
Managerial Accounting and Changing Models of Administrative Behavior: New Methods for New Models

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ABSTRACT

THE PURPOSE OF THIS ARTICLE is to provide a description of the model of administrative behavior found in agency theory as contrasted with earlier models of administrative behavior, and to introduce new managerial accounting techniques that can be used to evaluate upper-level administrators in a nonprofit organization such as a library. In addition, the article outlines several problems with the orientation of managerial accounting as a viable means of evaluating higher-level administrators through the use of the administrative model described in agency theory.

INTRODUCTION

Managerial accounting is concerned with collecting information for use in making operating decisions by higher level managers within a library system. These library managers have the authority to make changes in the manner in which library functions are performed. Managerial information can be historical data, or it can be estimates collected for making decisions that affect the future. In either case, information is collected and presented in a format that is helpful to the operating manager in making decisions. In preparing managerial reports, there is little concern with the manner in which financial statements are prepared for the external public or the board of directors. External financial reporting does not influence managerial reports prepared for internal use.

Managerial accounting can encompass three basic areas in the

library. Accounting information can be prepared for cost control, performance evaluation, or making decisions that affect the future. The major emphasis in this discussion is on the performance evaluation of higher level administrators. But it should be noted that each of the three areas of managerial accounting overlap, as successful cost control can affect one's performance evaluation, and decisions that change the future course of events eventually impact on one's performance record.

Basic to recommending a performance evaluation technique is a behavioral model of the executive or administrator. Relatively recently, in agency theory, the concept of the administrator has been redefined. As such, agency theory impacts on the performance evaluation methods used in managerial accounting—i.e., post- versus pre-agency theory methods. Most methods used in managerial accounting for evaluating administrative performance predate the development of agency theory, and little development of new methods has occurred since administrator characteristics in agency theory have been set forth. Therefore, most of the managerial methods used for performance evaluation do not incorporate the concepts of managerial behavior as described in agency theory. As a result, the actions and decisions made by upper-level administrators cannot be fully analyzed to determine if administrative behavior is oriented toward furthering the manager's interests at an unnecessary cost to the nonprofit organization or if the manager is genuinely attempting to achieve organizational goals.

Under agency theory, it is assumed that the managers—i.e., the agents—of an organization have a tendency to be primarily concerned with their own welfare. This means that the objectives of the managers and the objectives of the organization may not coincide. Although this may be a disagreeable assumption, anyone who has used library supplies for personal purposes or who is aware of others doing so has contributed to an increase in agency costs or experienced the basic premise of agency theory. Agency costs are equal to: (1) the costs incurred in monitoring managers to ensure that they are pursuing the goals of the organization rather than their personal goals—i.e., the costs of auditing the organization; (2) bonding costs which are the costs of purchasing insurance bonds that will reimburse owners if losses should occur because the manager pursues his/her personal goals rather than organizational goals; (3) the actual losses which the organization suffers due to the manager pursuing personal goals—i.e., the loss of library supplies. In a library, monitoring costs and losses are the two major agency costs to consider.

Briefly described, agency theory views the organization as a series of contractual relationships between principals (owners) and managers (agents) each of whom is motivated by self-interest. The contract between these two groups is designed to maximize benefits to owners within the constraint of the manager's self-interest goals. Agency theory is concerned with employment contracts, determining who has access to

organizational information, and the welfare of organizational members. Agency theory assists in identifying increased operating costs to owners—i.e., users or receivers of library services—due to negative behaviors exhibited by the managers in charge of the organization. Agency costs include the costs of monitoring the activities of the managers of the library—audit fees for example—to ensure that the greatest level of service is provided. Agency costs also arise from losses in resources that occur because managers are more interested in fulfilling their personal objectives rather than the organization's objectives. These additional costs reduce the level of services the library is able to provide out of a limited resource base.

MODELS OF ADMINISTRATOR BEHAVIOR

Two major works describe administrative behavior prior to the development of agency theory. The first description was made in a series of lectures delivered by Chester I. Barnard who described an ideal executive as an economic rational man. The second significant contribution to this area is the work of Herbert A. Simon which replaced the model of the administrator as a completely rational man with a description of the administrator as a man with "bounded rationality." In the bounded rationality model, the administrator or executive did not have the ability to reach the best solution to a business problem. There were limits to the executive's abilities.

In 1938, *The Functions of the Executive*, a collection of Barnard's lectures, was first published. This work describes the job of the executive and identifies the characteristics essential for executive success. One aspect of this work discusses the moral responsibility of the executive. Essentially, moral responsibility determines the manner in which an executive acts.

One important part of this moral fabric is identified with the organizational environment. Yet, as various codes of conduct internalized by the executive become more complex, there is likely to be more conflict among these codes. An organizational code requires an individual to submit to the authority of the organization in achieving the organization's goals. Yet personal codes can conflict with the organizational code, and this can result in a failure in the moral responsibility of the executive or possibly separation from the organization. Barnard (1972) identified the conflict of goals that can exist in the organization when he stated that, "frequently the leader believes his personal morality and that of his organization are identical when they are not" (p. 283). Although Barnard was aware of the conflicts that could exist between personal codes of conduct and organizational codes, he stopped short of describing the dysfunctional behavior which could arise since his main concern was describing the ideal executive.

The ideal executive was loyal to the organization and believed that through achieving organizational goals, personal goals would also be

achieved. Barnard's abstraction of the ideal executive represented someone with the ability and skills to succeed. There was little question about the executive's skill or abilities to reach the best managerial decision.

Simon (1959) took a different approach to describing the executive. He viewed the executive as "a satisficing animal whose problem solving is based on search activity to meet certain aspiration levels rather than a maximizing animal whose problem solving involves finding the best alternatives in terms of specific criteria" (p. 277). Simon did not assume the executive would always reach the correct decisions. Simon recognized that no one can find *the* optimal solution for the whole decision problem. Usually decisions are made without considering all alternatives or the interrelatedness of the decision's effects. Simon recognized that there were limits to the decision-making process. These limits are imposed by the executive's skill or mental abilities, values, and the amount of information available. Simon's executive operated within certain bounds of rationality. This executive is not the ideal rational executive described by Barnard. Simon's executive makes decisions that are adequate or pretty good but not the best.

The writings of these two authors on administrative theory differ in their basic orientation. Although Barnard was aware that not all executives could be the ideal executive, he directed his lectures toward describing that ideal. Implicitly, this executive could reach the best solution to a managerial problem. Simon did not concentrate on the ideal executive, but rather wrote about the executive who could never reach the ideal solution because he readily accepted merely satisfactory solutions.

Both Simon and Barnard accepted the abstraction that, once an individual decided to participate in an organization, personal considerations would have little effect on the administrator's behavior within a defined area of organizational activities. Agency theory, however, does not accept this view of the administrator. In agency theory, a more descriptive model of the administrator is developed. Although the agency model may appear as an extension of Simon's model of administrative behavior, it incorporates political and new behavioral considerations not found in either of the other models (for a description of agency theory see Fox [1986, pp. 36-38], Thornton [1984; 1985, pp. 93-100], and Jensen & Meckling [1976, pp. 305-60]).

Unlike a descriptive model, a normative model incorporates the best analytical techniques in solving a managerial problem, but it does not incorporate variables such as the political environment and behavioral considerations which are very real factors to a nonprofit administrator (Tinker et al., 1982). The basic premise of agency theory is a descriptive model in which the organization is managed by someone other than the owner, with the result that such managers will tend to pursue their self-aggrandizement goals rather than acting strictly in the owners' interests. These organizational relationships are assumed to be

bound together by a series of contractual relationships. In the simplest contractual relationship, a contract is signed between the owner and the manager for the performance of some service. At the same time, decision-making authority is delegated to that manager by the owner.

In nonprofit organizations, the manager or agent is the director, and the owners are either the groups that provide monetary resources or, in some cases, the group which is receiving the service. In a library, an agency relationship can exist between the director and the board, the director and the government entities providing funding, and the director and the service groups. In any case where authority or work is delegated, the agency relationship—i.e., a contract—is assumed to exist. Therefore, when the director delegates authority to a department head, agency concepts apply to that relationship as well.

In these relationships, it is assumed that the managers or agents are trying to maximize the benefits for themselves. Under agency theory, the concept that the manager foregoes personal considerations in favor of organizational goals is not accepted. An important principle of agency theory is that individuals possess unequal amounts of operational information. The agent has more information about actual operations than the owner and can therefore make decisions for personal benefit without the knowledge of the owner.

Under agency theory, consideration is given to the opportunism of managers in charge of departments and organizations. Opportunism means that a manager will select the solution to a problem that is in his/her best interest but not necessarily in the best interest of the organization or the group to whom the organization is providing services. For example, the best solution for a manager may mean exercising the least amount of effort—i.e., shirking. The lack of congruence between shirking and service goals should be a concern in a library. To assume that a manager's attitude toward accepting higher levels of career risk in order to provide better services, the manager's personal ambition, or the prestige attendant upon a position are not factors in the decision-making process is unrealistic. Yet even if these factors are recognized, it is difficult to assess their impact on the "hard" data in managerial reports.

It should be noted that a great deal of the so-called "hard" data in managerial reports are based on estimates which in turn may be biased due to behavioral effects, but this bias is difficult to detect. Because it is assumed that the manager in direct control of an operation has the best information about the situation, it is difficult for a supervisor or others to determine if the best estimate is really being made or whether the estimate has been biased to make the manager look better or to elicit more resources for the facility. The estimates that managers are called upon to make can relate to the time needed to finish a project, the personnel required, or the amount of use a new service will receive. The degree of personal bias introduced into these estimates is difficult to

isolate as evaluative information is only received after the action has been implemented—sometimes long afterward if ever.

The administrator who contrives may misappropriate organizational resources for personal use or may simply make decisions that further personal interests and waste organizational resources in the process. As an example, consider the administrative perks that might be available at some nonprofit organizations such as free long-distance telephone calls or travel reimbursement. The major question is "Are these organizational resources being consumed for personal use?" Personal consumption can take the form of vacationing under the guise of conference attendance or using free long-distance telephone service to call family members. In a library, misappropriation of organizational resources by managers occurs when library equipment is used for personal reasons for extended periods, when deaccession of books occurs in order to use these volumes in the home library, or when library personnel are used to complete personal projects for an administrator.

Behavioral contrivances can take the form of enhancing the status of the administrator without any commensurate benefit to the organization. For example, in a period of fiscal austerity, an administrator may use current expense money for an extravagant Christmas party which coincides with the administrator's birthday and includes arrangements to fly distant relatives in for the celebration. As another example, assume that a library director is on a highly upward career track. In accepting a new position, this person is mainly concerned with how the accomplishments on the new job will impact the next promotion. Since the director's accomplishments are all oriented toward building a short-term track record, the decisions he/she approves are only those which enhance that short-term performance record. For example, computers may be installed so that the director can list the development of a computer initiative on his/her résumé. In implementing this initiative, the cheapest computers are purchased, and, as a result, there is no maintenance agreement, little software, or no technical support. The computers are of little real use to the staff or the public. Worse yet, they will have to be discarded after two years of use. Yet this is not important to a library director who can list the computer initiative on his/her résumé and move on to a new higher-paying position before the actual nature of the computer initiative becomes apparent. There is disagreement in agency theory as to whether the job market is highly informed enough to act as a self-regulating device on managers who exhibit this behavior (Williams & Findlay, 1983, p. 44).

In managerial accounting, one area of continual analysis is the evaluation of administrator performance, but the abstraction found in Barnard (1972) and Simon (1959) concerning managerial behavior remained the basic underlying assumption—organizational resources were not consciously consumed in the furtherance of personal goals and self-aggrandizement. Also, implicit in Barnard's lectures was the

assumption that the manager could reach the correct decision. In contrast, Simon assumed that the manager was unlikely ever to reach the optimal solution to a problem because of his/her limited abilities and skills. More recently, in agency theory, the manager is conceptualized as an individual who is mainly interested in satisfying personal and not organizational goals. Administrative behavior in these three models spans fifty years and shifts over time from Barnard's view of the ideal executive, to Simon's view of a marginally competent executive, to agency theory's view of an executive who is largely oriented toward self-interested goals which generally do not correspond with organizational objectives. It is difficult to determine whether this change in perspective is a reflection of a change in society—i.e., the “me” generation—or the realistic recognition of characteristics that were always present.

But when agency theory is introduced into managerial accounting, new cost-effective techniques need to be developed to monitor self-serving managerial behavior, and the increased costs of this monitoring must be continually balanced against the wasteful loss of organizational resources. The agency model provides a description of managerial behavior that has a direct impact on the value of managerial accounting information. For example, managerial accounting information collected to evaluate performance is not cost free; therefore, it should effectively identify self-serving managers. If managerial accounting information used for evaluation purposes, especially information based on pre-agency concepts, does not assist in identifying the self-serving managers described in agency theory, the cost of collecting this information is also a waste of organization resources. Agency theory forces practitioners to place a value on managerial accounting techniques with regard to a defined objective.

Even if it is agreed that managerial monitoring should be instituted, it is still difficult to monitor administrative behavior in a non-profit organization. For example, if the director of a library is sitting behind a desk reading newspaper comics, how is this observable? And is this behavior decreasing productivity or providing a break after which productivity will increase?

Although techniques that have been used in the past may be adaptable to agency theory, they cannot simply be applied to observed practice without questioning their value (Baiman, 1982, p. 206). It should be noted that many of these older techniques were directed at providing Simon's manager with information to make better decisions and not directed at identifying self-serving behavior. The next section is concerned with introducing two new managerial accounting techniques that are specifically directed at incorporating agency theory into managerial accounting. These methods are limited to evaluating the performance of higher level administrators.

AGENCY ACCOUNTING TECHNIQUES

In agency theory, two general behavior patterns can be described as

exhibiting self-interest above organizational interests—shirking and behavioral contrivances. Shirking is exhibited by minimizing work effort. The second pattern occurs when the manager contrives to place self-interest above organizational goals. Contriving behavior occurs when actions are taken that are not in the best interests of the organization or when actions are not taken when they should be. Managerial accounting concentrates on several, but not all, aspects of this dysfunctional behavior. In detecting shirking, managerial reports are useful if the work is a highly structured activity such as book shelving or cataloging (Tiessen & Waterhouse, 1983, p. 256). Managerial accounting is less successful in detecting shirking when the work activities are not highly structured as is the case with most functions performed in higher level administrative positions. In these cases, there is imperfect data about the level of effort expended, and here the tools of managerial accounting have not worked as well.

Nonetheless, managerial performance reporting can highlight shirking and behavioral contrivances. Managerial accounting techniques oriented toward measuring behavioral contrivances by administrators are particularly successful in measuring the results of activities that have been completed. These managerial actions are recorded by the accounting system, and the costs associated with them or the level of services they provide can be determined. In the prior example of the library director who instituted a "computer initiative," the cost of the equipment is recorded, and it is a matter of proper and timely reporting to judge whether or not the service provided is adequate.

But, as Moliere said: "It is not only what we do, but also what we do not do, for which we are accountable." Managerial accounting has more difficulty in providing timely reports about administrator actions that were *not taken*. There is less accountability for actions not taken, and, when it is reported, there is usually a considerable time lag between the event and the report. For example, the effects of lack of maintenance on a facility—i.e., leaking roof, cracked pipes—are usually reported when water damage becomes apparent and this may be years after maintenance was curtailed. Timely reporting of maintenance expenditures is important to identify quickly the higher administrative level where the responsibility for the decision is located.

Efforts to correct these reporting weaknesses and to provide better managerial information increase costs. Collecting information to monitor behavior is not cost free. The question that remains is how to best incur these additional monitoring costs? It has been suggested that administrative compensation packages be designed so as to reduce monitoring costs (Fama, 1980). Such contracts allow an agent to share the output—i.e., risk sharing—of the organization in a way that provides congruence between the goals of the organization, its owners, and the agent. This arrangement allows the manager to share not only benefits but also the risks of running an organization. This method,

although acceptable in a corporate environment, is difficult to apply effectively in a library setting where compensation is set at a fixed budgeted amount.

Similar suggestions have been made to control shirking behavior. These recommendations have been applied on budgetary slack—an aspect of shirking. Budget slack occurs when there is more money allocated to an operation than necessary. As a result, it is not necessary to be concerned with the efficiency of operations. It has been suggested that budget slack can be eliminated by using participative budgeting and pay schemes tied to the budget (Chow et al., 1988). This method may have implications for nonprofit organizations, but the results are preliminary and difficult to implement.

Both of the earlier suggestions attempt to reduce monitoring costs by relating them to pay schemes, but a nonprofit organization, such as a library, provides fixed compensation to its employees. In addition, many employees may be tenured. Therefore, monitoring costs in a nonprofit organization need to be kept to a minimum by using information about the activities of higher level administrators that can be easily collected.

There are several suggestions and ways to incorporate agency concepts of administrative behavior into managerial accounting without incurring excessive expenditure. These methods are concerned with monitoring administrative shirking behavior or behavioral contrivances that are associated with actions not taken by higher level administrators rather than with those implemented. These are: (1) performance audits; (2) recording deferred items; and (3) value lost determinations.

Performance Audits

A performance audit differs from the annual financial audit performed by a certified public accountant (CPA). In the financial audit, the CPA checks for reasonable assurances that the financial statements prepared by the nonprofit organization comply with proper accounting standards for external reporting. Unlike a financial audit, a performance audit can either have a management or a program orientation. A management audit is performed to reasonably ensure that operations have been carried out efficiently and economically. A management audit investigates any of the activities conducted in the organization—from purchasing equipment and supplies to evaluating expenditures on interviewing candidates for a new library position. Even gas purchased for a bookmobile could be analyzed to determine if it was purchased from the most economical source.

A program audit, the second type of performance audit, determines whether the specified program objectives have been accomplished as prescribed. A program audit is conducted to determine if prescribed library policies were carried out, and if they achieved their intended results. The program audit lays more emphasis on program effectiveness.

Performance audits provide the means to integrate the principles of agency theory into management reports. In a library, it is often difficult to determine if management is shirking on the job. One factor in making this judgment is to find how successful management is in following policy initiatives. Policy initiatives can be established by the board for higher-level management or they can be set by higher-level management for the mid-level managers to follow. A performance audit should provide evidence as to how well management is performing. Yet it cannot be said that the negative behaviors described in agency theory will be clearly highlighted by the *typical* management or program performance audit, but the suggestions made in this article for changes can assist in identifying them. With these modifications, performance audits can significantly contribute to identifying administrative shirking or behavioral contrivances.

If a library is part of a state and local government, a performance audit may be performed for the library by the internal auditors who work for the state or local governmental unit. In the federal government, the agency responsible for performing performance audits is the General Accounting Office (GAO). Many states have similar agencies which are responsible for a performance audit. Therefore, it may be relatively easy for a library board to request that a performance audit be conducted, and it may be a cost free service for the library.

Recording Deferred Items

The main emphasis of managerial accounting is reviewing actions that were taken by managers. For example, if a new program is started, cost data on that program are analyzed in great detail. Managerial accounting also helps in making choices about future-oriented decisions as when it is necessary to choose between two types of similar equipment. But managerial accounting does not deal well with the impact of actions not taken. When no action is taken to maintain assets, managerial accounting does not identify this decision in a timely report. When no action is taken to train employees in the latest technology so that better services can be provided, this is not reported. Obviously, contrivance behavior can be related to actions not taken especially when a calculated decision is made not to take action. In many cases, managers should be held accountable for decisions they did not make just as they are held accountable for those they did. In the United States today, calculated decisions were made not to maintain state and local government infrastructures, and as a result bridges and roads are collapsing. Suddenly the public is faced with the choice of spending hundreds of millions of dollars to repair these facilities, and no managerial report showed, at the time, that a calculated decision was made to forego maintenance expenditures on these facilities. Managerial information should provide information to the board and to the community about

the choice—i.e., no action—made by nonprofit managers at the time the choice is made.

The same problem can exist within a library if its facilities are not properly maintained. One common problem with budget cuts is that the costs allocated for maintenance are the first to suffer. Maintenance cuts made in order to achieve other policy objectives are likely to go undetected in a typical performance audit. Therefore, it is suggested that reports be prepared, either in a performance audit or as part of the managerial accounting system, to show clearly expenditures required for maintaining assets in good working order. These amounts should be compared with expenditures actually made to determine variances.

Information from vendors should be available regarding the amount of yearly maintenance charges needed to properly maintain equipment and other assets. Maintenance charges for properly maintaining capital assets such as buildings and vehicles can be estimated. Using these data and the amounts actually spent, a yearly deferred maintenance charge can be calculated. The concept of deferred maintenance is different from depreciation. Depreciation involves allocating the cost of an asset to the various time periods that are benefited by the asset. Deferred maintenance, on the other hand, is equal to the difference between the amount of maintenance that is actually expended on an asset and the amount that maintenance guidelines indicate should be expended on the asset. If less is spent than should be expended, the difference between the two amounts shows the amount of curtailed maintenance expenditures. The yearly balance in the deferred account decreases or increases depending on whether there was a positive or negative difference between the annual amount spent and the amount that should have been spent. If the amount of curtailed maintenance expenditures is increasing, it is likely to be a sign of prematurely deteriorating assets.

Over the short term, it may be possible to curtail maintenance expenditures and use that money for new initiatives in the library. Such efforts make a library director appear to be a dynamic leader. If the director is able to find a new position before deterioration becomes apparent, these problems will be passed on to his/her successor. In order to prevent facilities from deteriorating to the point where they have to be prematurely replaced and to detect this type of administrative contrivance behavior, deferred maintenance should be clearly reported. Reduction or curtailment of maintenance expenditures is an example of actions not taken by management, and one that is not reported on a timely basis in traditional managerial accounting.

Reporting on the level of asset maintenance is suggested as a means whereby one type of contrivance behavior can more easily be recognized. It may be that a manager has to make a choice between drastically cutting maintenance or services, but, regardless, this information should be known. It is likely that current savings in maintenance costs

will result in unanticipated increases in future costs. The issue of maintenance is as important for the employees as it is for the equipment and buildings. Human resources—one of the most important assets of a library—can deteriorate almost in the same way as physical resources—e.g., obsolescence of skills. Unless funds are allocated to maintain the skills of personnel through seminars and workshops, it is extremely difficult to introduce new technology or methods in the library. Therefore, there is an annual maintenance charge for human as well as physical resources.

Value Lost Determinations

Value lost determination is another method that can be used where it is difficult to measure administrator input and monitor his/her activities. It is specifically directed at actions not taken by an administrator as is the reporting of deferred maintenance. Value lost determination is not a method to use with those employees who process books, work case by case, or where output can be clearly seen and measured. It is a procedure to use in making a determination of the value lost from lack of administrator input. Lost value may occur because of shirking or possibly misdirection. In making a value lost determination, one asks, "Is there any value lost to an operating activity because an administrator did not become directly involved in the decision process?" Value loss relates to losses to the public or the organization in terms of service levels. In other words, if an administrator had been directly involved in problem definition, identifying choices, and final selection of a solution to a problem, would better results—i.e., service levels—have been the consequence? The question is not directed at determining that the *best* solution would have been reached, only a better solution to the problem. Although it probably should not be assumed, it is assumed that administrator expertise and input to a problem leads to better problem resolution. With this assumption, the question can be answered in two ways.

The first answer is, "No value was lost"—i.e., no value would have been added—from administrator input into the problem. For example, if the administrator had no input into the work activity and the work activity was completed successfully, then the answer is "zero, no service value lost." In the day-to-day decisions that are made in purchasing books in a large library the director has no daily input in the selection activity, and the books are properly purchased. Therefore, the value lost from not having the director influence the choice of books or the vendor is zero. There has been no loss in service value to the public from the books that were purchased. The administrator would have little impact if he/she were involved in the book selection process.

The second possible answer to the question is, "Yes, value was lost" in problem resolution because the administrator was not involved in the decision process. Information available to the administrator could have resulted in a better decision—a decision resulting in higher service. For

example, in planning for a new library annex, if the structural decisions are left to the architecture firm with only minimum input from the library head, value lost could occur. For example, if it became apparent that books to be reshelved in the annex had to be wheeled outside because escalators, the only access from the main building, made it otherwise impossible to effectively take them into the annex, the service value of the annex has been reduced. There is an actual loss in the service value of the library annex due to lack of administrator input. Again, it is being assumed that with direct top-level administrative input better results are achieved. This analysis is directed at identifying shirking and not incompetence. Furthermore, the assumption that the contribution of a top-level administrator results in better decision analysis does not violate Simon's concept of the administrator as one who does not seek the best solution but only a satisfactory solution.

Value loss analysis is directed at identifying actions not taken by an administrator—those areas without administrator input. It analyzes the operating decisions in an organization to determine if they could have been better made with administrator input. It should be noted that this is only part of the analysis of administrative functions that needs to occur because performance evaluation must also determine where administrator's efforts are made as well as where they are not. The second part of this administrator evaluation question is beyond the scope of this article as the orientation here is in identifying nonaction on the part of the administrator.

A typical cost accounting system ignores the problem of where higher level administrator input is directed. For example, the typical cost system allocates overhead costs such as director's salary to "production" functions—i.e., reference or circulation—within the library to calculate the full cost of operations. It is assumed that the director has a direct impact on all departments. Under the typical cost accounting system, a director's salary would be allocated to all departments in a library on some reasonable basis such as number of employees in each department. Leimkuhler and Cooper (1971) have discussed overhead allocation in libraries. Overhead allocation can be used to determine the full operating costs of these departments. But if it is found that the functions of an administrator do not directly provide a service value to these departments, it seems misleading to assign the director's salary to them. It may be that this administrator's time was divided between getting the budget approved and developing a strategic operating plan for the library. In this case, the director's salary should be assigned to the cost of budget development and the strategic plan for the library. In this method, it is possible to prorate a specific cost to these activities.

Value loss analysis can be viewed in another way. When a library is started, it is very important to have a director who can make decisions involving even minor activities. After the library has been established and is in operation, many of the decisions that would be made by a

director in a new library are then made by department heads. Therefore, the question arises, at what point in the cutback of administrator input does value loss begin to occur? If, after a library is in operation, value loss analysis determines that an administrator is providing service value to only a few unimportant activities, again shirking may have been identified. If it is determined that a library or branch library can be run smoothly without an on-site director, then it may be that shirking is occurring and/or that the organization is top-heavy with administrative positions.

The purpose of value lost determination is to separate those operating decisions for which the director is not providing any direction and no direction is needed from those operating decisions where no administrator direction is provided but is needed. This analysis can be performed as part of the employee interviews that can occur in a performance audit. It is fairly common procedure in performance auditing to interview administrators and others about the functions and activities of the organization. Through the use of a series of questions asked of employees in confidence, conducted by auditors performing a performance audit, it should be possible to determine where administrator input is needed but lacking, and consequently identify this as shirking or as some other problem.

CONCLUSIONS

The methods suggested here can be used in locating some of the potential managerial behavioral problems identified in agency theory. Specifically, these methods are directed at shirking and behavior contrivances that occur because of managerial actions not taken. There are other methods as well that can and are being used. For example, if service measures are available for higher level administrators, they too help to prevent shirking. Reports on assets that have been sold and the use to which these funds have been put on an annual basis provide indications of behavior contrivances that managers may be taking. Changes in the resource base of the organization are a measure of the viability of the organization, and they also may be an indication of behavioral contrivances on the part of a manager. Erosion in the resource base of the organization brings into question the ability of the library to meet its service goals. Of course resource base erosion may be due to the cost of administrative talent. The total cost of managerial talent should be determined. This is not just the cost of salaries and benefits but also the cost of any official or unofficial administrative "perks." Such perks provide additional remuneration to higher level managers, and they should be considered as part of the administrative costs of this management level.

This article has focused on how managerial interpretation of the administrator's role has evolved over time, starting with the writings of Barnard and Simon and ending with agency theory. Managerial

accounting is a means of evaluating administrative performance but, because many methods predate agency theory, the insights of agency theory have never been brought to bear fully on this aspect of managerial accounting (Baiman, 1982) with the result that evaluations of administrative performance are often of limited value if not wrongly premised. This article seeks to bridge the gap between this aspect of managerial accounting and agency theory and in the process to bring the assessment of administrator performance in line with some of the more recent developments of the administrative model.

The suggestions for administrator evaluation made here are ideally suited to the nonprofit environment of libraries where continued financial support may be jeopardized by the perception on the part of contributors and the public that administrators may be receiving more than their fair share of organizational resources.

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