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Consumer decision-making across modern and traditional channels: E-commerce, m-commerce, in-store☆,☆☆

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ABSTRACT

This study investigates the effect of media richness on consumer decision-making and channel choice, and grounds the investigation in media richness theory, task-media fit hypotheses and cognitive cost (behavioral decision theory). Findings from three experiments provide evidence that consumers prefer channels with medium (e.g., e-commerce) and high (e.g., in-store) media richness for carrying out complex decision-making tasks. Findings reveal that consumers are likely to undertake simple decision-making tasks on channels that incorporate low (e.g., m-commerce) levels of media richness. Findings also demonstrate that product type moderates the effect of media richness on perceived channel-task fit, post-purchase evaluation, and channel choice. These insights should prove helpful to managers in managing content across different channels.

1. Introduction

With technological advancements, firms are increasingly reaching out to their customers through a variety of channels such as electronic commerce, mobile commerce, and brick and mortar establishments [34]. The decision support systems literature has a strong tradition in studying the relationship between channels and consumer decision making [11,17,27,29,59]. These studies have mostly focused on how customers evaluate, utilize [29], and adopt channels [59] and how the purchase environment (e.g., factors such as risk [27], trust and uncertainty [7,53]) plays a fundamental role during the adoption process. Although these studies advance our understanding of how consumers often undertake decision-making tasks on separate channels [39], limited research exists on investigating how different channel characteristics affect decision-making and channel choice [46], across a variety of channels.

In this paper, we address this limitation in the literature, and examine the role of media richness of channels on channel choice and decision-making tasks [12]. Media richness, as originally described by media richness theory (MRT) [15,16], is a set of objective characteristics such as feedback and communication capability, language variety, and personal focus, which determine a channel's ability to communicate richness of information [35]. The more a medium incorporates these elements, the richer it is [3,8,12,31,33]. Media richness of channels has been represented in two ways in extant literature: a) different forms of technology usage in the same channel impart different degrees of media richness to the channel [32]; and b) different channels represent different degrees of media richness [12]. The latter method of representing media richness is widely accepted [32], and thus is used in this paper to investigate the effects of media richness of retail channels on consumer decision-making and channel choice.

Originally developed in the context of organization communication channels, media richness has subsequently been applied to retail channels. Prior literature considering media richness as a channel characteristic has mostly focused on examining its effect on message processing in interactive media [14], creation of telepresence [32], understanding consumers' behavioral intentions [31], and efficacy of information acquisition [12], among other things. Although these studies advanced our understanding of media richness in retail channels, we still have limited knowledge on how media richness affects channel choice and purchase tasks. In particular, this study raises and investigates the following questions: How does media richness affect consumer

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decision-making and channel choice? How does media richness affect perceived media richness-task fit? And, how does media richness impact post purchase evaluation? With increasing technological advances that enable channels to incorporate new capabilities (e.g., embed audio/video, pay through mobile device) and with firms interested in engaging with the customer through multiple channels, it is imperative to conduct a formal study to investigate the effects of media richness on consumer decision-making.

This investigation focuses on three levels of media richness (i.e., high, medium, low) and undertakes three experimental studies that examine the effects of media richness on information search, and post purchase evaluation (e.g., satisfaction). The research examines perceived media richness-task fit, and evaluates the appropriate levels of media richness for different types of decision-making tasks. Product type and task complexity are potential moderators. Findings provide evidence that consumers prefer channels with medium media richness level over high richness for carrying out complex decision-making tasks. Findings reveal that consumers are likely to undertake simple decision-making tasks on channels that incorporate low levels of media richness. Findings also demonstrate that product type moderates the effect of media richness on perceived channel-task fit, post-purchase evaluation, and channel choice.

The contributions of this paper are manifold. First, this paper investigates the effect of media richness on consumer decision-making and channel choice, a crucial under-researched area, and provides evidence that media richness is a driver of channel choice. Second, from theoretical and managerial perspectives, this paper provides insights on media richness continuum and perceived media richness-task fit, which are essential for retail channel design and content management. Finally, this research opens up many new avenues for future research. The paper proceeds as follows: the next section discusses media richness theory, delineates the effect of media richness on decision-making tasks in terms of cognitive cost and behavioral decision theory, and presents the hypotheses. The section that follows, presents three studies and the findings. The paper ends with theoretical and managerial implications of the findings, and proposals for future research.

2. Literature review and hypotheses

2.1. Media richness

McGrath and Hollingshead [35] classify media along a continuum of "increasing potential richness of information" ([50], p. 297). The four types of media that the researchers identify along this richness continuum are: text, audio, video and face-to-face communications. MRT is usually used in the context of media choice. Face-to-face is the richest medium as it allows mutual feedback and simultaneously conveys a variety of cues (e.g., tonal, facial, emotional). A text-based interaction (e.g. texting through mobile devices or browsing information through text-only cell phone browsers) is less "rich" than audio, video or face-to-face interaction (e.g. in-store interactions or communications using Apple iPhone's Facetime feature). Media that are highest and lowest in media richness anchor the two ends of the continuum. Researchers extensively use MRT in the context of dyadic intra-organizational communication situations in information systems literature [50].

Extending MRT to decision making in marketing channels, media richness is a characteristic that imparts to a marketing channel the ability to communicate information to consumers, and help them undertake decision-making on that channel. The degree of media richness may not only vary across channels, but also within a specific channel. For example, a mobile channel with audio/video capabilities is richer than a mobile channel with text-only capabilities. Also, an in-store setting suggests a face-to-face interaction with a sales associate, as well as the possibility of physical inspection of goods. Similarly, an e-commerce setting suggests that consumers access a website through a computer terminal, whereas an m-commerce setting suggests that a mobile device is used as a channel. This study examines the effects of channel characteristics on consumer decision making across three channels: in-store, e-commerce and m-commerce that represent three levels of media richness.

Decision-making inside a store involves face-to-face interactions, and has feedback and communication capabilities due to the availability of a channel representative (in-store salespeople). These features afford a personal focus and a wide variety of language support. Hence, the in-store channel is high in media richness. Decision-making through e-commerce involves accessing websites through computer terminals [13]. Most websites use text and images (in exclusion of audio and multi-media) to provide consumers with the required information [48], and is the scope of e-commerce in this study. These websites do not have the spontaneity in communication, feedback, and personal focus capabilities of the in-store channel. Such websites may have wider language support than that available in-store, but are typically limited to a database of non-customized vocabulary. Hence, the media richness of e-commerce is medium. Finally, m-commerce refers to the pairing of mobile devices with commercial transactions, providing consumers with the ability to carry out transactions through wireless Internet-enabled devices [13]. In addition to all the features that are available on e-commerce, m-commerce also offers portability [1], and ubiquity [1]. The other major difference between e-commerce and m-commerce is the interface (large versus small screen) of the mobile device. The setting of m-commerce imposes limitations, notably those of attention constraints and small-screen access devices [9]. These differences limit the extent of communication, feedback and personal focus capabilities that are possible on m-commerce. For example, in e-commerce, a consumer may simultaneously browse a product listing on a webpage, and watch a video about the product on the same computer screen. However, in m-commerce, such simultaneity is difficult to attain due to channel-specific limitations. Moreover, this investigation includes internet-enabled mobile devices that support text and images. Therefore, compared to in-store and e-commerce, m-commerce has the lowest media richness.

It is important to note that the goal of this research is to examine how channel characteristics defined by media richness impact consumer decision making. The selection of the three channels (i.e., m-commerce, e-commerce and in-store) and their settings are used to manipulate three levels of media richness (i.e. low, medium and high). Different settings of these channels may yield different richness levels.

2.2. Task-media fit

McGrath and Hollingshead [35] suggest task-media fit hypotheses as an extension to media richness theory, and present a matrix (Fig. 1a), which classifies patterns of differential fit along the two dimensions of communication media and task type (see [50], for explanation). Communication media is aligned along the "increasing potential richness of information" continuum ([50], p. 297). Task type includes choice (e.g., choosing) and negotiating (e.g., generating ideas) tasks. The best fits for the choice tasks between media and task type appear to be in media that offer medium richness. Task-media fit hypothesizes that media at the two ends of the continuum (i.e., media with the highest and lowest media richness) are ineffective for carrying out the communication tasks, as they cause distraction (too rich) or are incapable of transmitting the necessary information (too lean) [50]. In our study, the choice task that consumers are required to undertake is similar to "choosing". Our study advances this literature and investigates task-media fit in the context of choice tasks.