

Recommendation Seeking Behavior: Empirical Study of Recommendation Needs in Everyday Life

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Abstract. This study explores why recommendation seekers look for recommendations, and how they interact with recommendations through their social milieu. This study utilizes qualitative one-week diary recordings and post-diary interviews to collect rich data that reflect recommendation seekers' interaction and evaluation strategies in real life issues. The results show that respondents needed recommendations when they are new to situation, wish for changes from a routine behavior, seek trustworthy options, search for better solutions, and need inspiration. Degree of recommenders' understanding participants' situation is more significant than degree of their sharing interest and similarity with participants.

Keywords: Human information behavior, information seeking behavior, recommendation interaction, recommendation needs, trustworthiness.

1 Introduction

The role of recommendation became increasingly important for expediting information seeking or decision making process by offering trustworthy and personalized information in the age of information overload [1, 2]. To reduce the burden of users with the insufficient personal experience of alternatives [2], a recommender system (RS) attempts to suggest the most suitable items to particular users by predicting a user's taste based on online traces of users. However, significant gap exists between research of RSs and understanding of user's actual recommendation use. This study considers people's behaviors in the face of recommendations. Everyday recommendation-related experiences are the context, in which personal recommendation acquisition takes place from the perspectives of recommendation receivers. Research questions are: RQ1: Why do people seek recommendations?; RQ2: What are the sources of recommendations?; and RQ3: How do people decide which recommendations to accept or not? Herein, recommendations are considered as a second-hand knowledge [3], and recommendation use behavior refers to the mental acts and/or processes involved in incorporating recommendations into the recommendation receiver's existing or ongoing information seeking process (adopted from [4]).

2 Related Work

Most of what we know we learned from the spoken or written word of others. Knowledge gained through trust in testimony is always and necessarily knowledge at second-hand [5]. Similarly, Wilson [3] states that we mostly depend on second-hand knowledge, and for information about things outside the range of our first-hand experience. Then, information needs and knowledge gap lead us to seek second-hand-knowledge, and we are led to those whom we think know something we do not know; that is, cognitive authority, which is the authority that people grant to an entity that has knowledge about a particular topic [3].

Social capital is considered as a collective resource, and is the strong interconnections between individuals which foster “sturdy norms of generalized reciprocity and encourage the emergence of social trust” [6]. Meanwhile, Lin [7] views social capital as an individual resource. His theory [7] is rooted in the concepts of social network analysis, and the network of relationships comprises the social networks [8]. Social capital is defined as “an investment in social relations by individuals through which they gain access to embedded resources to enhance expected returns of instrumental or expressive actions” [7].

From the perspectives of consumers as advertising tools, word-of-mouth (WOM) is widely considered as a major driver of product information diffusion [9]. Personal sources are generally perceived as more credible than commercial sources; thus, WOM and eWOM are often more effective than traditional mass media in changing consumers’ attitudes and behaviors [10]. A few studies in business research have applied concepts pertaining to social relationships to understand traditional referral behavior in offline market environments [11].

Along a similar line, trust, another important factor of social relationships [12], has been found to facilitate the exchange and use of information due to the increased perceived credibility of information when the partner as an information source is trusted in a social relationship [13]. As a result, it is reasonable to believe that trust in a personal source could also affect the nature and pattern of recommendation use behavior.

3 Method & Data Collection

Qualitative research methods were used for both data collection and analysis. The sample was gathered using the purposive sampling. The seven participants were undergraduate, graduate students, post-doctoral researcher, or faculty member in a higher education in the U.S. This population is chosen because their different academic status and chronological ages offer various experiences about recommendation-related interactions. This study consists of three stages: 1) introductory interview, 2) one-week diary, and 3) post-diary interview. An initial interview includes a background questionnaire, and instruction about an online diary. Then, they completed a journal entry in a pre-formatted diary available through an online survey software whenever they sought or received recommendations. The diary was used as prompts for participants’ fuller reflection during the post-diary interview. A semi-structured interview was conducted to

elicit various data (e.g., purpose of seeking recommendations, evaluation, perception of trustworthiness in recommendations, and influence of social relations, etc.). All survey and diary entries were text files; downloaded in a spreadsheet. The interviews were taped and transcribed. Latent and manifest content analyses [14] are adopted to analyze data. Forty two diary entries out of forty seven were recommendation-related experiences and were used for analysis.

4 Results

4.1 RQ1: Why do People Seek Recommendations?

New to the Situation (Novice). When encountering new situations, respondents surveyed recommendations from various sources who might have already experienced a similar situation. One participant received the first salary and looked for how others do. Another respondent browsed the most economical route to a newly-moved city.

Wish to Change a Routine Behavior. Some participants indicated that their wishes for a change triggered recommendation needs although their current status was satisfactory. They lack knowledge about alternatives for the changes such as a new hairstyle, a new menu at a regular eatery, or alternative recipes for a usual one. A novel item resonates their interests.

Needs for a Trustworthy Option. Recommendations were sought to minimize uncertainty or risks about their choices. Respondents indicated that recommenders' subjective evaluation based on their real experiences matter. For instance, one participant looked for a reliable car repair shop by asking his father's experience.

Needs for a Better Solution. When a participant's choice did not solve an issue, he/she wanted to learn how other's experience worked. For instance, when a respondent's method for cleaning a vinyl floor in his apartment, he surveyed his neighbor's techniques to remove dirt on the floor, who has the same floor surface materials.

Needs for Recall or Inspiration. Several respondents used Netflix recommended list or Amazon user reviews as a reminder or inspiration because they cannot remember or recall a certain item during their searching processes. Another respondent checked a recommended list in Netflix after finishing a show if any item rings her interests for the next one to watch.

4.2 RQ2: What are the Sources of Recommendations?

Recommendation sources were mainly categorized into six groups: family, friends, acquaintances, significant others, strangers, and systems. Examples of anonymous people are bloggers, online reviewers, or online community users. The result shows that sources with strong ties or close relationships are more likely to offer more personalized and trustworthy recommendations due to frequent interactions and communication with participants. The most sources were conveniently accessible located nearby. If personal sources with strong ties are distantly located, they tend to search recommendations from

online. Some participants received recommendations (e.g., course materials for an upcoming semester) without asking for one since recommenders already knew the participant's current needs through recent communication. Another participant received pushed recommendations from Mendeley and KDNuggets based on his preference pre-settings in the systems. Several participants serendipitously encountered recommendations, which emerged from conversations or online chatting with friends.

4.3 RQ3: How do People Decide which Recommendations to Accept or not?

Degree of Understandings rather than Degree of Similarity. How much sources understand participants' situations is more significant than how similar backgrounds, taste, and interest they share with sources. For instance, one participant indicated that although her roommates are very different in backgrounds and interest, their recommendations are trustworthy because her roommates know the respondent's history of Halloween costumes over years and understand her up-to-date criteria of a costume through interactive communication.

Previous Experiences with Sources. Based on their past experience with sources, the participants strongly believe that recommendation from strong or close ties are beneficial. They accepted most recommendations without further investigation. On the contrary, recommendations from sources without ties are cross-referenced with information from other sources or their pre-knowledge. If a participant has a positive overall experience with an online community, then he/she tends to trust and accept recommendations from it. Most participants did not trust recommendations from RSs such as Netflix because most recommendations have been irrelevant.

Novelty & Relationships. When participants desire to try new choices, the aspect of novelty was an important factor to consider. If a new option is expected to give them a positive outcome, they accepted the recommendations, that is, the recommender's experiences and personalized suggestions. In some cases, recommendations from a known person of significant others are considered as recommendation to accept even though they have distant relationships with the person. For instance, one respondent felt obligation with a recommendation from his girlfriend's parent, and he accepted it.

5 Future Research

We presented the purposes of recommendation seeking, sources of recommendations, and their evaluation. This exploratory study intends to offer a comprehensive explication of recommendation receivers' needs and their sources. The following study will investigate trustworthiness of recommendations and influence of social relations. These aspects of recommendation use behavior will be integrated into a comprehensive conceptual model for design interventions. The sample of participants will need to expand significantly. Interview questions should be expanded by asking what are participants' processes of recommendation seeking, evaluation, and use, and what roles social relations play in this process.

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