



Chapter IX

A Question of Timing: Information Acquisition and Group Decision Making Performance¹

Souren Paul, North Carolina A&T State University, USA

Carol Stoak Saunders, University of Central Florida, USA

William David Haseman, University of Wisconsin – Milwaukee, USA

Abstract

Information acquisition and its use are frequently considered critical to the decision-making process, yet related research, especially about the timing of information acquisition, is limited. This study explores the impact of information acquisition on decision time and perceived decision quality for groups that used group support systems (GSS) to work on a fuzzy task. We found that more information was accessed from a Web-based system in the first part of the group decision-making process, when the decision environment was searched and possible courses of action were analyzed. We also found that the proportion of information accessed in the first part of the meeting was significantly related to the decision time. More specifically, when most information was accessed in the first part of the decision-making session, the relationship between decision time and amount of information accessed in the early part of the meeting was positive and linear. However, a curvilinear relationship was

found between decision time and amount of information accessed in the latter part of the decision-making session. Unlike the findings of a previous study, this earlier access of information is not associated with improved perceived decision quality.

Introduction

As organizations rely increasingly on groups, it is not surprising that managers are more concerned than ever with improving the quality of group decisions and the time required to make them. To this end, they would like to improve the decision-making process itself. A possible area for improvement in the decision-making process is information acquisition since better decisions can be made when based on higher quality information.

While information acquisition and use seems critical to the decision-making process (Janis, 1989), related research, especially about the timing of information acquisition, is limited. In the popular linear (rational) model of decision making, information acquisition is greatest in early stages of the process: to define the problem correctly, focus on relevant issues, search for a good solution, and develop or explore alternatives that otherwise might not be considered. Acquisition of critical information early in the decision-making process streamlines the process by reducing or eliminating unnecessary time spent in analyzing inappropriate solutions. However, in actuality it may be difficult to acquire information in a prescribed sequence or to process it when it is acquired. Decision makers may be plagued by information overload.

Saunders and Jones (1990) proposed a model that synthesizes the decision-making literature and explains the timing of information access during the decision-making process. Their model has three major components: decisional, information acquisition, and contextual. The decisional component focuses on decision processes. The information acquisition component focuses on source and medium and their links to decision-making phases and routines. The contextual component considers how contextual elements such as task type, decision arrival time, and time pressures affect source and media selection.

In this research, the Saunders and Jones (1990) model serves as the theoretical basis for exploring how the timing of information acquisition influences group decision making performance in complex tasks. In particular, we seek to answer two questions: (1) How do group decision makers engaged in fuzzy tasks acquire information over time? and (2) How does information acquired early in the decision-making process impact decision time and quality?

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/question-timing-information-acquisition-group/10100

Related Content

Live Interactive Virtual Explorations at a Southern California Native American Learning Center: Case Studies and Lessons Learned

Kimberly Mann Bruch, Hans-Werner Braunand Susan Teel (2010). *Journal of Cases on Information Technology* (pp. 62-74).

www.irma-international.org/article/live-interactive-virtual-explorations-southern/46039

Business Process Redesign in Travel Management in an SAP R/3 Upgrade Project - A Case Study

Marit Schallert (2003). *Annals of Cases on Information Technology: Volume 5* (pp. 319-332).

www.irma-international.org/article/business-process-redesign-travel-management/44550

Research on Photorealistic Virtual Face Modeling

Xiangzhen He, Shengyin Zhu, Yihao Zhang, Yerong Hu, Dengyun Zhu, Xiaoyue Liuand Fucheng Wan (2022). *Journal of Information Technology Research* (pp. 1-11).

www.irma-international.org/article/research-on-photorealistic-virtual-face-modeling/299949

Mediating Role of Switch Leadership Between Dynamic Work Environment and Project Success

Riaz Ahmed, Imran Qamar Khanand Simon P. Philbin (2022). *International Journal of Information Technology Project Management* (pp. 1-19).

www.irma-international.org/article/mediating-role-of-switch-leadership-between-dynamic-work-environment-and-project-success/290422

Factors Influencing the Success of Computer-Assisted Software Engineering

Mary Sumner (1995). *Information Resources Management Journal* (pp. 25-31).

www.irma-international.org/article/factors-influencing-success-computer-assisted/51008