Chapter I

An Empirical Examination of the Impact Organizational Culture Has on Employees' Computer Self-Efficacy

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ABSTRACT

IT-based business initiatives, such as ERP and BPR, require high computer self-efficacy among employees because such changes require large-scale use of computers. Computer self-efficacy is affected by many internal and external factors; for instance, personality or organizational culture. 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 chapter 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.

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) 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). The technology has been proven by many successful implementations; however, researchers want to know how the overall success rate could be higher. They have explored characteristics such as employees' computer self-efficacy, organizational culture and structure, management style and readiness of an organization (Al-Khalifa and Aspinwall, 2000; Cabrera, Cabrera, and Barajas, 2001; Hoffman and Klepper, 2000; Kim, Pindur, and Reynolds, 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 wide range of tasks (Compeau and Higgins, 1995). There is a consensus among researchers and practitioners that computer self-efficacy is positively related to an individual's attitude towards information technology. A detailed list of empirical studies incorporating self-efficacy in the conceptual and/or research models can be seen in Agarwal, Sambamurthy and Stair (2000). Computer self-efficacy has been found to be positively related to performance in software training (Gist, Schwoerer, and Rosen, 1989), perceived ease of use of computer systems (Agarwal et al., 2000; Hong, Thong, Wong, and Tam, 2002; Hung, 2003; Igbaria and Iivari, 1995; Venkatesh, 2000; Venkaresh and Davis, 1996) and adaptability to new computer technology (Burkhardt and Brass, 1990). All of these, in turn, influence 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, Kienzle, and Rodwell, 1999; Tesluk, Vance, and Mathieu, 1999). Studies, most of which are psychological and sociological in nature, have been conducted to identify the determinants and antecedents of self-efficacy and computer self-efficacy (Bandura, 1977; Compeau and Higgins, 1995; Gist et al., 1989; Thatcher and Perrewé, 2002). 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.

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