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ABSTRACT

In a democracy, news information is vital information which affects people's thinking process and their opinions. This study will evaluate the perceived IPQ (Information Product Quality) of news as it is disseminated via various media. When we consider the quality of news products, we examine not only news content, but also the form in which news products are delivered and presented. In this study, we consider how news products that deliver merchandisable information can be evaluated as a 'package'.

Keywords

Information product quality, news quality, information quality, news media

INTRODUCTION

If information is valuable to keep or use and information users are willing to pay for it, we can call it an information product. Information products can thus be considered merchandisable information, and people can convert their value to a specific amount of money. As information technology grows increasingly complex, information product quality becomes multivariate. *Perceived quality* is defined as "the consumer's judgment about a product's overall excellence or superiority" (Chen and Dubinsky, 2003). A concept similar to quality, *value* is often correlated to quality. In some studies, *quality* is defined simply as a property of the product itself; while *value* is explained as a function of price and *quality* (Ziethaml, 1988; Buzzell and Gale, 1987). In addition, higher-level abstractions (such as prestige, convenience, appreciation, etc) have been found to contribute to *value*—but not necessarily to quality (Ziethaml, 1988). Therefore, to focus on *perceived quality*, we will need to carefully consider concepts and constructs from an array of information and information systems studies.

Among the various types of information products, we have chosen to focus on news products. A news product is a special type of information product which conveys current happenings or events through various broadcast media. When we consider news products, we may specifically articulate the following contexts of various news products (adopted from Yahoo online news: news.yahoo.com): entertainment, sports, politics, science, health, weather, National, World, and local. Most products have three components in them: information, physical, and service components (Alter, 2002). The news products that we include in this study should contain all three aspects. In the following sections, we will discuss each one.

INFORMATION, PHYSICAL, AND SERVICE COMPONENT OF IPQ

The purpose of this study is to evaluate perceived Information Product Quality (hereafter referred to as IPQ) in relation to the way information is disseminated via various media. In contrast to prior research, we intend to focus on the whole 'package'. News quality has been studied in journalism studies, which focus mainly on the content of the products. Meyer & Zhang (2002), for example, used direct measures of credibility as an indicator of news quality. Because information is nearly always presented through media, even in these studies, the quality of information is usually measured in conjunction with the media. The ways people communicate affect how they think (Stephens, 1998). As Stephens pointed out, not only the content, but the medium itself has a meaning, and some recent studies highlight the differences in perceived quality that may be tied to the whole package. Abdull et al. (2002) found that people perceived newspaper and television news credibility more similarly than they did online news credibility. His survey respondents rated online news highest in credibility. Even though several credibility problems have been raised regarding online communication, the other empirical study results (Newhagen, 1997) confirm a perceived higher credibility of online news compared to print newspaper.

Various types of information biases may be related to technologies. Because of their accessibility and speed of communication, different technologies offer various levels of political biases (Postman, 1996). Also, because of technical and economical structure differences, various technologies show distinct content biases. Different physical forms result in distinct sensory biases, and the divergent conditions in which we attend to them result in various social biases (Postman, 1996). These different biases informed by characteristics of the technology are inextricable when we consider news product credibility. Some news users actually report that news sources or the medium is more important than news content itself when rating news credibility (Newhagen & Nass, 1989). Therefore, in our study, media related attributes will be carefully articulated in an examination of IPQ.

There have been several information system studies of studies done to develop Information Quality (IQ) frameworks. Wang and Strong (1996) empirically developed a framework to capture elements of IQ. Twenty objectives and measurable dimensions of information quality were measured and analyzed using factor analysis. Price and Shanks (2005) adopted a semiotic approach to develop a new framework of IQ which consists of syntactic, semantic, and pragmatic categories. Eppler and Muenzenmayer (2002) developed an IQ framework which consists of four different levels; community, product, process, and infrastructure level. While all of their measured attributes will be relevant to our research, we will need to evaluate how the measures can be adapted to a study of IPQ.

To distinguish the service from the physical components in information products, we rely on Alter who defines *service* as a set of actions that provide value to a customer that receives neither information nor physical objects. *Service quality* has been rigorously studied in the marketing research domain. According to Parasuraman, Zeithaml, and Berry's (1985) studies, *service quality* is defined as the gap between the expected level of service and customer perceptions of the service level received. Parasuraman, Zeithaml, and Berry's (1988) and Gronroos's (1982) both offer well-known frameworks that have been employed to determine service quality. Gronroos identifies two dimensions of service quality: functional and technical. Functional quality relates to how the service is delivered, and technical quality relates to the type of service delivered. However, Parasuraman, Zeithaml, and Berry (1988) propose five service encounter characteristics: reliability, responsiveness, assurances, empathy, and tangibility – which begin to merge with what might logically understood as aspects of the physical delivery component.

The distinctions between physical and service components of information products are not always clear. Furthermore, as ongoing services provided by sellers and manufacturers through the Internet extend the function of information products, it is sometimes hard to distinguish information products from information services because every product contains some combination of information, service, and physical component (Alter, 2002). This complexity of information products provides further justification for evaluating the IPQ of news products from a 'package' perspective.

NEWS MEDIA

Various media differ in their characteristics and in their capacity to convey information. To measure perception of media, three measures (social presence, communication effectiveness, and communication interface) have been adapted in several studies that we will use to guide our examination of media effects (Chidambaram and Jones, 1993; Burke and Chidambaram, 1999). These measures go beyond simple "media richness" concepts in which media with relatively more capacity, or "rich media," are hypothesized to process information better by reducing equivocality and uncertainty when compared to media with less capacity. A medium's capacity for immediate feedback, the number of cues and channels utilized, personalization, and language variety indicate richness differences in media. However, the ability to convey a feeling of presence is also a significant characteristic of a medium. Lombard and Ditton (1997) define the concept of *presence* as the "perceptual illusion of non-mediation." *Full presence* can be experienced when an individual can sense everything multi-dimensionally and thus simulates a feeling of presence in the real world, so, clearly, the gap between *full presence* and *presence* depends on the type of mediation. Short, Williams, and Christie (1976) posit, therefore, that some media may show greater social presence than others.

INFORMATION USE RATIONALE/CONTEXTS

We know that people use information for various reasons. Similarly, media users choose and use media to meet their needs (Blumler and Katz, 1974). Therefore, to evaluate IPQ, we cannot neglect the importance of understanding information use rationale in general. Various theoretical perspectives address this question: rational, interactionist, entertainment, environmentalist explanations, and postmodern perspectives. Rationalists posit that information use is a rational choice in human behavior. The rationality of information use results in alternative actions and choices. This classical view of information use was challenged by Feldman and March (1981). They studied the symbolic use of information. Sometimes, they argue, people gather information just to show their competence about their decision making, or to provide verification of

their intelligence. At other times, people use information for entertainment—they use mass media purposively to change or control their mood or excitatory states (Bryant & Zillmann, 1994). Taylor (1991) has studied information use environments to understand information use. He explains information use by introducing the concept of "information behavior." Information behavior is a product of information use environments, which can be categorized into four elements: the set of people, the typical structure and thrust of problems, the typical setting which these groups of people work in, and the resolution of problems. The philosophical discourse of postmodernism provides different perspectives dealing with social power structures to explain information use. Poststructuralists have studied how people use languages to politically affect other people (De Certeau, 2002). By alternating the theoretical lenses that we use to examine news product use, we may be able to better articulate the relationships among the various and complex attributes that seem to affect perceived IPQ.

RESEARCH QUESTIONS

Our central research question in this study is: how can we better characterize specific aspects of IPQ in relation to how information is delivered and presented, specifically in the news domain? To investigate this query, we will conduct exploratory interviews to develop a framework of IPQ, to understand the perceived difference in news media characteristics, and to investigate the rationale of news product use.

A news product is a special type of information product. So, a number of quality attributes from various information quality perspectives may serve as important themes to develop an IPQ framework, but a simple application of multi-dimensional frameworks may limit our ability to effectively evaluate and compare the IPQ of news products to those which are mainly designed for broadcasting. To avoid this possibility, first, we will investigate what aspects of news products users perceive as important (Research Question 1). Then, we will investigate how users perceive news media characteristics (Research Question 2) and why people use news products (Research Question 3). Qualitative results from these queries will provide the foundation to quantitatively measure news IPQ and to compare the IPQ of various news media in future studies.

METHODOLOGY

In our current effort, we are beginning to conduct phone interviews and face-to-face interviews in Seoul, Korea. The interviews will be done in Korean. Sixty (60) interview volunteers will be systematically recruited from the Seoul telephone book by choosing the first person on every 5th page. Upon completion of the interviews, we will compensate each participant with $10, which will be sent by mail. The interview will take about 30 minutes. We will interview people and transcribe interviews in Korean. Narrative transcripts will be obtained from voice-recorded data. We will follow this effort with a complementary effort among immigrant Koreans in Honolulu, HI. We believe that this attention to news use in homeland and immigrant settings will help to highlight the characteristics of IPQ that matter when considering the democratic influence of news products.

The collected interview data will be analyzed to determine correspondence with the theoretical propositions and framework components as described in the above sections. According to pre-established themes, which come from this body of prior research, we will code interview results in English. Because Eppler and Muenzenmayer's information quality framework concerns media quality (convenience, timeliness, traceability, interactivity, accessibility, security, maintainability, and speed) as well as content quality (comprehensiveness, accuracy, clarity, applicability, conciseness, consistency, correctness, and currency), we will utilize the dimensions of their framework as main themes in our 'first pass' over the data to examine both information and physical components of IPQ. To examine service components of news IPQ, Parasuraman, Zeithaml, and Berry's service quality dimensions will be utilized as main themes because our preliminary analysis indicates that their dimensions are more appropriate to use as themes and easier to use to evaluate news IPQ as a set in conjunction with Eppler and Muenzenmayer's quality dimensions. To code media perceptions, we will adapt the media perception attributes used in the Short, Williams, and Christie (1976) study as main themes. That instrument has been used in other studies that we are using as guidelines (Chidambaram & Jones, 1993; Berke & Chidambaram, 1999). Finally, three general information use rationales (rational, interactive, and entertainment) will guide our investigations about why people use news products. We expect that this approach will cover a wide range of responses, but if potential themes not previously indicated in the literature are mentioned by participants during an interview, new themes will be developed inductively.

CONCLUSIONS

In a democracy, the news information delivered in news products is vital information which affects people's thinking processes as well as their opinions. The continuous development of new technology accelerates changes in news products. Therefore, an examination of perceived IPQ should contribute significantly to understanding these changes and the ways to deliver news products of higher quality in our society.

Because the findings from this preliminary study will be utilized in future studies that will test our emergent IPQ framework quantitatively, we should be able to evaluate a wide range of news products, and their uses, from several different perspectives. We believe that this study can set the stage for investigating four critical questions that can shape information product research in meaningful ways. First, future studies will be able to use our emergent framework to compare perceived news IPQ in relation to the way information is disseminated via various media. Second, differences in perceived IPQ based on context types can be further examined. Third, quantitative comparisons of framework dimensions and characteristics of news media can be conducted. Fourth, the framework should facilitate future study of the relationship between perceived IPQ and information use rationale.

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