



Factors Influencing the Use of E-Management from Manager's Perspective: An Applied Study in Saudi Communication Sector

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ABSTRACT

Electronic management (E-management) is considered as an important organizational mechanism that is critical for the effectiveness of decision making and control in organizations. The main purpose of this paper is to investigate the factors influencing the use of e-management in Saudi communication sector from manager's perspective. Data is collected through questionnaires from communication companies in Saudi Arabia. Smart Partial least squares was used to analyze the data and to test the study hypotheses. Findings proof that perceived usefulness, ease of use and trust have a significant impact on using e-management.

Keywords: E-management, Electronic Management, E-management Factors, Communication Companies

JEL Classifications: M10, M15

1. INTRODUCTION

Information Technology revolution and the fast evolution in electronics, computers and communication have achieved quick and comprehensive exchange of information within the rapid flow of data policy, coupled with the widespread use of the Internet and its investment in the field of electronic business activity within the concepts of e-business and electronic commerce. Meanwhile, Communication institutions are essential to economic system, continued technological innovation and fierce competition between the communication company, has contributed in the accelerated developments in the industry, and new forms of e-management have emerged in various areas of these industry. E-management tools and strategy in developing countries should first target the improvement of their operations and processes and also the level of departments ability to cooperate.

This system combines the methodologies, controls and accounting techniques to track financial transactions and to provide internal and external reporting data as well as helping the preparation of financial statements with capabilities to improve organizational performance (Pérez Estébanez et al., 2010).

E-management improves the quality of organizations' performance through the use of modern, efficient electronic methods that characterized by high quality and accuracy in solving traditional management problem (Al-Nimr and Khashoggi, 2006). This tool is multidimensional which can achieve a lot of goals and objectives. Responding to the increasing daily work and work pressure, which now expects more than manage of organization resources, is a widely adopted view in e-management services. As well as, the successful implementation and manage of an effective e-management is mainly related to organizational change and facilities.

However, despite the observed remarkable progress in the managerial process and the great benefits of technological innovation, we still see deficient in the using of these services and the traditional way of management system is still applied. To sum up, this research mainly aimed to investigate the most important factors that limit the use of e-management in Saudi communication sector from manager's perspective.

This study seeks to address and explore this issue in a systematic research process that aims to answer the following main question.

1.1. What are Factors Influencing the Use of E-management in Saudi Communication Sector from Manager's Perspective?

The main aim of this study is to investigate factors influencing the use of e-management in Saudi communication sector from manager's perspective. The study also seeks to achieve the following objectives:

- Providing an overview of the available literature relating to E-management.
- Identify the most important factors that affecting the use of e-management in Saudi's communication sector.
- Providing recommendations for decision makers based on the findings of the study.

2. LITERATURE REVIEW

Electronic management (E-Management) term is related to modern information technology and its various components. It can be defined as Integration of information and data to achieve the organization goals with flexibility in their internal operations and respond to the environment changes both internal and external (Radwan, 2007).

Younis (2016) define e-management as administrative processes that rely on electronic tools and their application efficiently which lead to the development of the organization through improve technical capacity and enhance the effectiveness of information exchange to reach the desired objectives. It is also defined as a set of elements that interact with each other to collect, store, process and report data and information to enhance the processes of decision making processes (Al-adaileh, 2008. p. 17).

E-management services are available to support different organizational levels including operational, tactical, and strategic level. These systems can provide a continuous flow of information from internal or external sources. E-management is considered as an important organizational mechanism that is critical for effectiveness of decision management and control in organizations (Sajady et al., 2008. p. 50).

Furthermore, the application of e-management achieves a number of benefits for the organization including (Al-Salmi and Sulaiti, 2009):

- Simplification of managerial procedures within organization.
- Shorten the execution time of the various administrative transactions.
- Facilitate communication between different departments of the organization.
- Accuracy and objectivity in the completion of various processes within the organization.
- Reduce the use of paper significantly and this positively affects the work of the organization.

The essential of e-management is maximize, manage and maintain the performance which consider as a key role to play in improving the overall value of an organization (Armstrong and Baron, 1998). As well as, effectiveness of e-management also depends on the perception of decision makers on the usefulness of information

generated by the system to satisfy informational needs for operation processes, managerial reports, budgeting and control within the organization (Nwinee et al., 2016).

The quality of an e-management depends on many factors, critical among these are the organization's information policy, the number of users and their educational level, and motivation. Thus, the relationship between e-management and organizational performance would be influenced by many factors. According to the pervious argument we analyze the contingency fit these factors and use of e-management. Therefore, we formulate the following hypotheses.

3. RESEARCH HYPOTHESIS AND MODEL

- H₁: Perceived usefulness has a significant statistical impact on the using of E-management.
- H₂: Ease of use has a significant statistical impact on the using of E-management.
- H₃: Trust has a significant statistical impact on the using of E-management.

To test the above hypotheses, the following research model is proposed (Figure 1).

4. RESEARCH METHODOLOGY

4.1. Data Collection Method and Sampling Framework

Research methodology involves describing, explaining and predicting phenomena in addition to the research plan. It is necessary for the researcher to recognize the research and its contents to be able to identify the type of research. However, this research adopted a descriptive and analytical approach. A quantitative survey was used to collect the necessary data.

The study population included all managers of the Saudi's communication companies. A convenient sampling techniques was used to select the participants. 110 questionnaires were distributed. 100 questionnaires were analyzed. Table 1 outlines the sample characteristics.

4.2. Instrument Design

The research is based on questionnaire that was developed for the purpose of this study. Face validity and contents validity of the

Table 1: Sample characteristics

Personal information	Frequency (%)
Diploma (college) degree	17 (17)
Bachelor's degree	50 (50)
Educational level	
Master degree	25 (25)
PhD degree	8 (8)
Experience	
<5 years	35 (35)
11–15 years	37 (37)
More than 15	28 (28)
Total	100 (100)

Table 2: Result of construct assessment

Constructs	Items	Factor loading	Mean±SD	CR	Cronbach's α	AVE
Using of E-management	UM1	0.773	0.673±4.467	0.851	0.828	0.615
	UM2	0.781	0.82±3.46			
	UM3	0.822	0.685±4.204			
	UM4	0.811	0.681±4.248			
Perceived usefulness	P1	0.788	0.87±3.956	0.863	0.824	0.695
	P2	0.862	0.733±4.058			
	P3	0.813	0.778±3.964			
	P4	0.72	0.755±3.954			
	E1	0.81	0.686±4.182			
Ease of use	E2	0.884	0.784±3.883	0.915	0.891	0.771
	E3	0.834	0.758±4.036			
	T1	0.892	0.853±3.847			
Trust	T2	0.788	0.731±3.832	0.903	0.874	0.811
	T3	0.899	0.749±3.788			

SD: Standard deviation

Table 3: Hypothesis testing results

No.	Path (hypothesis)	t	p	R ²	Results
1	Perceived usefulness→using E-management H ₁	23.46	***	0.65	Supported
2	Ease of use→using E-management H ₂	28.64	***	0.44	Supported
3	Trust→using E-management H ₃	14.98	***	0.53	Supported

questionnaire were made. The answers were classified according to five Likert scale. The questionnaire includes two parts; the first part contains 2 items that related to personal information; the second part contains 15 items related to the research variables.

5. DATA ANALYSIS

Partial least squares (PLS) was chosen for the current study using SmartPLS software. It was used in a two-stage approach, measurement and structural model testing.

5.1. Measurement Model

The measurement model can be assessed by examining the reliability, convergent validity and discriminant validity. Specifically, reliability which refers to the internal consistency of measurement, can be assessed by checking if the value of composite reliability (CR) is more than 0.7, the average variance extracted (AVE) is >0.5 and Cronbach's α is >0.6 (Hair et al., 2006). Table 2 shows that the CR values ranged from 0.85 to 0.91 and the AVE values ranged from 0.62 to 0.84. These values are higher than the acceptance value 0.70 and 0.50 which indicate a good construct reliability.

Furthermore, in order to check the convergent validity, loading factor for each item was calculated. All item loadings are larger than 0.6 and t values indicate that all loadings are significant at 0.05 which indicates that the scale has a good convergent validity.

Bootstrapping method in SmartPLS software was used to test the statistical significance of path coefficients. Figure 2 shows the P value for all research variables and the PLS model of the study.

5.2. Structural Model

The analysis result reveals that the factor (perceived usefulness) has a significant impact on using E-management (t = 23.46,

Figure 1: Research model

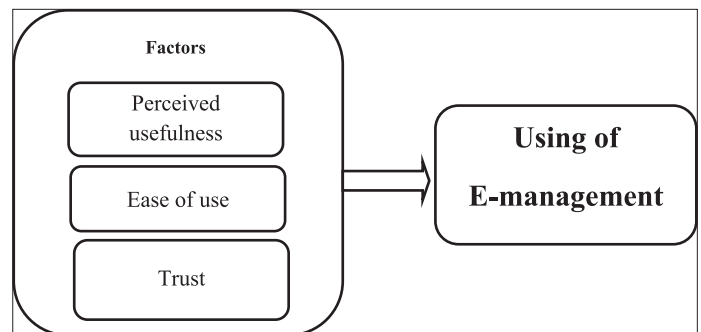
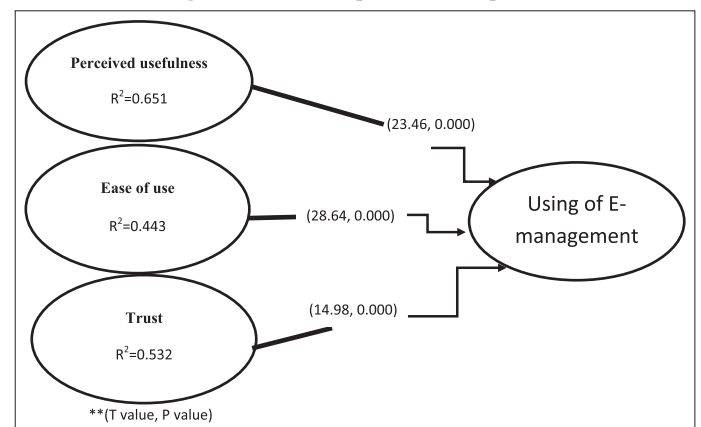


Figure 2: Result of partial least squares



$P \leq 0.001$) which supported H₁. In addition, perceived usefulness explained 0.65% of using E-management variance. Moreover, ease of use has a significant positive influence on using E-management with values (t = 28.64, $P \leq 0.001$) and can explain 0.44% of using E-management variance. Thus, H₂ was supported. Furthermore, trust has a significant positive influence on using E-management with t values (14.98) and ($P \leq 0.001$)

and can explain 0.53% of using E-management variance. Thus, H3 was supported.

Summary of hypothesis testing results are presented in Table 3.

6. CONCLUSION

The primary insights from this research are as follows. Perceived usefulness might be seen as a strong predictor of the using of e-management, coinciding with previous findings in the literature. Regarding the ease of use, the results show that ease of use has a positive and significant influence on using of e-management with previous findings in the literature (Charag and Ahmad, 2013). Finally, the research revealed that trust can enhance the using of e-management which agrees with the study of (De Oliveira et.al, 2012).

The study concludes that more concern should be directed towards using of e-management as an enhancement tool for better organizational performance. Management willingness and awareness seem important and their continuous support is needed to push up using of e-management.

REFERENCES

- Al-adaileh, R. (2008), *Essentials of Management Information Systems*. Karak-Jordan: Yazeed-Publications.
- Al-Nimr, S.M., Khashoggi, H.Y. (2006), *General Administration: Foundations and Functions*. Riyadh: Al Shokri Library.
- Al-Salmi, A., Al-Sulaiti, K. (2009), *E-Management*, VI. Amman, Jordan: Dar Wael Publishing and Distribution. p36-37.
- Armstrong, M., Baron, A. (1998), *Performance Management: The new realities*. State Mutual Book and Periodical Service. Boston: Harvard Business School Publishing Corporation.
- Charag, O., Ahmad, M. (2013), Optimizing service delivery magnitude by usage of electronic service delivery mechanism of E-governance. *International Journal of Applied Services Marketing Perspectives*, 2(2), 429-236.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L. (2006), *Multivariate Data Analysis*. 6th ed. Uppersaddle River: Pearson Prentice Hall.
- Nwinee, K., Akpos, Y., Vincent, G., Ibinabo, T. (2016), Impact of accounting information system on organizational effectiveness: A study of selected small and medium scale enterprises in woji, portharcourt. *International Journal of Research*, 3(1), 974-982.
- Olivas-Lujan, M.R., Ramirez, J., Zapata-Cantu, L. (2007), e-HRM in Mexico: Adapting innovations for global competitiveness. *International Journal of Manpower*. Emerald Group Publishing Limited., 28(5), 418-434.
- Pérez Estébanez, R., Urquía Grande, E., Muñoz Colomina, C. (2010), Information technology implementation: Evidence in Spanish SMEs. *International Journal of Accounting and Information Management*, 18(1), 39-57.
- Radwan, R. (2007), *Electronic Management Second Administrative Forum of the Saudi Society of Management*. Cairo: Information and Decision Support Center.
- Sajady, H., Dastgir, M., Nejad, H.H. (2008), Evaluation of the effectiveness of accounting information systems. *International Journal of Information Science and Technology*, 6(2), 49-59.
- Younis, M. (2016), *The Transformation Towards Electronic Management Conference of the Development of the System of Pre-university Education Visions and Projects*, Nasr, Egypt.