Revisiting Media Choice:
A Behavioral Decision-Making Perspective

H. S. Bok, National Computer Systems, Singapore
A. Kankanhalli, National University of Singapore, Singapore
K. S. Raman, National University of Singapore, Singapore
V. Sambamurthy, Michigan State University, USA

ABSTRACT

How do managers select media for communication and collaboration? Previous research has identified a myriad of contextual factors, individual characteristics, social factors, and the fit between medium characteristics and task requirements as influencing media choice. An implication from the cumulative research base is that managers must consider a large number of factors in the process of media selection, but task contingencies may not allow for the assessment of numerous criteria. Based on a behavioral decision-making perspective, this study proposes that task contingencies in the form of complexity, importance, and urgency influence the extent to which individuals evaluate various factors for media selection. The authors utilize data from a survey of managers in a financial organization. Under conditions of high task complexity and/or importance, managers are found to extensively appraise information for media selection. However, if the task is urgent, the extent of information evaluation during medium choice is constrained. Further, to the extent that managers’ appraisal is limited, their actual medium choice diverges from the optimal choice. The results indicate that a behavioral decision-making view can provide a fresh perspective and enhance understanding of how managers actually select media for their communication and collaboration activities.

Keywords: Extent of Information Appraisal, Media Choice, Task Complexity, Task Importance, Task Urgency

INTRODUCTION

How do managers select media for communication and collaboration? With a heightened emphasis on such activities in contemporary firms and the presence of a variety of technologies for this purpose (Kock, 2011), research on the choice of media and the resultant impacts on organizational work continues to be relevant (e.g., Brown et al., 2010; de Guineia et al., 2011). Existing research has identified myriad factors influencing media choice: (i) media features, such as synchronicity (Dennis et al., 2008), fitting task requirements, (ii) contextual factors, such as proximity (Watson-Manheim & Belanger, 2007), (iii) individual characteristics, such as self-efficacy (LaRose, 2009), and (iv) social and cultural norms experienced by the person making the choice (Lee & Lee, 2009). An implication of the cumulative research base
is that managers should choose their medium by comprehensively considering these numerous factors. Yet, considering the task contingencies under which managers operate, it is unlikely that they will always evaluate information about a large number of criteria to arrive at the optimal medium choice (where optimal choice implies the selection made for most effective task performance based on comprehensive evaluation of information). To the extent that task conditions limit managers’ information appraisal during medium choice, their actual media choices are likely to diverge from the optimal choices. Thus a relevant research question is: How do task conditions influence information appraisal for medium selection? Since managers spend as much as 80% of their time on communication and collaboration with important consequences for work performance (Mintzberg, 1994; Tengblad, 2006), it is essential to understand how information appraisal for medium choice decisions takes place.

A behavioral decision-making perspective can throw light on how information is evaluated for medium choice decisions, but has received limited attention in the media choice literature (Palvia et al., 2011). This perspective suggests that most of the time individuals are unlikely to make optimal choices based on comprehensive information evaluation during decision-making. Task conditions can cause people to employ satisficing and boundedly rational models of decision-making that consider limited amounts of information (Simon, 1957; Gigerenzer & Goldstein, 1996). Of these, task complexity, importance, and urgency are three practically relevant task parameters that are likely to determine the extent to which individuals evaluate information for decision making (Nutt, 2011; Payne et al., 1993). Therefore to investigate our research question, we use behavioral decision theory to model the effect of task contingencies on the extent of information appraisal for medium choice. We propose that task complexity, importance, and urgency and their interactions are likely to enhance or constrain the extent to which managers evaluate information for medium selection. The model is tested through a survey of managers in a single financial organization to control for organizational variations. The study aims to contribute to the theoretical and practical understanding of how managers make their choices of media for communication and collaboration.

The rest of this paper is organized as follows. The next section provides a brief review of the existing research on media choice and then describes how behavioral decision theory is relevant for our study. Subsequently, the model hypotheses and research methodology are explained. Finally, we present the data analyses, results, and implications of the study.

THEORETICAL FOUNDATION

Media Choice Literature

Medium choice and use is a complex human behavior that is influenced by many factors, e.g., the nature of the task, personal characteristics of the parties involved, the social system, and the attributes of the channels (Te’eni, 2001). Research in this area began more than 40 years ago (Melcher & Beller, 1967) and continues to attract interest (e.g., Kock, 2004; Brown et al., 2010).

As illustrated in Table 1, various theoretical perspectives that emphasize particular types of criteria influencing medium choice have been proposed. One set of theories focuses on the characteristics of the medium and advocates that communication and collaboration are effective when the characteristics of the medium fit the requirements of the task. The main premise of these theories is that media differ in terms of traits such as social presence (Short et al., 1976), richness (Daft & Lengel, 1986), and symbolic message (Trevino et al., 1987) and that these characteristics determine medium fit for different tasks. Another perspective belonging to this stream is the media synchronicity theory, which attempts to match media synchronicity characteristics with the nature of task goals (Dennis et al., 2008). While these theories categorize tasks in various ways to match them to media with attributes that will provide optimal