Application Level of E-Management in Higher Institutions at the Kingdom of Saudi Arabia: Case Study on King Abdulaziz University

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Abstract

Background/Objectives: To know the application level of E-Management in the higher education institutions in the Kingdom of Saudi Arabia concentrated on the level of application in King Abdulaziz University, the descriptive approach was chosen for the case study. Methods/Statistical Analysis: Study population consists of all management staff working in different faculties, administrations and departments at King Abdulaziz University, Jeddah, Saudi Arabia. 600 individuals were simply chosen randomly. The paper used 7 of previous studies as references. Findings: The study concluded in its findings that the application level of (E-planning) is at a good level at King Abdulaziz University in Jeddah, also the application of (electronic regulation) in King Abdulaziz University contributes in ensuring connection between different levels of management. It also helps to facilitate the access to transactions and their plan of operation between various different units and management’s levels in the university, creating a regulatory environment, which is accurate and flexible. It reduces the travail and difficulty of moving between different managements to complete transactions. Also it concluded the quality of application level of (electronic implementation) in a high degree according to the sample’s opinions that were discussed. In addition, the application of the electronic control is done below the required level according to the sample’s opinions that were discussed. The findings of the study revealed that the general value of the arithmetic mean of all four fields of E-Management (E-planning, electronic regulation, electronic implementation and electronic control) with regard to the application level of E-Management at King Abdulaziz University in Jeddah, according to the point of view of the sample’s opinions of the study that reached (4.16), which is a very high value that indicates the possibility of applying the fields of E-Management at King Abdulaziz University in Jeddah which is very good. The average answer values of the four fields in applying E-Management ranged between (4.46 - 3.81) in a percentages ranged between (89.2% - 76.2%). Improvements/Applications: The study recommends that the university staff be encouraged to increase the activation of shifting to practice E-Management in fact, and awarding the distinguished in using it with material and moral bonuses. Working on reducing or eliminating the routine procedures at the university that delay the complete shifting process to E-Management. Increasing the training courses of the human resources employees in the field of E-Management, especially with regard to E-planning and electronic control. Moreover, the university management should focus on designing integrated awareness programs suitable for all the employees and clients to illustrate E-Management concept, advantages, objectives and the services provided by it, and how to obtain them.

Keywords: Electronic Implementation, Electronic Regulation, E-Management, E-Planning, King Abdulaziz University
1. Introduction

“E-Management” terminology deems to be from the most recent scientific terminologies that was newly developed at the field of the modern science as a result of the technological revolution which have received a wide attention by the researchers who search in management and information technology, despite the modernity of the terminology, yet no single definition has not been agreed upon among the researchers.

The application of E-Management as a manifestation of technical progress has made a great development in the development of the management work methods in the last years, it also provided the opportunity to improve the means of management communication which will provide the effective management atmosphere that helps reducing time, effort and decreasing costs, these issues forced different modern institutions to shift from the tradition methods in executing works into using the electronic methods in management.

King Abdulaziz University has endeavored to apply E-Management methods and systems in all faculties and study centers. It shifted from transferring transactions within the university units manually or in study works through many stages and multiple procedures to transfer it electronically without papers and through a few steps that not prejudice the regulations and systems that govern its conduct. The university has started applying E-Management system (DSS) since 1420 A.H. and also has initiated in applying E-University project.

2. Study Problems

The study problems are produced from the general noticeable orientation towards applying E-Management in institutions of higher education. Although multi-studies dealt with the application of E-Management in the Kingdom especially in institutions of higher education, there is a deficiency in the studies that are concerned with knowing the true application level of E-Management till now. Therefore, the problems of this study are in the main following question: “What is the application level of E-Management (electronic planning, electronic regulation, electronic implementation and electronic control) at King Abdulaziz University, Jeddah?”

3. Study Methodology

Based on the questions and objectives of the study, the descriptive approach was chosen for the case study. Study population consists of all management staff working in different faculties, managements and departments at King Abdulaziz University in Jeddah, Saudi Arabia. The sample study was chosen through the random sampling method which reached 600 individuals. The questionnaire has been used as a tool to collect the main data that will help in achieving the objectives of this study by answering its questions.

4. Literature Survey

Study aimed to know the importance of the application of E-Management, identifying the most important factors and the major barriers that prevent E-Management application in General Directorate of Education in Aden. The study is based on the analytical descriptive approach. The study population consists of the staff of General Directorate of Education in Aden, and it reached several findings, most notably is that the study sample believes that there are factors which help the application of E-Management in General Directorate of Education in the holy capital. Moreover, the most important barriers facing the application of E-Management in General Directorate of Education in Aden are: lack of funds for modern applications, lack of extensive Internet services in institutions or its limitation to a particular category, lack of full confidence in modern technologies in terms of continuity of work, lack of human competencies used for modern technologies, some of the current computer-based models have not changed the traditional management procedures in dealing and thus have not convinced others to move to the full electronic system, overlapping responsibilities and poor coordination, absence of appropriate management and legal legislation, lack of transparency influence...
of special interest groups and the lack of appropriate means of communication.

Study\textsuperscript{2} aimed to identify E-Management role in the development of the management work in Egyptian Universities. The study was based on the analytical descriptive approach which is based on the case study method by using a questionnaire that was distributed on the academic staff and on some of the management leaderships and employees working in information network managements in different faculties of the university, where a random sample was selected as of (100) academic staff members, (64) management leaderships, (36) employees working in information network managements in the university. The study had reached a number of findings, the most important one is the existence of differences that have a statistical significance at the level of significance (0.01) in management mechanisms and requirements through: (planning, regulation, electronic routing) according to job rank variable between the management and the academic staff to the favor of the management staff, also the existence of differences that have a statistical significance at the level of significance (0.01) in mechanisms and regulatory requirements and electronic legislations according to job rank variable between the management and the academic staff to the favor of the management staff. The study recommended the provision of intensive training programs for the academic and management staff in fields of mechanisms and management and technical requirements for university staff.

Study\textsuperscript{2} aimed to detect the application level of E-Management in Yarmouk University from the view of academic and management staff. The study population consists of all management and academic staff members in the university and their number is (2410), of whom (683) academic staff members, and (1727) management staff members, the selected study sample of academic and management staff reached (647) members, whom were selected by random simple. In order to achieve the study objective, a questionnaire was improved for this purpose that composed of (55) paragraphs distributed on four fields, after applying the tool on the sample members, the findings of the study revealed that the application level of E-Management in Yarmouk University from the point of view of the academic staff was high as of (3.70). (Electronic implementation) field came in the first order with an average arithmetic mean of (4.12) which is a high degree. Meanwhile, (electronic regulation) field came in the second order with an average arithmetic mean of (4.05) which is a high degree, (electronic planning) field came in the third order with an average arithmetic mean of (3.30) which is a medium degree, the findings also revealed that the application level of E-Management in Yarmouk University from the management staff point of view is in a medium level, where electronic implementation field came in the first order followed by electronic regulation field in the second order then the evaluation and electronic control in the third order and electronic planning came in the fourth and final order.

Study\textsuperscript{4} aimed to evaluate male and female students for the website of King Abdulaziz University through knowing their point of views and orientations towards a range of elements that fall under six basic standards of the site which are, information modernity, site link with the university activity, the diversity of content display, the accuracy and location of information, the attractiveness of the site and the quality of its design.

The number of internet users in the Kingdom has increased over the past years to reach 6.9 million users which require parallel growth in the number of the websites, improving and renewing them to meet the needs. However, a survey study confirmed the difficulty of the students benefiting from the university website as having some gaps in its design and organization making it difficult to determine the quality of the site and identify the methods of its development, despite the fact that the Arab and foreign libraries are rich with studies that dealt
Application Level of E-Management in Higher Institutions at the Kingdom of Saudi Arabia: Case Study on King Abdulaziz University

with E-Commerce quality standards for websites, there was a scarcity in studies that dealt with the evaluation of the website of King Abdulaziz University, therefore, this study is considered one of the important studies where their primary data were collected from a regular sample of 585 members of the university students of both genders. The study resulted in a set of recommendations, most importantly is the necessity of supporting the site with audios and videos, providing illustrated images, maps and programs that help users when they face any problems in the site, providing site services and the availability of means of communication between students and site officials through e-mail, providing adequate links for different sites related to the university site, compress the time needed to load in terms of the balance of the distribution of images, texts and colors, supporting the site by means that make it more beautiful in terms of balance of distribution of images, texts and colors within a single page and make it more attractive in terms of innovation in design.

Study 5 aimed to know the relationship between organizational variables and E-Management application in Palestinian Universities in Gaza Strip. The study used the analytical descriptive approach, whereas a questionnaire was used as a main tool to collect the main data for the study, and it was applied on a random sample of (177) members. The study used a number of statistical methods for data processing and hypothesis testing, most importantly is (Pearson correlation coefficient and arithmetic means). The study reached a number of findings, the most prominent of which is a positive correlation between the prevailing organizational culture in Palestinian Universities in Gaza Strip and E-Management application within these universities, there is also a positive correlation between prevailing management leadership patterns in Palestinian Universities in Gaza Strip and E-Management application within these universities, with an clear difference in the interest of Palestinian Universities in Gaza Strip in providing the requirements of E-Management application, as there was a great lack of importance in issuing the necessary legislation and the improvement of the electronic regulation and training of employees on E-Management applications.

Study 6 aimed to reveal the effectiveness of the application of E-Management and the barriers of its application in Iranian universities, the study used the questionnaire in addition to the interview to collect the data. The study sample consisted of (239) academic and management staff members. The study findings have shown the presence of management barriers that limit the application of E-Management which are represented in the lack of technological awareness, lack of experience and lack of motivation and desire, in addition to cultural and technological barriers, the study sample also referred to the effectiveness of E-Management application in shortening the time and effort and that its effectiveness is better achieved if the barriers to their application are removed.

Study 7 aimed at revealing the degree of application of E-Management in Western Universities located in Hong Kong, which follow the Western style in the execution of its business, and the effectiveness of the recruitment of E-Management in improving and upgrading the level of management work. The study sample consisted of (136) academic staff members, employees and students. In order to achieve the objectives of the study, the direct interview method was used to express their perceptions about the degree of E-Management application and the effectiveness of its employment. The findings showed that Western Universities in Hong Kong applied E-Management to a medium degree in all operations except improving internal procedures for student registration, and the degree of salaries and promotions system application for academic staff members and employees is medium, the findings also showed that the efficiency of employing E-Management in improving management work came to a medium degree, as a result of the lack of full employment of E-Management in the fields of university management work. Moreover, the findings of the study revealed a weakness in the publications and lectures on awareness of the beneficiaries and the importance of using electronic software produced by the university in the field of teaching, and the field of management work.
5. Digital Findings

To know the study sample orientations about the application level of E-Management (electronic planning, electronic regulation, electronic implementation and electronic control) in King Abdulaziz University from the study sample point of view, as arithmetic mean, standard deviation and percentages had been used. Phrases have been arranged in descending order according to arithmetic means values.

First: Sample Answers to the Questions of (Electronic Planning) Field

Table (1) explains the sample answers about the main question of E-planning field as follows:

| Field | S | Phrase | Arithmetic mean | Standard deviation | Percentage (%) | Phrase ordering | Degree of approval |
|-------|---|--------|-----------------|--------------------|----------------|-----------------|-------------------|
|       | 1 | E-Management contributes in the development of E-planning systems in the university. | 3.78 | 0.69 | 75.6% | 6 | good degree |
|       | 2 | E-Management works on decreasing procedures costs of E-planning in the university. | 3.95 | 0.58 | 79% | 3 | good degree |
|       | 3 | E-Management usage reduces different management burdens. | 4.02 | 0.71 | 80.04% | 2 | good degree |
|       | 4 | E-Management usage leads to successful application of comprehensive strategic planning. | 3.85 | 0.56 | 77% | 5 | good degree |
|       | 5 | E-Management helps in minimizing planning problems in the university | 3.91 | 0.77 | 87.2% | 4 | good degree |
|       | 6 | E-Management contributes in providing alternative management plans when needed. | 4.07 | 0.83 | 81.4% | 1 | good degree |
|       | Total mean of phrases | 3.93 | 0.79 | 87.6% | - | good degree |
The above-mentioned findings in Table (1) refer to the views of all study sample members for all phrases of (E-planning field) which were positive, where the arithmetic mean value of each phrase of this field was greater than (3), and relative weight of each phrase (greater) than the neutral hypothetical relative weight (60%). This indicates that the study sample members have positive orientations towards (E-planning field) phrases, where phrase No. (6) came in the first order with an arithmetic mean of (4.07) and weight percentage of (81.4%), so the study sample approved, in a good degree, that E-Management contributed in providing alternative management plans when needed. Followed by phrase No. (3) which stated that (E-Management usage reduces different management burdens) where it came in the second order with an arithmetic mean of (4.02) and weight percentage of (80.04%), so the study sample approved, in a good degree, that E-Management usage lead to reduce different management burdens. phrase No. (1) came in the last order with an arithmetic mean of (3.78) and weight percentage of (75.6%), so the study sample approved, in a good degree, that E-Management contributes in the development of E-planning systems in the university.

It was noticed that (arithmetic means) values of the study sample answers towards (phrases) of this standard ranged (3.78 - 4.07), as these values are considered high. Meanwhile, standard deviations vary between (0.69 - 0.83) where it is generally less than (1) indicating the convergence of the point of views of the study sample towards the phrases of this standard. Whereas, weight percentages of the study sample answers vary between (75.6% - 81.4%) as the general mean reached (3.93), a standard deviation of (0.69) and a percentage of (78.6%) where this is a high degree indicating that the phrases of (E-planning) field were very clear to the study sample that was surveyed. It also confirms (E-Management) application in a good level at King Abdulaziz University in Jeddah according to the study sample views that have been researched.

In order to know the study sample orientations about the level of (electronic regulation) application at King Abdulaziz University in Jeddah from the study sample point of view, arithmetic mean, standard deviation, percentages and phrase ordering according to their weights have been used. The phrases are ordered in descending order according to the arithmetic mean values. The following table No. (2) shows the arithmetic means and standard deviation of the sample answers about the questions of the second sub-field that is related to (electronic regulation):

The above-mentioned findings in Table (2) refer to the views of all study sample members for all phrases of (electronic regulation) which were positive, where each phrase of this field had an arithmetic mean value greater than (3), relative weight of each phrase (greater) than the neutral hypothetic relative weight (60%). This indicates that the study sample have a positive orientation towards electronic regulation field, where phrase No. (1) came in the first order with an arithmetic mean of (4.73) and weight percentage of (94.6%), so the study sample approved, in a good degree, that E-Management helps to facilitate easy access to transactions and its plan of progress. Followed by phrase No. (5) which stated that (E-Management helps finding an organizational environment characterized by accuracy and flexibility) where it came in the second order with an arithmetic mean of (4.65) and weight percentage of (93%), so the sample study approved, in a good degree, that E-Management helps in finding an organizational environment characterized by accuracy and flexibility. phrase No. (6) came in the last order with an arithmetic mean of (4.07) and weight percentage of (81.4%), so the sample study approved, in a good degree, that E-Management contributes in breaking the routine and boredom barrier in performing different transactions.

It was noticed that (arithmetic mean) values of the study sample answers towards (phrases) of this standard vary between (4.07 - 4.73) where these values are too
high, standard deviations vary between 0.64 - 0.83) where it is generally less than (1) indicating the convergence of the point of views of the sample towards the phrases of this standard. Meanwhile, weight percentages of the sample study answers vary between (81.4% - 97.4%), general mean of (4.44), a standard deviations of (0.69) and a percentage of (88.8%) where this is a high degree indicating that the phrases of (electronic regulation) field

Table 2. Arithmetic means and standard deviations of the sample answers about the application level of (Electronic Regulation) field

| Field | S | Phrase | Arithmetic mean | Standard deviation | Percentage (%) | Phrase ordering | Degree of approval |
|-------|---|--------|-----------------|--------------------|----------------|-----------------|-------------------|
| Sub-field No. 2: electronic regulation field | 1 | E-Management helps to facilitate easy access to transactions and its plan of progress. | 4.73 | 0.64 | 94.6% | 1 | High degree |
|       | 2 | E-Management provides an electronic archiving system for different managements. | 4.53 | 0.68 | 90.6% | 3 | High degree |
|       | 3 | E-Management reduces the difficulty of moving through different departments to complete transactions. | 4.46 | 0.73 | 89.2% | 4 | High degree |
|       | 4 | E-Management helps insuring the communication between different levels of management. | 0.57 | 4.19 | 83.8% | 5 | High degree |
|       | 5 | E-Management helps in finding an organizational environment characterized with accuracy and flexibility. | 0.70 | 4.65 | 93% | 2 | High degree |
|       | 6 | E-Management contributes in breaking the routine and boredom barrier in performing different transactions. | 0.83 | 4.07 | 81.4% | 6 | Good degree |
|       | Total mean of phrases | 0.69 | 4.44 | 88.8% | - | High degree |
were very clear to the study sample that was surveyed, it also confirms the application of this standard in a good level, this is according to the sample views that have been researched.

This positive result may explain that E-Management in King Abdulaziz University contributes insuring the communication between different levels of management in the university, helps finding an organizational envi-

**Table 3.** Arithmetic means and standard deviations of sample answers on the application level of subfield No. (3) (Electronic Implementation)

| Field | S | Phrase                                                                 | Arithmetic mean | Standard deviation | Percentage (%) | Phrase ordering | Degree of approval |
|-------|---|------------------------------------------------------------------------|----------------|--------------------|---------------|----------------|-------------------|
| 1     | E-Management assists in implementing many management plans easily.   | 4.40           | 0.59              | 88%             | 4             | High degree       |
| 2     | E-Management assists in eliminating the bureaucracy in completing the transactions. | 4.77           | 0.48              | 95.4%           | 1             | High degree       |
| 3     | E-Management works on providing information in valid and accurate manner. | 4.36           | 0.79              | 87.2%           | 5             | Good degree       |
| 4     | E-Management assists in the perfectly usage of the available information sources. | 4.65           | 0.51              | 93%             | 2             | High degree       |
| 5     | E-Management works on minimizing the impact of personal relationships on completing the transactions. | 4.47           | 0.68              | 89.4%           | 3             | High degree       |
| 6     | E-Management contributes in accelerating the implementation of management decisions. | 4.12           | 0.71              | 82.4%           | 6             | Good degree       |
|       | Total mean of phrases                                               | 4.46           | 0.63              | 89.2%           | -             | High degree       |
environment characterized by accuracy and flexibility and reduces the difficulty of moving through different departments to complete transactions. In relation to breaking the routine and boredom barrier in performing different transactions, the findings reveal that this part didn’t reach to the required level, so it came in the final order.

Three: Sample Answers to the Questions of (Electronic Implementation) Field

Arithmetic mean, standard deviation, percentages and phrases ordering according to their relative weights were used to identify the sample orientation about the application level of (electronic implementation) in King Abdulaziz University in Jeddah. The phrases were ordered according to their arithmetic mean values. Table No. 3 shows the arithmetic means and standard deviations of sample answers in regard with the subfield No. (1) of (electronic implementation):

The above-mentioned findings in Table (3) show that the views of all sample members for all phrases of (electronic implementation) were positive. Regarding each phrase, it was found that the arithmetic mean value was greater than (3) and the relative weight for each phrase is (greater) than the hypothetical neutral relative weight of (60%). This proves that the study sample members had positive orientations towards the phrases of electronic implementation field, as phrase No. (2) came in the first order at an arithmetic mean value of (4.77) and a percentage of 95.4%. Thus, the study sample members highly agree that E-Management assists in eliminating the bureaucracy in completing the transactions. Followed by phrase No. (4), which proved that (E-Management assists in the perfectly usage of the available information sources), as it came in the second order by arithmetic mean value of (4.65) and a percentage of (93%). This indicates that the study sample members highly agree that E-Management assists in the perfectly usage of the available information sources. Meanwhile, phrase No. (6) came in the last order by arithmetic mean value of (4.12) and a percentage of (82.4%) which indicates that the study sample members highly agree that E-Management contributes in accelerating the implementation of management decisions.

The (arithmetic means) values of sample answers towards (the phrases) of the field of electronic implementation varied between (4.12 - 4.77) which are so high. Meanwhile, the standard deviations varied between (0.71 - 0.48) which are in its entirety less than (1). This showed the convergence of the sample members’ point of views towards the phrases of electronic implementation field. The percentage of sample answers weight varied from (82.4% - 95.4%). While the general mean reached (4.46), with standard deviation of (0.63) and a percentage of (89.2%) which is a high degree. This indicates that the phrases of electronic implementation field were clear enough. Furthermore, it showed the high quality of application level of (electronic implementation) according to the sample's views.

Four: Samples Answers to the Questions of (Electronic Control) Field

Arithmetic mean, standard deviation, percentages and phrases ordering according to their relative weights were used to identify the samples’ orientations about the level of application of (electronic control) on King Abdulaziz University in Jeddah. The phrases were ordered discerningly according to its arithmetic mean values. Table (4) shows the arithmetic mean values and standard deviations of samples’ answers in regard with the subfield of (electronic control):

The above-mentioned findings in Table (4) show that all samples’ views on all phrases of (electronic control) are positive. It has been found that the arithmetic mean value of each phrase of this standard deviation is greater than (3). As well, the relative weight of each phrase is (greater) than the hypothetical neutral relative weight of (60%). That indicates that the study sample members have positive orientations towards phrases of electronic control field. As the phrase No. (4) came in the first order with an arithmetic mean value of (4.05) and a percentage of (81%). This indicates that the study sample members highly agree that E-Management provides the university management with reports and accurate statistical information). Followed by phrase No. (1), which states that (E-Management helps in generating variable methods for
Table 4. Arithmetic means and standard deviations of sample answers on the application level of subfield No. (4) (Electronic Control)

| Field | S | Phrase                                                                 | Arithmetic mean | Standard deviation | Percentage (%) | Phrase ordering | Degree of approval |
|-------|---|------------------------------------------------------------------------|-----------------|--------------------|----------------|----------------|--------------------|
|       | 1 | E-Management helps in generating variable methods for evaluating management work. | 3.91            | 0.97               | 78.2%          | 2               | Good degree        |
|       | 2 | E-Management helps in employing the new methods in the continuous evaluation operations. | 3.78            | 0.73               | 75.6%          | 4               | Medium degree      |
|       | 3 | E-Management helps in following-up with the plans and daily works.       | 3.85            | 0.86               | 77%            | 3               | Good degree        |
|       | 4 | E-Management provides the university management with reports and accurate statistical information. | 4.05            | 0.67               | 81%            | 1               | Good degree        |
|       | 5 | E-Management helps in applying a developed financial system.            | 3.75            | 0.73               | 75%            | 5               | Medium degree      |
|       |    | E-Management provides accurate methods for following-up and monitoring management works. | 3.53            | 0.89               | 70.6%          | 6               | Medium degree      |
|       |   | Total mean of phrases                                                   | 3.81            | 0.81               | 76.2%          | -               | Good degree        |

evaluating management works), with an arithmetic mean of (3.91) and a percentage of (78.2%). Then, phrase No. 6 came in last order with an arithmetic mean of (3.53) and a percentage of (70.6%). This indicates that the study sam-
ple members highly agree that E-Management provides the university with accurate methods for following-up and monitoring management works.

It is observed that the (arithmetic means) of samples answers towards the (phrases) of electronic control ranged (3.53 - 4.05) which is so high. Meanwhile, the standard deviations are between (0.89 - 0.67) which are less than one. This showed the convergence of the sample members’ point of views towards the phrases of this field. Regarding the percentages of the weights of the sample answers ranged between (81% - 70.6%). Furthermore, the general mean is (3.81) with standard deviation of (0.81) and a percentage of (76.2%) which is a high degree. This indicates that the phrases of the proposed field were clear enough for the samples, as well as, asserting strong possibility of applying electronic control in a good degree according to samples’ views.

### 6. Findings and Recommendations

The study findings revealed that the general mean value of the study samples’ answers about the application level of (E-planning) in the university is (3.93), with standard deviation of (0.69) and a percentage of (78.6%) where this is a high degree indicating that (E-planning) application is in a good degree at King Abdulaziz University in Jeddah. This result is attributed to the researcher’s assessment of the importance of E-planning and what it achieves from multiple benefits reflected positively on all other E-Management elements. Hence, if the planning was good, the other outputs of E-Management processes will undoubtedly be good. The study findings also revealed that the general mean value of the study sample answers about the application level of (electronic regulation) in the university is (4.44), with standard deviation of (0.69) and a percentage of (88.8%) where this is a high degree indicating that the phrases of (electronic regulation) field were very clear to the study sample that was surveyed. It also confirms the possibility of applying this standard in a good level according to the sample answers that was surveyed. These positive findings may explain that E-Management in King Abdulaziz University contributes in insuring the communication between different levels of management in the university, helps finding an organizational environment characterized by accuracy and flexibility and reduces the difficulty through moving between different departments to complete transactions. In relation with breaking the routine and boredom barrier in performing different transactions, the findings refer to that this part did not reach the required level, so it came in the final order. The study sample answers show that the general mean value of the application level of (electronic implementation) in the university is (4.46), with a standard deviation of (0.63) and a percentage of (89.2%) where this is a high degree indicating the level of (electronic regulation) application which is in a high degree, this is according to the sample answers that had been surveyed. The study sample answers show that the general mean value of the application level of (electronic control) in the university is (3.81), with a standard deviation of (0.81) and a percentage of (76.2%) where this is a medium degree which indicates that the application of electronic control is done below the required level according to the study sample answers that had been surveyed. The findings of the study revealed that the general arithmetic mean value of the four fields of E-Managements (electronic planning, electronic regulation, electronic implementation and electronic control) with regard to the application level of E-Management in King Abdulaziz University in Jeddah according to the views of the study sample members reached (4.16), and this is a very high value which indicates the possibility of applying E-Managements fields at King Abdulaziz University which is very good. The answers mean values of the four fields in applying E-Management varied between (4.46 - 3.81) with a percentage varies between (89.2% - 76.2%).

The study recommends encouraging university staff to increase the activation shift to practice E-Management and to grant those who excel in its use material and moral incentives. It also aims to reduce or eliminate the routine procedures of the university that delay the process of full transformation towards E-Management, with the increase of training courses for human resources employ-
ees working in the field of E-Management, especially with regard to electronic planning and electronic control, as well as the need of the university management to design integrated awareness programs suitable for all employees and clients to clarify the concept of E-Management and its features, objectives and services provided through them and how to obtain them.

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8. References

1. Fahmi Ahmed Ali A. The possibility of implementing the E-Management in the Directorate-General of Education in Aden. Unpublished Master Thesis at the Faculty of Business Studies, Aden University, Aden. 2014.
2. Walaa Ibrahim AR. A proposed proposal to activate the use of E-Management in the development of management work in Egyptian universities in the light of contemporary international experiences (i.e. Monofya University). Unpublished Master Thesis, Faculty of Commerce, Cairo University, Cairo. 2013.
3. Ashour A, Mustafa K, Nimri, Jamil D. The extent of the application of E-Management at Yarmouk University from the point of view of academic staff and administrators. Research published in Jordan Journal of Educational Sciences. 2013; (9):2:199-220.
4. Waheeb S. Evaluation of the website of King Abdulaziz University from the perspective of the regular students of the university. Research published in the Egyptian Journal of Business Studies, Mansoura University - Faculty of Commerce. 2012; 36:289-340.
5. Agha, Salim M. The relationship between some organizational variables and the application of E-Management in the Palestinian universities in the Gaza Strip. Research published in the Journal of Al-Azhar University in Gaza, Series of Human Sciences. 2012; 14(1):73-102.
6. Seresht H. E-Management: Barriers and challenges in Iran. 2008.
7. Mellivell L. British University E-Management in Hong Kong setting. Higher Education in Hong Kong. 2007; 6(2):32-77.