How Does Attitude Impact IT Implementation: A Study of Small Business Owners

ELAINE R. WINSTON, Hofstra University, USA
DOROTHY DOLOGITE, Baruch College, City University of New York, USA

According to previous studies, attitude towards information technology (IT) among small business owners appears to be a key factor in achieving high quality IT implementations. In an effort to extend this stream of research, we conducted case studies with small business owners and learned that high quality IT implementations resulted with owners who had positive or negative attitudes toward IT, but not with owners who had uncertain attitudes. Owners with a polar attitude, either positive or negative, all took action to temper the uncertainty and risk surrounding the use of new IT in their organization. In contrast, owners with uncertain attitudes did not make mitigating attempts to reduce uncertainty and risk. A consistent finding among those with high quality IT implementations was an entrepreneurial, or shared, management style. It is proposed, based on case study data, that small business owners with an uncertain attitude towards IT might experience higher quality IT results in their organizations through practicing a more entrepreneurial, or shared, management style. The study provides insights for both computer specialists and small business owners planning IT implementations.

The small business owner’s dominating role in any information technology (IT) implementation is well documented (Cragg and King 1993; Doukidis et al. 1994; Julien and Raymond 1994; Thong and Yap 1995). The owner in a small business often decides on the technology to implement, the personnel that will manage the implementation, and the supporting managerial and human resource polices (Agarwal and Prasad 1997; Cragg and King 1993; Doukidis et al. 1994).

Some studies suggest that the owner’s positive, negative, or uncertain attitude toward IT affects the quality of an IT implementation (Cragg and King 1993; Delone 1988). For this study, small business owners were interviewed to explore their attitude toward IT and the quality of their IT implementation. We learned that high quality IT implementations resulted with owners who had positive or negative attitudes toward IT, but not with owners who had uncertain attitudes. Owners with a polar attitude, either positive or negative, all took action to temper the uncertainty and risk surrounding the use of new IT in their organization. In contrast, owners with uncertain attitudes made no mitigating attempt to reduce uncertainty and risk. A consistent finding among those with high quality IT implementations was an entrepreneurial, or shared, management style. These findings provide insights that can help IT practitioners as well as small business owners planning IT implementations.

The presentation of this qualitative study begins with an overview of the implementation process. Next, the research question is developed from a review of the literature that grounds the concept that attitude impacts the quality of an IT implementation. A description of methodology and the findings from the data analysis follow. The critical theme regarding the interaction between the owner’s attitude towards IT and their management style, which emerged during the interview and data analysis process, is then presented. Finally, a discussion of the implications for practitioners and researchers is offered.

The IT Implementation Process

IT implementation is the process a business undertakes to diffuse IT within the organization. To better understand this process it has been defined and described by a proposed six-stage model (Kwon and Zmud 1987; Coopers and Zmud 1990). Outlined in Table 1, implementation begins with scanning the environment for IT opportunities or solutions, adopting the appropriate IT, adapting it for the specific organization, accepting and routinizing it into daily business
interaction of attitude and implementation quality. A better understanding of any interaction should assist the computer specialist, as well as small business owner, in choosing appropriate strategies to maximize the quality of an IT implementation.

DEVELOPMENT OF THE RESEARCH QUESTION

Attitude Towards IT

Previous studies suggest that 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 and King, 1993; Delone, 1988). Only when faced with the threat of closing do these entrepreneurs seek the short-term solution of implementing IT for survival (Agarwal and Prasad, 1997; Quinn, 1979).

Some small business owners who perceive IT implementation as risky and uncertain become immobilized by indecision and hesitation. As a result, they handicap any potential increased business earnings that could be achieved from using IT (Quinn 1979).

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. These problems persist regardless of the complexity level of the IT application (Cragg and King, 1993; Malone, 1985).

Small business owners with positive attitudes towards IT, on the other hand, often have a deep knowledge about IT and find it easy to commit to an IT implementation (Cheney et al. 1986; Cragg and King, 1993; Nickell and Seado, 1986; Ray et al. 1994; Thong and Yap, 1995; Winston and Dologite, 1999). Consequently, owner knowledge of IT and commitment are believed to increase the likelihood that a business will effectively incorporate IT. 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 et al. 1997; Quinn, 1979).

Quality of IT Implementation

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, 1995; Cooper and Zmud, 1990; Iivari and Ervasti, 1994). Only when faced with the threat of closing do these entrepreneurs seek the short-term solution of implementing IT for survival (Agarwal and Prasad, 1997; Quinn, 1979).

At a more 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.

Table 1: Six Stage IT Implementation Model (adapted from Cooper and Zmud 1990)

<table>
<thead>
<tr>
<th>Order</th>
<th>Stage</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Initiation</td>
<td>Scanning of organizational opportunities and IT solutions</td>
</tr>
<tr>
<td>2</td>
<td>Adoption</td>
<td>Negotiating to gain organizational backing for implementing an IT application</td>
</tr>
<tr>
<td>3</td>
<td>Adaptation</td>
<td>Developing, installing, and maintaining IT application</td>
</tr>
<tr>
<td>4</td>
<td>Acceptance</td>
<td>Inducing members of organization to commit to use IT application</td>
</tr>
<tr>
<td>5</td>
<td>Routinization</td>
<td>Encouraging use of IT application as a normal activity</td>
</tr>
<tr>
<td>6</td>
<td>Institutionalization</td>
<td>Using fullest potential of IT application in a more comprehensive and integrated manner</td>
</tr>
</tbody>
</table>
Related Content

Virtual Reality User Acceptance
www.igi-global.com/chapter/virtual-reality-user-acceptance/163878?camid=4v1a

Web Caching System: Improving the Performance of Web-based Information Retrieval System
www.igi-global.com/chapter/web-caching-system/173974?camid=4v1a

Effectiveness of Computer Training: The Role of Multilevel Computer Self-Efficacy
www.igi-global.com/article/effectiveness-computer-training/3808?camid=4v1a

Segmentation of Information Systems Users: The Finite Mixture Partial Least Squares Method
www.igi-global.com/article/segmentation-of-information-systems-users/100011?camid=4v1a