Chapter 14
The Relationship between Information Technology Adoption and Job Satisfaction in the Jordanian Construction Industry

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ABSTRACT

Despite the popularity of Information Technology and job satisfaction research, little empirical evidence exists of the relationship between IT adoption and job satisfaction within the Jordanian construction industry. This research fills these knowledge gaps by exploring the relationship between IT adoption and job satisfaction from the perspective of construction companies, contractors, consultants, and architectural and engineering firms in Jordan. Measures were developed using MSQ and IT Barometer surveys. Three hundred questionnaires were distributed to investigate this relationship among different companies from the Jordanian construction sector. Descriptive statistics were obtained and hypotheses were tested using multiple regression analysis. Results show that more investment in technology would increase employee job satisfaction regarding intrinsic, extrinsic, and general perspectives.

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INTRODUCTION

The business world is continuously changing due to the advances and developments in technology. Innovations in technology can change the way business activities are performed. Information Technology (IT) has played an important role in business since the 1950s and the use of technology to reduce costs, improve operations, enhance customer service, and improve communications has progressed rapidly over the past four decades (Peslak, 2005).

Using new technologies such as Computer-Aided Manufacturing (CAM), Virtual Reality (VR), Expert Systems (ES), and the Internet can give companies an edge. New technologies can result in employees “working smarter” as well as providing high-quality products and more efficient services to customers. Companies that have realized the greatest gains from new technology have human resource management practices that support the use of technology to create what is known as high-performance work systems. Work, training, programs and reward systems often need to be reconfigured to support employees’ use of new technology (Noe et al., 2006).

The objective of the present study is to investigate the relationship between IT adoption and job satisfaction levels of employees working in the construction industry in Jordan.

LITERATURE REVIEW

Igbaria and Tan (1997) pointed out the importance of understanding the impact of IT adoption on individual performance and organizational productivity when IT is being deployed in organizations. Organizations are able to deploy IT more effectively if the consequences of its acceptance are obviously valuable. They investigated the implications and consequences of IT acceptance by examining the relationships between IT acceptance and its impact on the individual user. One of the major components involved in the research model was employee satisfaction.

Employees can make or break an organization (Deal, 2007); they are considered valuable assets to the corporation, and the success of any company is directly linked to the satisfaction of the employees who embody that company. Kumar (2002) indicated that job satisfaction is an important criterion for the success of an organization where it is closely associated with job turn over and life satisfaction. He mentioned that job satisfaction was defined in various contexts by various authors and he found that job satisfaction is associated with employees’ needs and values.

According to Arslan and Kivark (2007), construction is one of the most information-dependent industries that have to adopt new technological applications in order to survive in business environment in the future. In a study conducted by Jennings and Betts (1996), the construction industry showed some evidence of strategic planning implementation; however such concepts were mainly adopted by large contracting companies that had the resources to identify and develop competitive weapons such as information systems/technology (IS/IT).

In recent years; Jordan has embarked upon an ambitious plan to make full use of the information technology capabilities (El-Mashaleh, 2007). The study conducted by El-Mashaleh (2007) aimed at benchmarking the current IT usage, availability, and perceived impact in the construction, architecture and engineering, and consulting industry in Jordan. The paper’s findings signify that IT has a positive impact on the productivity of business activities. And according the author, such benchmarking is of prime importance to both construction education and practice to understand current trends, forecast future directions, and conduct international comparisons.

Further case studies on the use of IT in the Canadian construction industry defined an initial compendium of Best Practice in the use of IT in Canada. The case studies covered architecture,