IT Implementation in Small Business

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INTRODUCTION

The small business owner's dominating role in any information technology (IT) implementation is well documented (Cragg & King, 1993; Doukidis, Smithson, & Lybereas, 1994; Thong & Yap, 1995). A survey of the IT implementation process in small businesses indicates that both the owner's attitude towards IT and management style influence the implementation process and have a direct impact on outcomes (Winston & Dologite, 1999). These characteristics, attitude and style play a key role in directing the small business owner's decisions regarding the technology to implement, the personnel that will manage the implementation, and the supporting managerial polices (Winston & Dologite, 2003).

A more practical and pressing reason for concern with the small business owner's attitude towards IT and management style comes from the Internet. Innovative owners, who are early IT adopters, seize new opportunities that the Internet offers by reaching and selling to new markets (Pratt, 2002). More cautious managers will wait for the pioneers to reorganize as e-businesses and then attempt to learn from them (Pratt, 2002; Winston & Dologite, 2002). Other small business owners will completely avoid investing in Internet technologies (Winston & Dologite, 2002). It is advantageous for the IT practitioner to recognize how the small business owner's attitude and management style affect the adoption of IT and quality of the implementation.

BACKGROUND

Quality of IT Implementation

At an operational level, the results of a high-quality IT implementation process include increased internal organizational performance and efficiency, better customer service, and a higher quality working life within the organization (Doukidis et al., 1994; Julien, 1995). Studies of IT implementations have identified specific outcomes of success and find such indicators as increased profits, greater market share, or improved return on investment (ROI) performance (Byrd, Sambamurthy, & Zmud, 1995; Iivari & Ervasti, 1994). For small organizations, it is the added considerations of a high quality IT implementation that lead to increased profits, greater market share, or improved ROI performance.

Attitude Towards IT

Generally, small business owners with positive attitudes towards IT often have a deep knowledge about IT and find it easy to commit to an IT implementation (Cragg & King, 1993; Nickell & Seado, 1986; Ray, Thomas, & Dye, 1994; Winston & Dologite, 1999). More specifically, a positive attitude will likely help the owner endure the frustration and effort of overcoming the technical and organizational obstacles that frequently confront innovative initiatives (Harrison, Mykytyn, & Riememschneider, 1997; Winston & Dologite, 2002).

Conversely, small business owners with negative attitudes towards IT implementation generally avoid investing in IT because they fail to understand the strategic impact of IT on their business (Cragg & King, 1993; DeYoung & Spence, 2004). Only when faced with the threat of closing do these entrepreneurs seek the short-term solution of implementing IT for survival (Agarwal & Prasad, 1997). Some small business owners who perceive IT implementation as risky become immobilized by indecision and hesitation (Beckers & Schmidt, 2001). Even after approving an investment, owners with a negative or uncertain attitude towards IT often have difficulty sustaining commitment through an implementation. This results in reducing resources allocated to a project, inhibiting organizational changes required to achieve benefits, and preventing the use of IT to its fullest potential.

Management Style

Management style influences various aspects of the implementation process, such as IT strategy, owner involvement, and timing (Winston & Dologite, 2002). Yet, IT studies often do not explore the owner's management

style. Perhaps this is because of the confusion that style is connected to personality, and therefore not likely to change. Management style, however, is demonstrated by work role and by patterns of actions (Waterman, Peters, & Phillips, 1995). A small business owner's management style, then, is essentially manageable. Management style may be generally classified as either entrepreneurial or traditional (Jelinek & Litterer, 1995; Senge, 1990; Waterman et al., 1995).

An entrepreneurial policy enhances the capacity of a business to address and reduce any risk and uncertainty connected with a new IT implementation (Jelinek & Litterer, 1995). Employees tend to rely on one another to make the IT implementation successful and to keep others informed of its progress (Cragg & King, 1993; Winston & Dologite, 2003). Procedures that allow employees to have their views considered greatly affect the support and commitment a work force has to an IT implementation (Senge, 1990; Way, 2002). In other words, in organizations with a shared management style, employees accept responsibility for guiding the affairs of the organization.

The small business owner who practices a traditional style typically attempts to reduce the uncertainty surrounding the use of IT by maintaining policies that support bureaucracy, identifying clear boundaries of responsibility, and retaining control of the problem as well as its solution (Herbert & Bradley, 1993; Thong & Yap, 1995). The basis of the traditional management style is to establish order, exercise control and achieve efficiency in the work force. Policies may not exist or be clearly defined for hearing end-users' opinions (Jelinek & Litterer, 1995).

The entrepreneurial and traditional management styles provide small business owners with an approach to actively deal with the complexity of an IT implementation. Furthermore, the management style that is employed may support or moderate an owner's attitude towards IT (Winston & Dologite, 2002).

ATTITUDE/STYLE PROFILES

This section discusses the emergence of distinct attitude/style profiles, which are Positive Entrepreneur (PE), Negative Entrepreneur (NE) and Uncertain-Traditionalist (UT). In a study conducted by the authors, support for classifying small business owners into these three profiles was provided by a consistent pattern of data that describes attitude towards IT and management style (Winston & Dologite, 2002). Alternative attitude/style profiles, such as positive-traditionalist, negative-traditionalist, or uncertain-entrepreneur, were not identified in this study.

Table 1 lists the data clusters and sample supporting statements for the three identified attitude/style profiles. To further demonstrate the profiles, more detailed descriptions and quotes from business owners follow.

Positive-Entrepreneur (PE)

A small business owner classified as a positive-entrepreneur (PE) has a positive attitude towards IT and actively seeks applications of IT to enhance his or her business.

Table 1. Attitude/style profiles of small business owners towards IT implementation

	Positive-Entrepreneur (PE)	Negative-Entrepreneur (NE)	Uncertain-Traditionalist (UT)
Attitude	**Positive:** Expresses a positive perception about IT, identifies opportunities for innovative use of new IT.	**Negative:** Expresses a negative perception about IT, hesitates to invest in IT, implements IT out of necessity.	**Uncertain:** Expresses indecision about IT, hesitates to invest in IT, is anxious about using IT.
Management Style	**Entrepreneurial:** Identifies the use of policies that encourage collaboration and shared management.	**Entrepreneurial:** Identifies the use of policies that encourage collaboration and shared management.	**Traditional:** Uses policies that support power, authority, and status; demonstrates an inability to adopt tactics to decipher overwhelming data and IT alternatives, as well as conflicting suggestions about them.

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