Short research note

Key factors enhancing acceptance of management information systems in Yemeni companies

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Abstract
Management information systems play a key role in the life of organizations; it provides the appropriate information in right time as needed to support the management activities. In the telecommunication companies in Yemen, management information systems enable to compilation, processing and storage of the information; with overall purpose to make that information available on demand in the required format. There are some factors hinder the acceptance of management information systems. Synthesizing from the literature and interviews with some of the employees of telecommunications companies in Yemen, this paper proposes a theoretical framework on the factors contributing to the acceptance of management information systems in Yemen companies.
Keywords: Key factors, Acceptance, Management information systems, Telecommunication, Yemen.

1. Introduction

The successful adoption of technologies in companies is much depending on technology characteristics, project and organizational characteristics, user and social characteristics, and task characteristics (Petter et al., 2013). However in reality these factors are much neglected by organizations especially among small companies.

Based on preliminary interviews with some of the employees of telecommunication companies, the main problems which hinder the adoption of MIS in telecommunication companies are the inadequate skills/knowledge in using the system as well the difficulty of using and learning system. According to Al-Omari (2009) ease of use and ease of learning system lead to the acceptance of employees of the system, leading to its success and its effect on the efficiency and effectiveness of the performance of the staff for their work. Lai (2009) claimed that computer self-efficacy does affect on system success adoption. In the context of Yemeni companies most of employees do not have prior experience with the technology. According to Sabherwal (2006), user experience enhances the system use and affects information

systems success. Therefore, the companies should offer training to their staff to improve their skills and knowledge. Similarity Ajami and Mohammadi-Bertiai (2012) affirm that a number of information systems fail because the end-users are inadequately trained. In addition, some of employees said that working with computer makes them nervous and anxious; because they are worry about making mistakes they can't correct it.

Top management should provide the required budget for continues skill training programs. Moreover, they should provide the necessary material needed for training and encourage as well as support the employees to use MIS. According to Chen and Hsiao (2012) and Ragu-Nathan (2004), top management support gives significant impacted on the adoption of technologies in organizations. There is a problem with team technical support department where some of employees say that in some cases delayed for technical support on repair system problems and may be the reason for that is the lack of staff or some of the technical support staff don't have the skills to solve the complex problems. Technical support team also needs to be trained to develop their skills and knowledge.

According to Gorla et al. (2010), service quality has a significant positive influence on organizational impact either directly or indirectly. Especially, in the context of mobile telecommunication the continuance of trust using the same product range is much depending on the customer service and values provided by the service provider. A number of researchers consider information quality as important factor to MIS success. Lee and Kozar (2006) affirm that the quality of the information that the system produces and delivers is considered to be a key factor affecting MIS success. In addition Al-Adaileh (2009) confirms that information quality has a significant direct impact on the users' perception of IS success.

2. Telecommunication companies in Yemen

The rapid development of ICT has created a wealth opportunities for business and communities around the world. Although with the advent of current telecommunication devices networking there is still disparity in the ICT adoption between developed and developing countries. Available in Yemen, more than a system of communication across the LAN for mobile services is Yemen Mobile governmental organizations, and three companies of the mobile phone system (GSM) Y, MTN, Sabafon.MTN and Sabafon started for the first time in February 2001. Y Company started for the first time in 2007. The services cover companies nowadays most areas of the country, in addition to mobile phone service via satellite. The number of subscribers to the companies (GSM) from 120 thousand in the first year to nearly 400 thousand subscribers in the next year, and currently stands at more than one million subscribers. And it is expected to contribute to Yemen Mobile operating system (CDMA) to double the number of subscribers within the competition in service sectors.

In case of telecommunication companies, there are different types of MIS used in telecommunication companies such as marketing IS ,accounting IS, human resources IS, and customer relationship management system. The most common management information system used in telecommunication companies in Yemen are human resource IS and customers system. The human resource system contains of personal details such as salary, and attendance etc. Meanwhile, the customers' management system includes all the information that related to the customers.

The telecommunications sector in Yemen is one of the most important sectors. According to the Yemeni Minister of Communications the total revenue 2013 of telecommunications sector in Yemen amounting to almost 400 million dollars (Algomhoriah). While the budget amounted to Yemen in 2013 is nearly to 12.9 billion dollars (Aljazeera). The allocated budget is equivalent to nearly 2.8% of the overall budget of Yemen.

3. Factors enhancing acceptance of management information systems
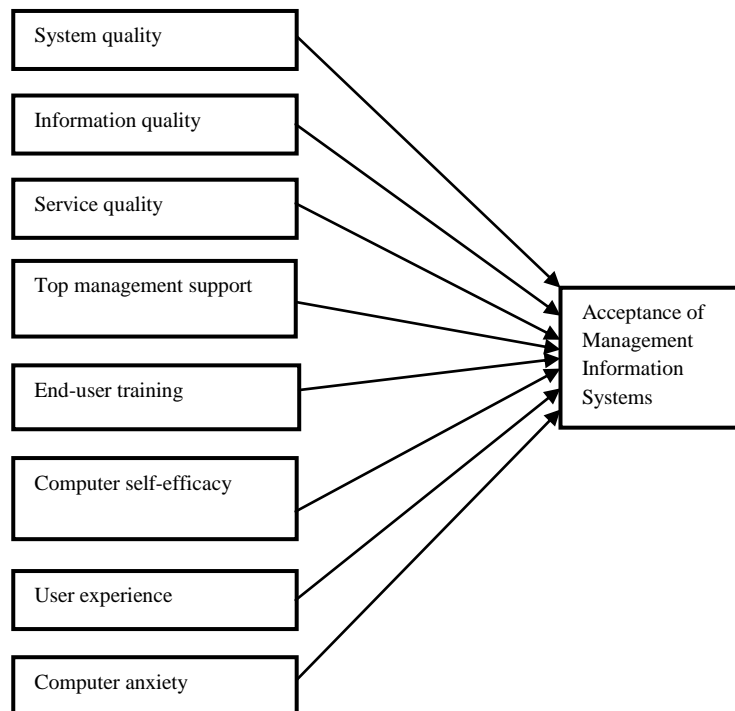

Fig. 1: Conceptual model

3.1 System Quality

System quality is the desirable characteristics of any information system. The common measures for system quality that used/adopted by previous researchers are ease of use, flexibility, response time and reliability (Hasan et al., 2013).

3.2 Information Quality

Information quality is the desirable characteristics of the system outputs. For example relevance, understandability, accuracy, conciseness, completeness, currency, timeliness, usability (Petter et al., 2008).

3.3 Service Quality

Service quality is the quality of the support that system users receive from the IS department and IT support personnel. For example; responsiveness, accuracy, reliability, technical competence, and empathy of the personnel staff (Petter et al., 2008, Gen-Liang, 2012).

3.4 Top Management Support

Top management support is able to ensure sufficient allocation of resources and act as a change agent to create a more conducive environment for IS success. For example: management is aware of the benefits that can be achieved with the use of the system, management always supports and encourages the use of the system for job-related work, management provides most of the necessary help and resources to enable people to use the system, management is really keen to see that people are happy with using the system, management provides good access to hardware resources when people need them, and management provides good access to various types of software when people need them (Igbaria et al.,1997).

3.5 End-User Training

Training is teaching the skills that needed to use Information Systems. Training is essential in the adoption of the systems. Quite often top management or IT department are asking employee to use specific software but do not provide adequate training. Therefore, sometimes the systems implementation is proved to be a failure because people do not have the right skills (Bechina and Ndlela, 2007). According to Igbaria et al. (1997) the items that used to measure training are: the company offers training to use the system, the company offers internal training the company offers external training, the company offers training to use spreadsheets the company offers training to use word processing, the company offers training to use application packages, and the company offers training to use operation systems.

3.6 Computer Self-Efficacy

Computer self-efficacy refers to an individual's belief that he or she has the skills and abilities to accomplish a specific task successfully (Zhao, 2010). According to Brown (2002) the items that used to measure self-efficacy are: I feel comfortable using the system on my own, I can easily use any of the functions in the system, I be able to use the system even if there is no one around to show me how to use it (I can use the system without help from others).

3.7 User Experience

According to Chuttur (2009) Experience is prior experience of an individual with a specific technology. According to Sabherwal (2006) Experience is duration or level of an individual's prior use of computers and ISs. According to Igbaria1 and Iivari (995) the items that used to measure user experience are: I have experience in using the systems, I have experience in using spreadsheet, I have experience in using word processing, I participation in feasibility studies, I participation in requirements analysis, I have experience in using financial modeling, I have experience in using programming languages, and I participation in design of computerized information systems

3.8 Computer Anxiety

It refers to the tendency of an individual to be uneasy, apprehensive, and/or phobic towards current or future use of computers in general (Igbaria and Iivari, 1995) According to Saade and Kira (2009) the items that used to measure computer anxiety are : I feel apprehensive about using computers, It scares me to think that I could cause the computer to destroy a large amount of information by hitting the wrong key, I hesitate to use a computer for fear of making mistakes I cannot correct, and Computers are somewhat intimidating to me.

4. Conclusion

The main conclusions are as the following: There are eight factors affecting acceptance of management information systems in Yemeni companies, namely: system quality, information quality, service quality, top management support, end-user training, computer self-efficacy, user experience, and computer anxiety. The subsequent phase of this study will be the empirical testing of the research model.

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