Telecommunication Companies Performance in Jordan as affected by Management Information System: Software, Devise and Database

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Abstract
This study was carried out to investigate the effect of management information system organizational performance Jordan. Studying the effect of management information system that includes: Software, devices, and databases may help decision makers in the business sector to improve company's performance. The Questionnaire items are written in the form of statement using a 5-point Likert-type scale (ranging from (1) strongly disagree to (5) strongly agree). The questionnaires were distributed to (100) employees. The questionnaire was sent directly by hand to employees based on (10) branches of telecommunication companies. The items used in the questionnaire have been assessed and tested by a panel of experts, thus their remarks and directions had been taken into consideration. To provide evidence that the instrument produced the data for which it was designed, the reliability test was conducted and the survey instrument was evaluated for validity, the mean, standard deviation and correlations of different responses to the statements were calculated using Statistical Package for Social Sciences (SPSS). The distributive analysis results show that the mean of scale for questions related to software use, device and database in the companies was within (agree) range. The organizational performance was highly correlated with software, device, and database; the probability value (p) was less than 5% for all parameters.

Keywords:
Management information system, software, device and database.

1. Introduction

The revolution in information technology has significantly changed the nature of the business and created competitive advantages for those who appreciate its effects (Vieira, 2013). The advent of IT has affected the form and substance of information, accounting not excepted (Stephen, 2012). Management information systems are comprised of a combination of computer systems, communications systems, and applications software that are designed and maintained by professional IT staff (Kupiec, 2000). They support organization functions such as financial management, manufacturing and production, human resource management, and office administration. Management information systems also support communications (i.e. email) between employees within the organization as well as workers in supplier or customer organizations(EBSCO, 2014). The emergence of e-commerce has made possible voluminous and cross-border transactions being carried out (Deshmukh, 2002). This development therefore behooves a firm to change its accounting systems in order to ensure that outputs from the accounting systems could be prepared in a more timely manner. Therefore, the need for on-line and real time processing systems will naturally arise (Noor et aI, 2003). In the network era, electronic linkages within and among organizations are proliferating, altering the ways in which firms acquire factor inputs, convert them into products and services, and distribute the result to their customers (Pather et al., 2003). This raises new questions about how IT can be applied to improve organizational performance (Ilhan and Veyis, 2003). For example, how do electronically connected trading partners impact a firm's ability to execute IT -based strategies for improved efficiency and competitive advantage (Muhammad and Asfandyar, 2012). And how does the evolving competitive environment shape IT business value (Booth and Philip, 2005). Though emerging studies are beginning to examine pieces of the network-era IT business value puzzle, our knowledge remains underdeveloped and unsystematic (Nigel, 2004). A company's selection of systems and applications software is determined by its business strategy and business needs (Brien, 1999). Studying the effect of management information system, software, devices, and databases in organizational performance may help decision makers in business sector to improve company's performance (Saeed, 2012). The objective of this study was to cover part of lack of research addressing the effect of management information system organizational performance Jordan.

2. Methodology

The Questionnaire items are written in the form of statement using a 5-point Likert-type scale (ranging from (1) strongly disagree to (5) strongly agree). The questionnaires were distributed to (100) employees. The

Manuscript received April 5, 2017
Manuscript revised April 20, 2017

questionnaire was sent directly by hand to employees based on (10) branches of telecommunication companies. And 96 responses were received five points Likert scale has been coded to enter the data into SPSS software in order to achieve the study objective. The levels of the scale were given the following rating: (1) strongly disagree, (2) disagree, (3) neutral, not sure, (4) agree and (5) strongly agree. To get the general results of the study, the mean and the standard deviation of different responses to the statements were calculated using Statistical Package for Social Sciences (SPSS). While the standard mean of all statements is (3), and the response below is considered negative. The survey instrument was evaluated for validity. The items used in the questionnaire have been assessed and tested by a panel of experts, thus their remarks and directions had been taken into consideration. To provide evidence that the instrument produced the data for which it was designed, the reliability test was conducted.

3. Results and Discussion

The distribution of respondents according to their personal characteristics was as the following: About 74.2 percent of the employees are males, and 25.8 are females. According to management level, only 15 percent of employees are mangers, and 22 percent are head section while 73 percent belong to management level.

3.1. Software Results Analysis.

According to data analyses, there are positive attitudes towards all of statements related to software. The distributive analysis results in table 1 show that the mean of scale for questions related to software use in the companies was about 4.06 (Agree). Email is a common communication tool used by all. The same is true for the world-wide-web (WWW). They made extensive use of the web to find information that fit their unique requirement. Even though they find it a major source of information for their operation, it takes good skills to locate the information desired. One of the common complaints is the amount of time it takes to utilize the Internet effectively and the lack of depth of information. One of the critical questions relates to how effective Internet is in addressing the higher levels of Haeckel's hierarchy.

Table1: The descriptive statistics of questions related to software.

	Questions related to the device	Scale
1	I use Managerial programs in my work	4.6563
2	We use internet in Managerial works	3.4479
3	Our Company depend on Managerial information system	4.2604
4	Our customer buying the company product by using website	3.8646
Mean		4.0573

3.2. Device Analysis Results.

Managerial information system makes it easier for the user to use and access data and information, and to move data from one application to another or to link applications. However, this still remains a user-initiated task and in some cases can be complex taking into consideration the security and safety for account information. The mean score of questions related to the device is seen in table 2.

Table2: The descriptive statistics of questions related to the device.

	Questions related to the device	Scale
5	Managerial Information System is more security	3.9375
6	Managerial Information System devices than traditional system	3.2292
7	Using Managerial information system devices In company more safe for account information	4.2917
8	Managerial mistakes IS less under Managerial information system devices	3.2917
Mean		3.6875

3.3. Database Analysis Results.

The questions related database that include adjusting, developing and upgrading managerial information system any time on database were taken score 3.9583 as seen in table 3.

Table3: The descriptive statistics of questions related to database.

	Questions related to database	Scale
9	Company can adjusting Managerial information system any time on databases	3.4479
10	Company can develop Managerial information system databases	4.5833
11	Managerial information system IS completely for Managerial operations	4.2188
12	Upgrade Managerial information system don't need to change the current system	3.5833
Mean		3.9583

3.4 Organizational performance results.

Most commercial companies now own a computer station and have access to the Internet, many with high speed connection. Most of the computers are of recent vintage with large data storage and memory capacity. It is safe to state that the hardware is not the bottleneck with respect to management information system. Descriptive statistics of questions related to organizational performance is listed in table4.

Table4: The descriptive statistics of questions related to organizational performance.

	Questions related to organizational performance	Scale
13	Employees can user Managerial information system easy to increase organizational performance	3.6875
14	Employees can control the features of Managerial information system easy in order to increase organizational performance	4.6667
15	Mistaskes is under control in Managerial information system can increase organizational performance by feedback	4.7500
16	Managerial information system suitable for our company	4.4688
	Mean	4.3932

3.5 Correlation between management information system and organizational performance in telecommunication companies in Jordan

Correlation between software, device, database and organizational performance in telecommunication companies in Jordan is listed in table 5. It can be seen that organizational performance was highly correlated with software, device and database; the probability p value was less than 5% for all parameters as seen in table 5.

Table 5: Correlation between organizational performance and software, device and database.

	Software	Database	Device
Organizational performance Pearson Correlation	0.85	.419	-.906
Sig.(2-taild)	.032	.022	.001

**correlation is significant at 0.01 level *correlation is significant at 0.05 level

4. Conclusion and recommendations

The development of marginal information systems includes five basic phases: planning, analysis, design, implementation, and support. Jordanian telecommunication companies have positive attitudes towards devices software, database, and organizational performance. The managerial system in Jordanian telecommunication companies effect organizational performance, they use managerial program in works, the internet in managerial works and they are dependent on managerial information system. It was seen that a good managerial information system is carefully planned, designed, installed, managed and improved in order to meet changing demands, and companies should match between the managerial information system and organizational performance.

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