
Organizational Culture and Employees' Computer Self-Efficacy: An Empirical Study

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ABSTRACT

IT-based business initiatives, such as ERP and BPR, require high computer self-efficacy among employees because these changes require a large-scale use of computers. Computer self-efficacy is affected by many internal and external factors, for instance, personality, organizational culture, etc. While extensive literature exists on how psychological and sociological factors affect a person's self-efficacy, almost no research has been done on how organizational culture could influence employees' computer self-efficacy. This paper examines the relationship between organizational culture and employees' self-efficacy for a sample of 352 subjects. The results from multiple regression and discriminant analysis show teamwork and information flow contribute most to employees' computer self-efficacy.

Keywords: organizational culture, computer self-efficacy, information technology

INTRODUCTION

Over the past two decades, computer usage has increased dramatically in business operations. Applications such as Enterprise Resource Planning (ERP), Business Process Reengineering (BPR), Supply Chain Management (SCM) and Customer Relationship Management (CRM) all require an extensive use of computer technology. Few of these applications were completely successful and few were total failures, with the rest falling somewhere in

between (Kotter, 1995). While the technology itself has been proven by many generally successful implementations, the question of why the overall success rate has not been higher has led researchers to explore characteristics such as employees' computer self-efficacy, organizational culture and structure, management style and readiness of an organization, etc. (Al-Khalifa and Aspinwall, 2000; Cebreira et al., 2001; Hoffman and Klepper, 2000; Kim et al., 1995; McNabb and Sepic, 1995; Stock and McDermott, 2000).

Computer self-efficacy refers to one's belief in one's ability to apply his or her computer skills to a wider range of tasks (Compeau and Higgins, 1995). There is a general consensus among researchers and practitioners that computer self-efficacy is positively related to an individual's attitudes towards information technology. A detailed list of empirical studies incorporating self-efficacy in the conceptual and/or research models can be seen in Agarwal et al. (2000). Computer self-efficacy has been found to be positively related to performance in software training (Gist et al., 1989), perceived ease of use of computer systems (Venkatesh, 2000) and adaptability to new computer technology (Burkhardt and Brass, 1990). All of these, in turn, impact the successful deployment of an information system.

Several studies have examined the relationship between organization characteristics and employees' behavior; for instance, the relationship between organizational climate, which is a manifestation of culture (Schein, 1985), and employee involvement (Shadur et al., 1999; Tesluk et al., 1999). Studies, most of which are psychological and sociological in nature, have been conducted to identify the determinants of self-efficacy and computer self-efficacy (Bandura, 1977; Compeau and Higgins, 1995; Gist et al., 1989). Unfortunately, very little research has been done on the macro level to see how organizational culture could affect and shape employees' computer self-efficacy. This study empirically investigates the relationship between organization culture and an employee's computer self-efficacy.

ORGANIZATIONAL CULTURE

Environmental influences such as social pressure and personal factors such as

personality and behavior are reciprocally determined. This has been identified as a "triadic reciprocally" by Bandura (1977, 1982). Organizational culture is one type of environmental influence which impacts the way people (employees) think, perform tasks, and communicate/interact with each other. According to Schein (1985), culture is "a pattern of basic assumptions—invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration—that have worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (p. 9). Also, Hofstede (1984) describes organizational culture as "the way things are done in the business." More specifically, organizational culture is the "shared perceptions, patterns of belief, symbols, rites and rituals, and myths that evolve over time and function as the glue that holds the organization together" (Zamanou and Glaser, 1994). Based on these definitions, it is easy to see that the existing culture of an organization provides a corporate framework which provides guidance on issues like how work is done, the use of technology, how people think, and standards for interaction and communication.

The shared perceptions and beliefs that make up an organization's culture are fostered and cultivated by communications and interactions among people inside and outside of the organization. It then impacts and can be influenced by people's behaviors on various things, such as how to solve problems, how to conduct a job, and how to communicate (Bates et al., 1995). These, in turn, affect an individual's job performance and satisfaction, and then impact a firm's performance. It has been shown that organizational culture (and various sub-cultures within the organization) can have a

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