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Chapter I

Reducing Risk in Information Search Activities

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ABSTRACT

This chapter proposes that the initial perceptions of uncertainty and risk relating to decision making are unlikely to be modified irrespective of the quantity or quality of the information transmitted and processed by the decision maker. It argues that initial risk perceptions and decisions are fairly robust even when confronted with contradictory information. The chapter begins by offering definitions of the key terms such as risk, uncertainty, and the components of the digital economy. The authors then provide an overview of risk assessment and associated management processes before moving onto an examination of the contribution of intelligence and information to risk resolution. A case scenario provides a practical illustration of the issues raised.

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INTRODUCTION

Information technologies have been deliberately targeted toward enhancing database access, analytical powers, and the communications capacity of managers. The justification for these efforts has been based on the premise that more and better quality information will result in reduced uncertainty and improved risk perceptions in decision situations. In short, the outcome would be reflected in "better quality" decisions in terms of risk assessment and resolution. A countervailing outcome is that the digital economy itself may enhance the riskiness of the business situation through a more dynamic and rapidly changing environment and fundamental changes in the structures, processes, and relationships involved in business. The whole emphasis in managing business risks is undergoing significant change.

An overview of the risk assessment and management process is presented, highlighting the key dimensions. The changes in business structures, operations, and relationships as a consequence of the digital economy are examined and the implications for risk assessment and management are assessed. Investigating the accepted wisdom that increasing information will improve risk assessment, the chapter proposes that the initial perceptions of uncertainty and risk relating to the decisions faced are unlikely to be modified, irrespective of the quantity or quality of the information transmitted and processed by the decision maker. Initial risk perceptions and decisions are fairly robust even when confronted with contradictory information. Empirical evidence will be presented that illustrates that the decision maker may also construct his or her decision-making behavior to constrain the opportunity for new information to alter the initial perceptions and choices made. This outcome is used to conclude that a change in emphasis is needed that provides more attention to managing risk. Key topic areas discussed in the chapter include:

- a. Defining risk and uncertainty;
- b. Examining the individual/organizational response to resolving risk while recognizing that it may not be possible to fully eliminate the risk extant in any decision situation;
- c. Addressing the contribution of intelligence and information gathering toward resolving some of the uncertainty and improving the identification, measurement, and management of risk;
- d. Evaluating the more usual approach to risk resolution through information search and processing;
- e. Recognizing the limitations of this approach, such as, the ability to search and source relevant information, the issue of quality assurance of the

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