure out "how are we going to do this?" First of all, they needed to hire the team in Bangalore, and they needed us to train them without anybody knowing about it really. It was very uncomfortable quite frankly for quite some time, because we knew they were taking a good portion of what we work away from other teams. We knew the concern would be they [the counsellors] would be worry about their job, job security, etc. It was never never ever the intention that their roles would go away, just they would have more time do counsel and then more time talking with and working with that relocated employee, and moving some of the financial [responsibilities] over to a specific team in Bangalore, [who were] trained specifically to do that. That is kind of the gist of the project. Where it got messy was that is when the realization for IT, when they became aware that every time they were in the system changing it, practicing something, trying to see if it worked, they were in the same system we were in trying to deliver the training. So basically if they started working on this before we have started meeting, it would have not been a confidential product. It would have been showing the counselors something about [this]. They were removing fields, they were removing process flows, so that is where we have to be really careful in educating them. We actually put them through our training to show them what happened when they were working in the system at the same time. From that, the good part was, it created two different environments. One for them to do their work, and they are kind of practicing and building whatever they needed to, and an environment for us to train from that they could not enter. So it was two private entities. Does that make sense?

Q: Yes it does. So you communicated with the IT department, sort of offered a training for them to say we are doing some changes, but the process should be confidential…

A: All of that information was coming from them. So they have a project, and a team in place, and they were ready to change these work flows in the system. When they finally realize that "we better talk to training because they are going to train to it". Up until that point, they have been doing all this work with the assumption that they were fine and it would be confidential. When they brought me in, and my technical trainer, they were very supervised that they have missed that step out that they [should have] brought us in at the very beginning at the project. It delayed their project about 6 months.

Q: When you are responding to request like this, again, what are some of your considerations by the time when you had to deal with them?

A: In that respect, in that situation, the consideration was we needed to protect the role, the consultant role that anyone else sees in the system, that where the major themes coming, and for all of this confidential, or remained confidential. That was difficult to manage because so many people were involved all the way up to the point when they basically wanted to flip the switch. We advised them in caution that you can not do that. You have to make sure that everything is in place on the other end. That needs to consider change management. How are you going to manage this change without demotivating and miscommunicating to the team stumbled in. Well they are the IT people, they are not considering that type of thing as far as how well this [change] would be received? Is it going to impact performance? Motivation? All this kind of questions. All of that had to be brought to the forefront.

Q: When did you finally reveal this project? I believe that the counselors finally found out that some portion of their responsibilities, including the accounting and expenses process, had been removed. How did you communicate this to the counsellors?

A: Once all these changes had been made in the system, [when] we know it was going to work that their objectives would be met once we train the new team in Bangalore, then we put together a change management process, if you will. We were in partnership now by that time. My team and I were putting together, writing the training for the consultant group, working with their signatures, so we brought them together to announce this. The leadership announced the initiative, the changes were coming, even though I have been working on this for months behind the scenes, they announced that this was coming, here is what it meant, here is what not going to change, they focused on that first. It reassured your role is not changing significantly. Some of the portion that are more, with the budget, with the expenses, etc. that was the accounting that we were working for, will move over to save their time for more interactions, one on one. More counseling if you will. So when it was positioned that way, rather than them finding out by accident, it was very well received, they see the logics in it and we will train them on those step, but not until leadership had already communicated the changes, the need for the change, the rationale, and then we did the training. It was fine then, but if it had gone the other way, and if they have not brought training in, it would have been a pretty negative situation.

Interview I

Q: In the Ring-Ring scenario that I provided, what would you do if you were the HRD director and why would you do that?

A: I would ask the manager why she or he wants to raise the request because I think the purpose is very important. What goals or objectives do they want to achieve through the training? So I will understand their purpose first.

Q: Why do you think understanding their purpose is important?

A: I think everything [that] you want to do you must have the purpose in your mind or you do not want to do that. In this case, the manager wants to provide certain training to the employees. I would assume that maybe because the manager thinks [an updated] approach or the training will be beneficial to employees to help them achieve work efficiency or maybe help improve their skills on the work. In order to schedule or implement the training effectively to the point, to achieve something that she/he wants, I have to know what they are thinking.

Q: Has this type of scenario ever happened to you when you are at work?

A: Yes. Similar case like when there is a new approach or methodology we have to use in our daily work, but because it is new, so I have to provide some kind of training to other colleagues or other employees.

Q: Who told you to train other employees? Where did the request come from?

A: My manager.

Q: So your supervisor?

A: Yes.

Q: So if you receive a training request like that, for example, there is a new approach that needs to be implemented in your company and you have the responsibility to train other employees can you walk me through on your decision-making process in terms of how you go about it?

A: Usually I will gather some information like what needs to be learned, like what is the timeline, by when they have to learn that thing, how much time do I have or what resources I have, so I can plan accordingly like if I have to do it in a very short time, I have to find already [available] materials or resources to support me to do that, but if it is a long process, maybe I can develop the material by myself. The purpose of course is very important, and the timeline, and resources.

Q: When you receive a request like this, did you ask any questions to your manager about the training?

A: Actually, I will ask pretty much the three things I mentioned.

Q: What about your colleagues or your work team members if you were working with others?

A: Do you mean the people who work with me to deliver the training?

Q: Yes.

A: I think it will be around how the training is going to be implemented. Basically the training plan. How are we going to conduct the training? In what way? What time?

Q: The three things—the purpose, the resources and the timeline are apparently very important to consider. Is there any other things that you consider when you have to respond to a request like this? Other than these three?

A: No.

Q: What about other examples of training request you have received?

A: We do receive the requests from external clients very often. The purpose will be very different. Different needs.

Q: Ok. What are the differences? Can you give me an example?

A: For example, the clients might want us to train their managers to understand, or to be familiar with some concepts, like how they manage their compensation [system] in their organization or how the compensation is defined? Based on what type of principles? Something like that.

Q: So when clients said they want to have a training for mangers on their compensation management process. What do you usually do to develop training like this?

A: First of all, we will understand more about their principle [of compensation]. Of course first of all, it starts with the purpose, something like because their compensation management process is not communicated ever, so the managers do not know how to do, or how they [can] talk to their employees when they have questions. The purpose is clear. Because we have to equip the managers to have those skills to communicate with employees. When the purpose is defined, we will talk more about the details like what kind of content they want to include, like they want us to talk about how they manage compensation [process] in their organization, or they want us to talk about views from a consulting firm. If they want to include some case studies, so they can have group discussions, so they have more relevant cases they can relate to.

Q: Two questions. So you asked them if they want to focus on how they manage the compensation management process in their company, or they want to know about the views from a consulting firm.

A: Yeah that is one example about the content.

Q: If the content is about how they manage compensation system in their organization, what will be different from providing training like that or from training on views from a consulting firm?

A: It relates to the content itself. They wanted us to give the training in 2 hours, we have to think about what we were going to include in that 2 hours training. That is content wise. There are other things like how we are going to deliver the training. Maybe we will understand if they want us to deliver in class face-to-face training, or if they want us to deliver [the training] through online through web apps? Because it is a company thing if they majorly deliver the training through online apps, we will do that, but some companies they prefer face-to-face training.

Q: How did you find out information like this? Did you just have a meeting with them and find out the information or you have a certain type of form that the clients need to fill out and they can tell you about it?

A: No, so basically through discussion.

Q: How would you evaluate your decision? If we say, the clients give you the requests, and you decide to provide the training to them and you deliver the training, how would you evaluate your decision?

A: We usually gather two feedbacks-one is from the clients we worked with. After every training, we will ask them about “how was the training?” “What are the things we can improve?” The other feedback will be from the participants of the training so we usually provide a feedback form to them to ask if the training was delivered clearly or if it met their needs.

Q: How did you find out what they think about the training? Do you do survey? Meetings? Or informal discussions to ask their opinions on satisfaction?

A: If it is from the participants/employees, it will be collected from the feedback form, so it is in paper. If it is from the clients, usually it will be a conversation.

Q: Do you have another example like this?

A: We get different training requests with different purposes.

Q: Is there something you received recently?

A: Yeah a while ago. There were clients asked us to do a training about how they evaluate the performance ratings to their employees and how they should communicate the performance ratings with employees. Because when you receive a performance rating, maybe you will encounter employees who are not happy, or who are very crazy about the results. You have to face different types of employees’ reactions. In different scenarios, you should know what to do. So that is something we include in the training to help managers to prepare themselves before the performance appraisal meetings.

Q: So I heard two things. One is how to do the performance evaluation, that is more like a technical process training. The other one is about communicating with the employees, so that is more like a managerial, or soft skill type of thing. So for the first type, how did you develop or design that training?

A: In most cases, they have a clear performance rating structure or a management process in place. It is just that managers are not so familiar with the process as much as the HRs. They invite us to give the training once a year before the performance management process starts. It is very clear that they have a performance structure, then we just have to explain the structure very clearly and how they should use the structure to provide or to grade their employees.

Q: How was the training delivered in this case?

A: It is usually through face-to-face training.

Q: Will the training be like a couple day training? Or just a half day, a couple of hours, face to face?

A: Usually it is 3-4 hours.

Q: Why do you think 3-4 hours are enough?

A: Because usually the training will include the knowledge part, they have to understand something [about the topic]. And then we will include some case studies or exercises, so they can practice or role play. We give them scenarios that they have to role play to understand different types of dealing approaches and we will have a Q&A sections. So usually 3-4 hours are enough to include all the things.

Q: So how did you decide on scenarios? Why do you decide on using role play in this training?

A: Because they purpose is to let managers equip with the skills to communicate with employees. Of courses employees' reactions are very different. So they might face crazy type, or silent type, or face like very different…maybe some employees defend themselves, or maybe they have good ability of talking through and persuade managers to give them higher ratings. In those kind of cases, what would you do.

Q: Will this performance evaluation rating affect the employees' salary? Or what is the impact of the performance rating?

A: Usually the performance [rating results] relate to the salary or the bonus the employees will receive. That is why they will have different reactions.

Q: How did you evaluate training like this?

A: It is something like the evaluation process I talked before. One is from the clients and the other is from the participants.

Q: So the participants' feedback will be collected from feedback form and the feedback from the clients will be collected from conversations?

A: Yes.

Q: Do you have another example of training request? It can be very specific.

A: One thing I can think of is that I trained summer interns this year. Because we invited them to help us in one of our work [function] because they are new, they do not know how to do it, I have to give training to them before they conducted the work.

Q: Did you get this request from your manager again or who told you to do it?

A: Yeah.

Q: What is the training about? What was the work they need to perform?

A: We call it data validation. Because every year we receive many many data from our clients. When the clients filled in the data, they might have wrong understanding about how to do it, so the data might be wrong or it should be validated before we put it into our report. Basically the interns helped us with the validation process.

Q: Is the data compensation data?

A: Yes it is compensation or HR policies.

Q: Can you tell me more about how you decide to train those interns?

A: I think about the timeline first because we had to meet deadlines. I had about 2 weeks to help the interns to equip with those skills. When the timeframe is set, I can think of how I am going to deliver the training, including how much time they had to understand our methodology, or our approaches. Then I gave them sometime to do practice, so they conducted validation then they passed the results to me, then I provided feedback to them, and they can do some follow ups or revisions before they talked to real clients.

Q: How did you deliver the training?

A: It is through in-class training, so it is face to face, and sometimes it is through technology support. Sometimes I was not in the office, they could drop me some questions through our communicator.

Q: How long was the training session?

A: Because I had two weeks. In the first week, basically I asked my colleagues to provide different training sessions to them for about 1-2 hours every day. On Monday, they learned about section A from a colleague A, and in the afternoon, they could study this section by themselves, so they can ask any questions they have. On Tuesday, they learned another section from another colleague. So every day from Monday to Friday they learned one to two hours every day. Then the next week, we will be focusing on the practice part.

Q: Why were there different colleagues to train different sections?

A: One thing is that because every colleague has the knowledge to provide the training. The other one is to let them to have different helpers. If they have questions and they can only ask me, or I am the only contact, it will not be efficient because sometimes I will not be available for them.

Q: How did you evaluate this training?

A: There are two kinds. One is through continuous feedback. Whenever they had questions, of course they could come ask me. Then we could revise the training like how we could help them immediately. The other one is after their two months of internship, I scheduled one hour [meeting with them] to understand how they felt about the whole process.

Q: Do you think the training was successfully based on the feedback?

A: They gave us some positive feedback and some suggestions as well. Because actually it was the first time we recruited summer interns and the training was first time as well, I think there are areas of improvements we would have to take.

Q: What did you decide to improve the intern training?

A: I plan to give them more cases to practice because last time it was two times, so they felt that it was not enough, so we will definitely increase the practice cases, number of cases. The other one when they practiced, it was not real case, it was not like they were talking to a client. After they had officially started doing the validation, they had to talk to a real client, it increased the complexity of the job because the clients might react in very different ways, they might have very different questions. The other improvement we are going to make is help them through the process like they can see how I communicate with a real client. How I respond to a client's requests or questions. They might get a better sense about how they communicate with a real person.

Q: How are they going to see it? How are they going to see how you communicate with a client?

A: It might be I call the client to do validation, and they are with me to hear how I talk to the client.

Q: So it is through observation?

A: Yes.

Q: Do you have another example?

A: There is a once-a-year system training we conduct to our clients to teach them how to use our compensation system to create their customized reports, or customized data to benchmark with markets or to do their internal compensation management.

Q: How did you do this training?

A: We delivered the training in two ways. One is through online training, so it is a live web app. Usually it is like one hour. We will demonstrate how we use the system online, so clients can dial in and attend the live training with us. They can raise questions on the app. The other one would be in class training.

Q: How long is the in-class training?

A: It is about two hours. It is longer than the web apps because in face to face trainings, you get questions more often. So online training if it is too long, I think everyone will leave their computer and do something else. So we keep it short in one hour.

Q: So how did you decide to use a combination of an online training and a in classroom training?

A: One consideration is of course our resources. If you have to do face to face training, you have to book the venue, then prepare some snacks, etc. the other thing is clients' available time, web app is more flexible. You do not have to travel to attend the trainings. If you are busy, you might get to squeeze one hour to attend the online training.

Q: So before you designed those two training, what questions did you ask your clients to help you make decisions?

A: Usually we collect the clients' feedback or questions they have, because we receive clients' questions a lot. For example, they do not know where to download the report, or they want to do some kind of reports, then they do not know where to click? Or they do not know if they could do [certain tasks] through our system or something like that. [Those are] the questions we gather every day.

Q: How did you evaluate the training?

A: It is through the feedback form. For the [training on] the web app, because we could not distribute paper form to [the clients], we have a QR code to display on the screen to ask them if they can take the online feedback form.

Q: So there is an online feedback form for them too?

A: Yes.

Q: So is there another example that you can give me?

A: I think I ran out of examples of training requests.

Q: Is there anything else you would like to share with me?

A: No.

Q: Thank you! Please feel free to contact me at any time if you can think of more examples.

APPENDIX L: CRITICAL INCIDENTS

1. One client wanted us to provide a 2-hour long training to their managers for them to understand the concepts of compensation system and to be familiar with how to manage their compensation system in their organization. To decide on the training content, we identified the problems in their current compensation management process. We [as a team] decided to train the managers on two main aspects—the principle of their compensation management system (technical knowledge) and how to communicate the compensation system to their fellow employees. The training was delivered in a blended instruction manner based on the available timeline that the client provided us. ***Clients requested a technical training program to provide various skills / Congruent approach***

2. When there is a new approach or methodology that my organization is going to implement, my manager will ask me to provide training to other colleagues to support the implementation of the new approach. I will start from gather information to know what the learning needs are, the timeline and resources I have for the training. If it is a relatively short timeframe, I use existing materials or courses to provide the training, but if it is a long training effort, I develop the materials by myself. ***Clients requested an awareness training program to explain on-going changes in the organization / Expedited approach***

3. There were clients asked us to do a training once a year for the managers who oversaw performance evaluation using performance ratings. In most cases, there were clear performance rating structure established in the organization, but the managers also needed to be well trained on how to deal with different employees' reactions to their performance rating. We decided to include in the training to help managers to prepare themselves with good communication skills before the performance appraisal meetings. ***Clients requested a managerial training program to support managers and supervisors / Value-added approach***

4. Last summer, we hired a few summer interns for the first time to conduct data validation for our company and my manager asked me to train these interns. I thought about the timeline first and I had about only 2 weeks to help the interns to equip with the necessary skills. When the timeframe is set, I thought of how I am going to deliver the training and how I can incorporate opportunities to practice the skills trained. I decided to use in-class training, which was split in 2 weeks. ***Clients requested a technical training program to provide various skills / Expedited approach***

5. We did not initially have new hirer training when I started with the organization, we were quite small, about 800 employees, but as the organization continued to grow internationally, we need to train all these new hirers on who we are as an organization, what do we do, where we located, who are our leaders in the organization, how are we structured, etc., who are some of our major clients. Because I directly reported to the CEO and the president of the organization, and I also had a good working relationship

with our operational managers globally, I could reach out to them and understand their needs, their clients and how large the team will grow to. At the end, I was able to put together a nicely comprehensive onboarding new hirer training customized for each region. ***Clients requested a training program based on perceived performance issues / Congruent approach***

6. The IT department sent me a request about a confidential project. The organization was mobbing a large portion of the relocating process to a newly created office, while the IT department was working on re-configure the updated system in terms of removing fields, process fields, it would interrupt the current counselor's work in the system. We actually put them through our training to show them what happened when they were working in the system at the same time, to help them how to avoid the conflicting situation. At the end, we decided to create two different environments, one for the IT department do their work while the other one is for us to conduct training. ***Clients requested an awareness training program to explain on-going changes in the organization / Congruent approach***

7. I had a request for training in Orlando, FL for Microsoft training this year. Every year, I would send one or more people to this training every year. I worked with my senior analyst on my team to have them look at the agenda, the themes of the conferences and determined the value. I realized that I would be short on people to perform work here, so I would have not only lost the cost, but also the productivity. I felt like we were able to get the same information through alternative means. Taking all those into consideration, I made the decision to not to send anybody to the training this year. It was an effective decision because we did not lose productivity in the office, but still got the information from the alternative training options. My team also agreed on that decision. ***Clients requested a technical training program to provide various skills / Value-added approach / Congruent approach***

8. One of my team member's career goals and security plan is to get into the security-related job here. So he requested to be able to get a certificate in security. I know that was part of his development plan and goals, so he is a happy employee if his able to do the type of work they are interested. Security is one of the area that is growing, and we have a need for a lot of talented people here in this company. Other thing is that the training is self-directed combined with a few internal online trainings, so it would not a disruption of his day-to-day work. The downside was that I had to replace him. Understanding what the need of the company was and knowing the employee's long-term goals and he will still be working at his job while taking the training, I went ahead and approved the training. ***Clients requested a technical training program to provide various skills / Value-added approach***

9. My company provides this training on excellence on operations management, which is a system that helps people work more efficiently. I did not have any expectations of the

training in terms of the changes we would want to see after the training. I just hope people can go take the training and say, “this is what we can do” and “this is how we should do things”. I sent my employees to take that training, but the results were not effective. The training was informative, yet we could not apply it with our work here. ***Clients requested an awareness training program to explain on-going changes in the organization / Value-added approach***

10. We had training every month because the system changed every month. When a new client came on board, their policy was different, and required new field or new actions in one of the system, we had to retrain the counselors in the region because it changed for everybody. So this type of training is an ongoing, huge responsibility, and we had to spend 90% of our time on system training. ***Clients requested an awareness training program to explain on-going changes in the organization / Value-added approach***

11. My organization is going to roll out a problem-solving methodology. We know that not everybody in the company knows this problem-solving methodology, so we know there is a lack of knowledge and skills around using this problem-solving methodology. Also, different department might have different understanding and usage of this methodology, we need a standardized process for problem-solving. We would be teaching everybody how to use this problem-solving methodology, providing it is successful, it would have significant return to the organization as we could cut problem-solving time in half. The ROI might be 100 times the amount we spend on that training. We developed an e-learning course that covers that Dmaic methodology. ***Clients requested an awareness training program to explain on-going changes in the organization / Value-added approach***

12. I had a call one time, where an organization called me, and they complained about the high rate of defects that that organization had. We actually did an analysis of the defects and asked questions like “show me those defects and let me see them. Let me see what is going on.” “Can we talk to some people who are doing this work or overseeing this work?” On the surface that it might be a skill gap, but there were some pretty significant system problems that prohibit people from doing their job correctly. ***Clients requested a technical training program to provide various skills / Expedited approach***

13. A client requested sales training from me and upon questioning, I learned that the product that they were trying to get everybody to sell, there was no incentive to sell it, but there were compensations to sell other products. So I am not sure it is a skill problem at that point, it could be a problem with incentives. I need to ask more questions to make sure it is actually knowledge or skill that is getting the way of performance before I responded to the request. ***Clients requested a technical training program to provide various skills / Value-added approach***

14. We had a new feature for our product called freeze-it, all of the 4000 agents have to know about it, have basic understanding about how it works, and they need to be able to answer the questions from customers, so we had to train all 4000 the agents on this kind of changes incessantly. The return on investment on actually training agents is really really tiny, but we are still going to do it because it is unacceptable for us to have a customer call and the agent not be aware that we have this functionality or understand how it works. ***Clients requested an awareness training program to explain on-going changes in the organization / Value-added approach***

15. I was responsible for conducting a quarterly week long, meaning 5 business days, training session on wireless communication technology. The audience for that training included members of our regional office staff, and members of management would take that same class to become familiar with the technical work that their people were doing. Most of them were not new to the organization but perhaps new to that role. Even though the employees who were taking that course were not new to the organization, the technology, the subject matter was relatively new to many people. ***Clients requested a technical training program to provide various skills / Congruent approach***

16. I had an employee who was interested in a leadership career development path within the organization. I knew that our HR department had some off-the-shelf training courses available, so I guided that employee first to some of the online or virtualized training that the company's HR department have. That employee came back to me and shared that it was very valuable, it helps give him exposure to some of the leadership topics within our organization that are pertinent if you were to continue following a path to become a management level person within the company. It helped him to make some decisions about what he wanted to do next in terms of his career development. ***Clients requested a managerial training program to support managers and supervisors / Experience-based approach***

17. Our organization was receiving concerns from our outside offices that people did not understand the wireless technology well enough to support the products and services, or deliver the immediate training to others, in other words, there is no "train the trainer" environment. I was involved in making the decision we would develop a wireless technology training program for the company that would be offered to the selected employees that were close to that work of supporting those products and services. I also helped coordinate some research that helped us to figure out which office needed the training the most based on their operational and technology needs. We implemented a classroom training to overcome the concerns as well as to establish a "train the trainer" program with a site visit to one of our vendors incorporated. ***Clients requested a technical training program to provide various skills / Value-added approach***

18. Our organization is currently in the process of implementing a process, which the IT world refers as a scrum and agile approach. So, we are in the process right now to make

some relatively large management decisions around what types of our work might fit in this new agile or scrum approach and managers, myself included, are being very deliberate about having our employees selected to get a training that consists of an industry level training provided by an outside vendor, and a training that touches on our companies' principle and organization-specific subject matters. I need to determine which of my direct report group need to attend and then setting expectations around attendance and what we expect you to gain from attending the training, making sure the folks are able to practice the training they received and applying it to their job. ***Clients requested an awareness training program to explain on-going changes in the organization / Congruent approach***

19. When there is a change occurred on the organizational level, as a manager, I would decide to send my fellow employees to a training, which was proper for the organizational change. I had a situation where the person who received two or three very important and key pieces of training ended up leaving our company, so from the standpoint while they were here, that training was of benefit to the company, but then when they left, it was no longer benefit to our company because that person was no longer working for our company but rather moved on to a different opportunity. ***Clients requested an awareness training program to explain on-going changes in the organization / Value-added approach***

20. When an analyst is pursuing becoming a manager at some point in the future, he will need to reach out to me to set up a formal mentorship. When I meet with the person who requests me as a mentor, I let them know the very first meeting I expect you to set up the agenda and let me know what the agenda is going to be ahead of time so I can prepare, and then we get together and go through it. I provided mentorship based on the demand and shared my expertise and experiences on how to navigate the organization as a leader, how to manage the transition from analyst to the manager and how to handle situations being one that is in charge. ***Clients requested a managerial training program to support managers and supervisors / Expedited approach***

21. I had team where we had very structured training. When a new team member joined the organization, he will need to work with a training coordinator for the first six months. The training for this new hirer will be very structured, required by the organization, almost like a syllabus to go through what they do, you know, one through 10 on the list to check off, and those are the things they need to do right off the bat. ***Clients requested an awareness training program to explain on-going changes in the organization / Congruent approach***

22. I had an employee named John. He was at a point in his career pursuing leadership in the organizations. Realizing that he had exceptionally strong background in both business and technology, as well as his personal life situation—he had a young family, I guided him with multiple options and analyzed the pros and cons of each option for him by

giving him input how he could best leverage his situation with specific training options. As a result, he has got into leadership within the architecture space, and it all worked out great. ***Clients requested a managerial training program to support managers and supervisors / Experience-based approach***

23. One of my employees requested to set up a six-month formal mentorship with me. I accepted it and became his mentor. I provided him insights on how to deal with managers and directors when you become a manager, however, due to the high degree of similarity we have, I really have not provided him a great deal of information that helped him develop to a manager. The lack of diversity in us made me feel like I was just repeating back to him what he already knew almost all the time. I felt like I should have pointed him to a source that would provide a more diverse perspective, relative to his view. ***Clients requested a managerial training program to support managers and supervisors / Experience-based approach***

24. Someone in our firm specifically chose me to be their coach, and I accepted the request, because that person wanted a different female manager perspective. Before I offered any career advice to that person, actually it was more challenging for me because I did not work with that person at all, I let her know that I could give her advice more on a personal and general level and I brought another person onboard in order to get her on the next level because the outsider had more insights on the career paths system that our firm is implementing. ***Clients requested a managerial training program to support managers and supervisors / Expedited approach***

25. We received increased calls because there was a higher number of accidents on farms because farmers will stock piling the corn, waiting to the price to go up, waiting for the ethanol demands to increase. We were confronted with an issue where there was a training need that was not what we anticipated, and we have more demands of classes on how to rescue farmers that were trapped in grains. After understanding why that was happening, we created a training program with firefighting on how to rescue someone who's trapped in the grain building, and also cooperated with the farm bureau of the state to help educate the farmers on how to prevent fire in the first place. We started about five years ago, and the farmers are interacting with firefighting before there is an emergency, so they get to know each other better before there is a problem, and possibly prevented a problem. ***Clients requested a training program based on perceived performance issues / Congruent approach***

26. During thanksgiving week, our institute would share a video on Facebook about not dropping a frozen turkey into a boiling pot of oil because it freezes up, because we anticipate an increase in house fire incident around thanksgiving. What we did is we plugged the same concept of public education to a different risk of problem that we are presenting, because that allowed us to create a program for audiences that we did not typically talk to before. If we want simultaneously to prepare the fire department to help

people, it also reduces the need for that help in the first place. If I can teach you a couple of things that you do not start with house on fire, the fire department does not have to go put it out. It is an idea that the fire service starts to embrace it to be more proactive, and prevent emergency as much as possible, instead of just being reactive and dealing with the emergency when it happens. ***Clients requested a training program based on perceived performance issues / Expedited approach***

27. A police officer shot at an autistic young man because at the time they did not know how to interact with people with autism. The legislators in Illinois introduced a bill to mandate an eight-hour training for all firefighters and police officers on how to deal with emergencies with people with autism. My job was to intersect with these legislators and to help them understand this might not be a good solution because a required eight-hour autism training would make many volunteer communities not able to have their fire department at all. I listened to the legislators, understood what their concerns were and based on my experience as an educator and a former fire fighter, I proposed a voluntary program that would be available online for on-hour and give emergency responders general information on what it might be like to interact with someone with autism. ***Clients requested an awareness training program to explain on-going changes in the organization / Experience-based approach***

28. We have an unexpected high number of incidents where an individual firefighter drove the firetruck into the side of the building. We identified the problem was the lack of firetruck training that we provided to the firefighters because we assumed all of our part time staff have been through such training with their home fire departments. After that, we decided that the in-person training of firetruck driving on the actual fire trucks we operate must be required for everyone even if people have been fire fighters for 40 years. ***Clients requested a compliance or safety training program be scheduled / Value-added approach***

29. My organization was called to develop a training program on how to put out fire in fields and farms, and we were told to get funding on ourselves. What I did was that I found out how much money the federal government was giving to Illinois to conduct this training, and I found out that only 10% of that got spent on training. A lot of the rest of it was spent on people who managed the money. Because I am an executive in my organization and I have fiscal understanding to know where the funding issue is, I was able to decide to go to one of those people [who managed the training funds] to ask for funding, and it was successful. ***Clients requested a technical training program to provide various skills / Experience-based approach***

30. I received a request from the Vice President of Finance in our company on how to use knowledge management in finance department, how to keep the content up to data and organized so people can find them easily. I had a meeting with the V.P. as well as some people in finance department to have a better idea of what the problem might be. I am not

sure if it is knowledge management as what the V.P. stated, my hunch is content management is what he needed, but I would like to put something together for next steps whenever they are ready, and then we could experiment more. Until we talk about this more, we do not know. ***Clients requested a technical training program to provide various skills / Expedited approach***

31. The director of sales requested a training on Microsoft Dynamics through email. Upon receiving this request, I had a follow up meeting with this person and asked more questions, including the learning needs and what they planned to do in terms of the training plan and developing the materials. I sent them examples of templates that we had as well as an instructional design guideline that we used and suggested that we need to emphasize reinforcement after the training is conducted. ***Clients requested a technical training program to provide various skills / Expedited approach***

32. Often time, our superiors would asked us to provide monetary or budgetary documentations for an upcoming period of time. I considered my capacity as a technology manager in assembling the complete budgetary document and realized that I needed to include my direct employees to help gather and analyze the information. As a result, informal training, sometimes would be an ad-hoc meeting, was usually conducted, and I trained my direct employees on the materials and step-by-step process that we were asked to adhere to. ***Clients requested a technical training program to provide various skills / Congruent approach***

33. We have employees requested training based on individual development needs and we can not prioritize all of the training requests of individual needs. We conducted an organization-wide needs assessment through focus groups and interviews. We gathered data from all business units and we consolidated that data and identify the top 3,4, or 5 skills that we need to drive development off. One of the needs we identified through this initiative is how to conduct high-quality presentations, which a lot of people have problems with. This skill is considered as "individual development needs". We consider that to be one of the things that we want to make sure that everybody has access to, is the ability to get additional training on high quality presentations. ***Clients requested a technical training program to provide various skills / Experience-based approach***

34. Somebody wanted to become really good at using the statistical program. We considered trainings on this skills as individual skill training, unless the skill is essential for using across the whole organization. For specific individual looking to specific things, we would suggest them to go external because we have already done a needs assessment and we have identified the key skills that we support, from that we determine what our core offerings would be. ***Clients requested a technical training program to provide various skills / Value-added approach***

35. Regulatory touch points are enforced on many activities that all agents on the phones. If an agent reopens a closed account because of its previous suspicious activity, one single charge go through that account after it is flagged for suspicious activity, that is $275,000 for every transaction. So we roll out training related any one of those regulatory touch points for every single time because the consequences of not doing so would be very high impact. We have actual real numbers of what would happen if somebody makes this error. ***Clients requested a compliance or safety training program be scheduled / Value-added approach***

36. We have learned that smoke has carcinogens in it and fire fighters absorb those carcinogens through the skin on their face in work, so there is a higher risk of cancer in firefighting than in other organizations. We decided to change fire fighters' behavior and make them use a baby wipe after they come out of the fire. We put up signs, says "remember to wipe your face", as an environmental cue or a prompt to remind people of what their right behavior is. ***Clients requested a compliance or safety training program be scheduled / Value-added approach***

37. We have collaborated with Motorola and they have engineers to make products that did not work with fire fighters and they did not understand that firefighters could not push little buttons when wearing fire gloves. I knew the learning theory proposed by Jack Mezirow that sometimes you have to have a disorienting event to learn. I worked with Motorola sales people to bring Motorola engineers to here in Champaign, dressed the up as firefighters, and let them experience the problems that their customers were having. It revolutionized the engineers' concept of what the problem was and what the customer needs. ***Clients requested an awareness training program to explain on-going changes in the organization / Congruent approach***

38. 70% of the people with heart stopped outside of the hospital, by the time they get to the hospital, it has been to long for them to get aestivated. If more people on campus knew how to use this and how to start CPR by the way, we have a much better survival ability. We thought there were 120 AED defibrillators on campus, but nobody was checking them. I went to negotiate with the chancellor and made the business case that the cost of not having people checked and trained on using AED could be much greater than the cost of doing the training. I received funding and created an application that mapped every defibrillator on campus and started training students on campus to perform CPR. ***Clients requested a compliance or safety training program be scheduled / Value-added approach***

39. We trained all the chemical response team in Hong Kong on how to teach out courses back in Hongkong to the national standard. We tried to do the same thing in Guangzhou, China but it did not work. We then learned that the fire department in Mainland China is military not civilian, so the same types of training did not translate. So I went to Mainland China to meet with the professors and people from the Chinese arm force

police academy to understand how the training fire officers in china different from training fire officers in the U.S. We now are having people going to Langfang twice a year, deliver classes, because we learned how to apply this process to the demands of the Chinese military fire department. ***Clients requested a training program based on perceived performance issues / Congruent approach***

40. There is an actual need for design thinking and people want class on that. To me, I think you can teach people the strategies of design thinking, but I do not think it is realistic to make them an expert with design thinking after a class. I think you have to give them a framework in context to apply that skill and knowledge. We created a program and learners can actually develop a minimum variable product (MVP) to apply the strategies learned into real-life application. After training we also employed retrospect to create a feedback mechanism for continuous improvement. ***Clients requested an awareness training program to explain on-going changes in the organization / Experience-based approach***

41. Another request that I got is for Oracle. Oracle is an enterprise software and they needed to do an upgrade. During the upgrade, people ask questions about how we are going to give the skills to the people who use it, what we do in terms of the training, what they need to know, etc. Here is a communication plan we use. We send this out when we do training. ***Clients requested a technical training program to provide various skills / Expedited approach***

APPENDIX M: CODING SCHEME FOR ANALYZING DATA

Coding scheme for analyzing data to address Research Question 1-3

Parent Code	Child Code	Descriptors	Example of excerpts
Clients requested a technical training program to provide various skills (15)	Critical Incident 1, 4, 7, 8, 12, 13, 15, 17, 29, 30, 31, 32, 33, 34, 41	Clients requested training for acquiring technical skills needed to perform at their job (e.g. operating and managing new tools, obtaining certification in their fields, on-the-job training/assistance for improving and learning technical skills, etc.).	
Clients requested an awareness training program to explain on-going changes in the organization (12)	Critical Incident 2, 6, 9, 10, 11, 14, 18, 19, 21, 27, 37, 40	Clients requested training of which needs were caused by internal on-going organizational changes.	
Clients requested a managerial training program to support current and prospective managers and supervisors (6)	Critical Incident 3, 16, 20, 22, 23, 24	Clients requested training programs provided by managers who were more experienced and knowledgeable. They seek to receive guidance in career development and other individual needs for professional and personal development.	
Clients requested a compliance or safety training program be scheduled (4)	Critical Incident 28, 35, 36, 38	Clients submitted requests for training that provides necessary education on laws, company-specific regulations and policies, and workplace and occupational safety.	

Clients requested a customized training program based on perceived performance issues (4)	Critical Incident 5, 25, 26, 39	Clients requested training tailored to their various needs. The training programs were targeted to solve performance issues that were caused by different external factors (e.g. cultural differences, time zone differences, language differences, etc.).	
Approved the training request without any changes (10)	• Approve employees' training (1) • Approve the training because it aligns with the employee's personal development goal (1) • Approve the training because it has potential value to the organization (5) • Approve the training because the employee would not be off duty (1) • Approve training if it is compliance training (1) • Do whatever is asked for (1)	Managers approved the training as requested by the clients.	"So as the owner of that particular work item, I can do whatever is asked for, so as a result, in an informal manner, which usually includes a, like a staff meeting, or an ad-hoc meeting, where that peer group would come together, I would present an overview of the subject matter, what is being asked of me, and I would provide informal training on that subject matter."

Approved the training request and suggested appropriate change management efforts to reinforce the results of training (26)	• Change management process (1) • Make a static training environment that does not affect by the user interface changes (1) • Non-training/change management process (3) • Proper change management efforts (8) • Build learning reinforcement into the workplace after training (2) • Include job aids to reinforce learning and assist learning transfer (1) • Incorporate hands-on practice to reinforce learning and learning transfer (8) • Solving practical real-life problems during training (2)	Other than developing the training programs as requested, managers included appropriate continuous change management efforts on the department and/or organizational level that helped consolidate the results of training.	"Once all these changes had been made in the system, [when] we know it was going to work that their objectives would be met once we train the new team in Bangalore, then we put together a change management process, if you will."
Approved the training request and gave immediate instructions on what clients should do (8)	• Give clear instruction on what the mentees need to do (4) • Send templates and instructional design guidelines to the client (1) • Point the clients to existing courses (3)	As a response to the requests for training, managers told the clients instantly and quickly about the next actions to fulfill their needs of training.	"When I meet with anybody who seeks for leadership mentorship, I let them know the very first meeting I expect you to set up the agenda, I expect you to let me know what the agenda is going to be ahead of time so I can prepare, and then we will get together and go through it."

Approved the training request and directed clients to multiple existing programs (6)	• Inform the employees available internal training resources (3) • Point the clients to existing courses (3)	Managers offered multiple suggestions and recommendations in response to the client's request for training. Based on the nature of the requests, managers listed or helped clients identify available options of training that can fulfill the needs of the clients.	"I know where the resources are myself, I can say "start with these", a lot of stuff is on our intranet, if there is something out there that I think they could start with first, or if it is conceptually stuff, we have some on demand CPE that they can go to do some of the additional training."
Did not approve the training request for a variety of reasons (11)	• Not offering all training to everyone due to incapacity (1) • Suggested other self-learning options to replace the training that does not have direct values to the organization (3) • Training is not appropriate to solve the problem (3) • Offer alternative options that yields better results (1) • Guide the employees to the appropriate person who has more proper knowledge (3)	Managers responded to clients with disapprovals of the training requests. In some cases, for example, managers who have had training responsibilities did not have the capacity or sufficient knowledge to develop the requested training, or the training requested by clients was not aligned with the organizational strategic goals or yielded the best outcomes, or the training requested by clients was not the proper solution to the problem identified, managers would offer suggestions, such as self-learning options, alternative options with greater outcomes, resources that had the sufficient knowledge, etc, to fulfill clients' needs.	"If somebody wants to become really good at using the statistical program, that is sort of very individualized skill, unless [it is] for using across the whole organization. Specific individual looking to specific things, we would suggest them to go external because we have done a needs assessment and we identify the key skills that we need to support, from that we determine what our core offerings are."

Managers made decisions based on whether the requested training programs would support the strategic goals and missions of the organization. (26)	• Conduct needs assessment to identify training needs that align with business strategy (2) • Prioritize training requests if they align with the business strategy (3) • Evaluate the decision based on the alignment between the value of training and company's strategies (2) • Define the problem from the customers' perspective (1) • Follow the structural practice in the organization (3) • HRD function is at high decision-making level in the organization (8) • HRD is connected with business strategy (3) • Direct supervisor request training that cater to the organizational changes (2) • A large-scale training in the department on organizational process (1) • Transfer climate within the organization (1)	Managers approved and prioritized training requests that were substantially aligned with business strategies and outcomes.	"That is the first question because many time people want training, but it is not related to a business outcome. Tying it to business outcome helps you establish some revenue generation or some impact to PML because you are looking at from the business standpoint." "Instead what we are going to do is we are going to focus on capabilities that are going to drive the business in the way that is the most aligned to the business strategy."

Managers made decisions based on whether the requested training programs would address clients' needs (48)	• Ask questions to identify clients' needs (16) • Gather information on client' expectations (5) • Gather information to identify the problem (10) • Identify problems with the provider of the training (2) • Training has to be aligned with clients' needs (3) • Ensure identify the real problem not just the symptoms (3) • Using survey or feedback form to identify the problem (3) • Identify the current status of using the process (2) • Define the end goals upfront (3) • Used the end goals decided upfront to evaluate the effectiveness of the decisions (1)	Managers identified clients' needs and analyzed the problems that needed to be solved prior to respond to clients. They approved the requests if the requested training was truly what the clients asked for and also solved the real problems.	"I would ask the manager why she or he wants to raise the request because I think the purpose is very important. What goals or objectives do they want to achieve through the training? So I will understand their purpose first."
Managers made decisions based on whether the requested training programs would generate value for the organization (47)	• Determine if the training has return on investment (2) • Determine the value of the training before approving it (7) • Forecasting ROI to determine the value of training (2)	Managers carefully calculated the financial value of the requested training. If the value of the training is in intangible form, managers would transfer the intangible value into financial impacts. Managers who examined the value of requested training believed that a training must yield value	"Now there is a minimum expectation that "I am not just wasting the organization's money" whether that will be on their salary while they are there taking the training or whatever we pay for the training itself. I have an expectation that the organization is not just throwing the money away to just have them spend time

	• High-impact consequences if do not do it (3) • If training benefits personal development (2) • Outcomes of training affect compensation (1) • Training has to have values back to the organization (2) • Making decisions based on the cost of the training (5) • Prioritize training request based on the value (5) • Evaluate the effectiveness of decisions based on time cost (1) • Decisions made based on audience size, the urgency and impact (2) • Making decisions based on the cost of the training (5) • Make training decisions based on time (4) • Decisions made based on availability of resources (4) • Funding (2)	to the organization for the requests for such training to be approved or further decision-making to be processed.	on something that they do not absorb." "As a manager, part of my job in addition to making sure people had the training they need, there is also a balance of making sure that the cost and the expenses of training has a return on investment and it is within the company's guidelines to spend whatever that amount of money, so I would say cost and expenses factor in to those decisions."
Managers made decisions based on whether the requested training programs benefited the trainees to	• Employees requested training because of new tools and skills improvement (1) • Employees requested on-the-	Managers' responses to clients' training requests aimed to provide various essential skills and knowledge for the trainees to have improved performance at their job.	"One of the key things will be identifying the employees who would benefit the most and the soonest from attending. By that I mean I have responsibilities for a group of employees that are

better execute their job duties (53)	job training/assistance to perform their work (1) • Determine who attends the training (1) • Determine who to attend the training based on employees' job duties and the content of training (1) • Prioritize employees whose job duties align with the training content (3) • For employees to be able to perform their work (2) • Provide essential knowledge for the employees to perform their work (8) • Recipients of the training can improve productivity (1) • Prioritize employees whose job duties align with the training content (3) • Evaluate the effectiveness of decisions based on job performances (7) • Perform job analysis to determine job duties changes (1)		implementing a specific project, and these particular practices that are taught in this training have a direct correlation or influence to the project work or the project deliverable they are responsible for, so I made a decision that group will be my first group of employees get trained and have the other training resources to them so that they can be very quickly begin applying what they have learned to their current day-to-day job." "…a group of employees whose work does not fit that model, or we are not sure, it might not fit the model, and as a result, we would not plan on having them attend that training right away. We would prioritize them lower than other employees who would benefit from it sooner."

	• If training benefits personal development (2) • Knowing the learners' characteristics and current knowledge on the subject matter (12) • Learner-centered (2) • Determine employees' strengths and weakness (1) • Ask question the recipients of training to identify problems (2) • Request for training but the problem might be in the organizational structure (1) • Using organizational structural criteria of performance to judge the effectiveness of training (1) • Positive employees' feedback to justify the effectiveness of the decisions (1) • Check the quality of the final product to judge the effectiveness of decision (1) • Define the ideal performance level before training (1)		

Managers made decisions based on whether the requested training programs were advocated by the stakeholders (48)	• Decisions made based on consensus (12) • Use a feedback mechanism that involves all the stakeholders (16) • Keep all stakeholders involved and engaged (9) • Subject matter expert was involved in the decision-making process (1) • Identify the stakeholders before making training decisions (1) • Working with training coordinators to train new hirers (2) • Using external vendor if it is an industry level training request (3) • Using internal trainers if it is company specific knowledge request (4)	Managers included stakeholders (e.g. subject matter experts, training coordinators, external vendors, internal trainers, leadership, etc.) in the decision-making process to obtain consensus for consolidating the effectiveness of decisions.	"We do have this consensus building [structure]. It is not a singular autonomous individual saying, "I am going to develop this person or this team", so we get to triangulate from multiple people on what the person needs."

Managers made decisions based on whether the requested training programs were consistent with managers’ past experience and knowledge in HRD (21)	• Refer to best practice to make decisions (3) • Refer to research study to make decisions (6) • Use past experience to make future decisions (1) • Decisions made based on education background (1) • Decisions made based on previous experiences (4) Training has to be aligned with clients' needs (3) • Intuition developed based on years of work experience (3)	Managers retrieved past sources of information to help them make decisions. They referred to their past experience, outcomes of previous decisions made in a similar situation, theoretical models and knowledge in HRD and decision-making, to make current decisions in response to clients’ training requests.	“One is, we used Kirkpatrick’s level 1 and 2, for student feedback. I wanted to use 3 and 4, but you do not have a good way to do that yet. “ “These are things that I have subject expert matter knowledge of because I was a firefighter and a nurse, but the organizational development and the strategic HRD part is because of my education from the College of Education.”

Other (22)	• Gather information before making effective decisions (2) • Gather information on available resources (3) • Successful trained the trainers (1) • Cultural differences influence training decision-making (3) • Decisions made based on individual context (6) • Decisions made based on maturity of the team (2) • Make decisions based on logistical details (1) • Prioritize training request based on timing (2) • Keep open communications about changes (1) • Staff meeting or ad-hoc meeting (1)		"Learning how that system is different, somebody is going to be a fire officer in China and they will have that job for four years, not 20 like here in the U.S. and you are not going to start out as a fire fighter, and then become an officer. In China and most of Europe, officers are selected separately from firefighters. So that is another difference that we have to make sure our classes have flexibility."

Coding scheme for analyzing data to address Research Question 4

Theme	Operational Definition
Expedited Approach • Approved the training request without any changes • Approved the training request and gave immediate instructions on what clients should do • Clients requested a compliance or safety training program be scheduled	Managers made decisions to ensure the clients' requests were fulfilled without delay.
Value-added Approach • The requested training programs would support the strategic goals and missions of the organization • The requested training programs would benefit the trainees to better execute their job duties • The requested training programs would generate value for the organization • Clients requested a technical training program to provide various skills • Clients requested an awareness training program to explain on-going changes in the organization	Managers made decisions based on the perception of gain from the requested training.
Consensus-based Approach • The requested training programs were advocated by the stakeholders • The requested training programs would address clients' needs • Clients requested a managerial training program to support current and prospective managers and supervisors	Managers made decisions based on stakeholders' consensus on the need for the requested training.
Experience-based approach • The requested training programs were consistent with managers' past experience and their knowledge in HRD	Managers made decisions based on past practice or professional literature in HRD.