

The impact of E-Services on the performance of AL- Balqa Applied University

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Abstract:

The study aimed to uncover the extent of the quality of electronic services in the Al Balqa Applied University, as seen by faculty and administrative members. the study revealed the impact of electronic services on the performance, and detected if there are differences in the estimation of members of the study about the quality of e-services and the impact on the performance.

The study population consisted of (1475) faculty members, (3057) administrative members, a simple random sample consisting of (162) faculty members, and (227) administrative members has been taken. The quality of electronic services resulted in (medium degree), and the impact of electronic services on the performance resulted in (high degree).

The statistical significance of differences attributable to the impact of job title came in favor of the administrative body.

In light of this study, a set of recommendations has been formulated to benefit the concern of the study.

Keywords: e-services, e-government, e-administration, performance, Al Balqa Applied University.

Introduction

Today, the world is witnessing rapid and successive changes, resulted in significant varied challenges. These changes produced new challenges and created more pressures to educational institutions.

In order to face them, educational institutions imposed modern methods to cope with these challenges, they adopted strategies and modern entrances to make the most of data revolution of information and communication technology to provide more efficient services.

Higher Education; like any other format systems, suffer from significant problems; which leave no room for hesitation in starting a comprehensive, developed and modernized programs to ensure Arab education institutions ability to overcome its problems and weaknesses. (Grant and Chau, 2005), (Barakat.2010).

To achieve this goal, universities have begun to adopt modern methods of information technology and the Internet by creating websites to provide high-quality integrated services, to contribute to improve the performance (Odeh.,2012).

Therefore, universities accelerated its efforts to create ways to apply and then use them. Information technology and the Internet offer unprecedented opportunities in several areas, such as raising the level of functionality, improving management decisions, simplifying and facilitating procedures, optimum utilization of the workforce as well as their significant contribution to the financial systems, through application of a number of actions and changes (Atieh.,2012).

Rapid technological development resulted in emergence of e-government that provides excellent electronic services. Traditional administration prove inability in providing multiple services to the beneficiaries under the revolution of modern information, access to quality electronic services, through efficient mobility of the Internet, and the increasing volume of data and information provided to the beneficiaries, (Najm, 2010). So, e-services have become a basic need for any institution or university, regardless of the location or nature of services provided, interesting to raise and improve their performance. (Ida Lindgren and Gabriella Jansson, 2013)

The concept of e-services emerged with the advent of e-government through individuals and institutions dealing with governments for the purpose of obtaining services with less effort and costs (Pavlichev and Garson, 2004).

Service is: " benefits to satisfy the needs of beneficiary, not subject to store and transport it, nor does it result in ownership" (Kotler & Armstrong, 2013: 145).

Electronic -service is defined as: "electronic delivery of information, programs and services through the Internet with assistive devices." (Montazeri, et al, 2013: 689), while the quality of e-service is known as "customers rating for the services provided to them through the process of interaction between the client and the service"

(Praeg and Spath, 2010: 32). This study is aiming to identify the impact of electronic services on the performance in Al Balqa Applied University.

Characteristics of quality electronic services

1. Easy to use : includes easy browsing to site , submission of applications , completion of transactions and access to instructions.
2. Clarity of information and instructions : includes the clarity of writing information and clarity of the assistive screens.
- 3 Reliability : It means you can access around the clock , and during all days of the week.
4. Page download speed : the time it takes to download photos, videos and all the files.
5. Time completion of operations : completion of transactions of beneficiary in the right time.
6. Privacy and security : private information of beneficiary remains in state of privacy.
7. Aesthetic website : graphics looks nice and consistent.
8. Economic : services reaches to beneficiary with the lowest possible cost. (Praeg and Spath, 2010) ; (Nuaimi and Sous.2008).

Forms of electronic services

Forms of electronic services can be summarized as follows:

- Vertical services: services provided exclusively by one governmental entity, so that the service starts and ends in the same direction.
- Overlapping services: services shared by more than a government institution, so that recipient of service of a government institution can coordination and request information from other government institutions to complete the transaction.
- Shared Services: services that are developed centrally only once and serve all electronic services.
- Composite services: systems and joint and recurrent mechanical applications between the various government agencies (Jordan e-Government .2013).

Implications of shifting towards electronic services

- Rapid technological advances, and the widening circle of investment in the field of information and communication generates the need to harness this evolution of the service of human life.
- Spread the concepts of globalization and the openness between people through the Internet, push governments to accelerate the improvement of the level of services.
- High levels of public awareness and spread the concepts of democracy and personal freedom and free media.
- The implications of the policies trend towards private sector with regard to customer focus and quality improvement.
- Keeping up with technological developments, many of international public organizations applied the concepts of e-government (Thunaibat and Mubaideen.2009).

Problem of the study

Al Balqa Applied University sought, since its inception, to activate its potential and capabilities and enrich the experiences of its students, supported by the scientific expertise and intellectualism of its professors, basing it on all the innovations and scientific and technological methods as well as visions of social actors in order to serve all sectors and disciplines.

In order to maintain its role, Al Balqa Applied University has been synchronizing technical developments that benefit its business. The emergence of Web Services (Internet) offers an alternative to the beneficiaries and information seekers. Traditional service has posed a challenge to the university, which necessitated the provision of electronic services for beneficiaries.

Therefore, universities in general, and Al Balqa Applied University in particular seek, on one hand, to improve its electronic services to reach outstanding innovative and creative performance, and, on other hand, achieve quality performance to all corners of the educational process of learning, as well as for all categories of beneficiary, Whether they are teaching staff or administrative body.

The researcher – who is one of the university’s employees - feels the need to study the impact of electronic services on the performance of the BAU, as seen by its staff.

Previous studies

The following are a number of previous studies from oldest to newest, which addressed the issue of electronic services and information and communication technology at the level of higher education institutions and other institutions which provide access to it.

The aim of the study (Sung Chul & Hyuk, 2004) was to detect the gap between the perceptions and expectations for measuring the quality of services provided by Korean institutes in higher education from the perspective of beneficiaries. (86) of the beneficiary was chosen as a sample who used measure of the gap to Parashoraman and colleagues (SERVQUAL), the results of the study showed that this measure is effective for measuring the quality of services.

The aim of the study (Nouraddin, 2007) was to detect the quality of services and their impact on customer satisfaction. The study was applied to (40) client. Questionnaire and a descriptive approach to achieve the objectives of the study was used. The study found that the evaluation of the quality of customer services through indicators for evaluation varies from client to another, and that the quality of the service is important to achieve customer satisfaction.

The aim of the study carried out by the Institute for Social Research Ipsos Mori (Ipsos Mori Social Research Institute, 2009) was to assess the impact of the recession on electronic services in the libraries of British universities. (40) Interview was conducted from service users on (36) British university. The results showed the presence of concerns with regard to the matter to the potential impacts of the economic recession on electronic services.

The aim of the study (Churu, 2010) was to measure the extent of the use of electronic information services available in the library of the University of Abeokuta (Abeokuta) Nigerian, through distribution of (800) Questionnaire to members of the faculty and students of the university. The results showed that the majority of users were satisfied with a number of obstacles, including the lack of basic infrastructure, and power failure continuously.

The aim of the study (Barakat, 2010) was to detect the gap between the perceptions and expectations for measuring the quality of services provided by the Al-Quds Open University, from the viewpoint of the students. (215) individuals as a stratified random sample was chosen to Use the scale of the gap (SERVQUAL). the study results have shown that, there is a positive gap - non- significant statistically- between the perceptions of students and their expectations for the total score for the level of service offered by the university, which is a simple indicator of the high level of service offered by the university for students.

The aim of the study (Horla, et al., 2010) was to measure the quality of performance in organizations through the adoption of three criteria (quality system, quality of information and the quality of service). Questionnaire was used as a tool for the study, was sent electronically to (90) person. Results showed that quality of service has the most influence to organizational performance among the three dimensions, followed by the quality of information, and then the quality of the system.

The aim of the study (Deheimat, 2011) was to measure the quality of e-services offered by the libraries of Jordanian universities (private and government) from the viewpoint of faculty and students members, where the study was applied to a sample of (1065) per capita. The most important results of the study showed no difference between the views of faculty members and the views of students about the quality of services.

The aim of the study (Odeh, 2012) was to detect the influential relationship between the quality of electronic services and feature of the universities. A sample study of Jordanian private universities, were selected consisting of deliberate (1524) student. The most important results of the study showed that the quality of the information and services provided by the university sites were not to the level which the student aspires to.

The aim of the study of Tadros and others (Tadros, et al., 2012) was to identify the role of information and communication technology in the development of the administration official universities, from the perspective of academic leaders. the study was applied to sample mounting to (180) individuals. The study results showed that the role of information and communication technology in the development of university administration at the level of official Jordanian universities from the perspective of academic leaders, were of a high standard in all fields and paragraphs.

The aim of the study (Tadros and Abdul Rahman, 2014) was to detect obstacles to the application of e-governance and the aspirations to overcome them in the future, as seen by administrators in Al Balqa Applied University. To achieve the objectives of the study, a questionnaire was prepared and applied to a sample of (522) administrators that was selected by simple random stratified way. The results showed that the obstacles which prevent the application of e-governance, as perceived by administrators, were of very large degree.

Importance of the research:

The importance of the study is as follows

1. A scientific and academic importance, the results of the study is expected to add knowledge to the subject; the fact that, this study exposed to the knowledge of the factors that increase electronic services and thus affect the performance levels in universities. Universities bear the burden of providing services of all types within each discipline is taught by universities to Jordanian and Arab societies.
2. The research provides a framework for achieving outstanding performance in universities through the activation of quality of e-services, thus earned the importance of being a practical research that manifested in the link between the variables of the study, as well as that the electronic services are a strategic growing weapon globally, especially in light of the high cost of access to information and the desire to achieve excellent performance..
3. The research made a set of proposals and recommendations that contribute to the development of performance through electronic services in the official Jordanian universities.
4. Lack of scientific studies on the subject of quality electronic services in Jordanian universities.

Objectives of the study

The study aims to detect the quality of electronic services in Al Balqa Applied University, as seen by the faculty and administrative members, it also aims to detect the impact of electronic services on the university's performance, and detect if there are differences in the estimations of members of the study about the quality of e-services and the impact on the performance.

By answering the following questions:

- 1- What is the quality of electronic services in Al Balqa Applied University, as seen by its employees?
- 2- What is the effect of electronic services on the performance of Al Balqa Applied University, as seen by its employees?
- 3 - Are there any statistically significant differences at the level of significance ($\alpha = 0.05$) to the estimates of the study sample about the quality of electronic services of Al Balqa Applied University, attributed to the different variables (faculty, administrative body)?
- 4 - Are there any statistically significant differences at the level of significance ($\alpha = 0.05$) to estimate the sample study on the impact of electronic services on the performance of Al Balqa Applied University, attributed to the different variables (faculty, administrative body)?

Procedural definitions

Electronic services: services are obtained by the beneficiaries (faculty and administrative bodies) automatically through a device or a certain technique from the library or administrative unit, through a complex network, and are used inside or outside the university.

quality of e-services: effectiveness of e-service provided to achieve goals, its suitability to the wishes of the study sample and its ability to meet their professional, practical and scientific needs. The quality of e-services was measured by grades obtained by the study sample.

Performance: ability of the faculty and administrative bodies to carry out their duties and tasks assigned to them efficiently and effectively through the e-services provided to them. Performance was measured by grades obtained by the study sample.

BAU: Jordanian government educational institution offering academic and training programs after secondary school or its equivalent, offering degrees, which have been identified for the distribution of the study tool.

Methodology of the study

using descriptive approach through a survey that is appropriate to the nature and objectives of the study.

Society and the sample of the study

The study population consisted of all faculty members of BAU totaling (1475) individuals and all administrative staff totaling (3057, involving (19) College for the academic year 2013/2014. A random sample consisted (439) or (9.6%) representative of the population has been selected.

Table (1) illustrates this.

Table (2) frequencies and percentages according to the study variable

	Categories	repetition	rate
Job Title	Teaching staff	162	36.9
	Administrative staff	277	63.1
	Tota	439	100.0

Study tool

After reviewing the theoretical literature and related previous studies, a questionnaire consisted of (45) paragraph was constructed, getting benefited from the study Jolla (Gorla, et al., 2010 Barakat (2010), and Odeh (2012). A five-graded measurement has used Likert (very high, high, medium, low, very low) by grades (5,4, 3, 2,1), respectively. The following equation was adopted: (Top Range - Near term divided by three levels) $(1-5 \div 3 = 1,33)$ and the levels are: 1. 2.33, Weak level, 2.34 - 3.67 average level, 3.68- 5 degrees of high level.

Veracity of the tool

To verify the veracity of the tool, the study has been presented to a committee of arbitrators who specialize in management and information systems, in Al Balqa Applied University and other Jordanian universities. Their observations were taken regarding amendment, deletions and re-drafting.

Stability of the study tool

To make sure of the reliability of study tool, it has been verified in a manner of testing and re-testing (test-retest) by applying the test, and re-apply it after two weeks on a group of outside study sample consisting of (40) person. Pearson correlation coefficient were then calculated between their estimates on both occasions, Reliability coefficient manner by internal consistency based on Cronbach's alpha equation was also calculated. Table 2 shows the internal consistency coefficient according to Cronbach's alpha equation and constant repetition. These values were considered appropriate for the purposes of this study.

Table (2): coefficient of internal consistency, Cronbach’s alpha, and stability reloads.

Field	Stability of repetition	internal consistency
Quality electronic services	0.91	0.88
The impact of electronic services on performance	0.93	0.91

Results of the study

First question: What is the quality of electronic services in AlBalqa Applied University, as seen by its employees? To answer this question, arithmetic means and standard deviations of the quality of electronic services in Al Balqa Applied University as seen by its employees was extracted. Table 3 illustrates this.

Table (3): displays arithmetic averages and standard deviations of the quality of electronic services in Al Balqa Applied University as seen by its employees in descending order according to arithmetic averages.

Rank	No.	Paragraphs	arithmetic averages	Standard deviations	Class
1	4	available Information is updated constantly	3.68	967.	High
2	5	Links offered by the websites is sufficient	3.67	1.044	Medium
3	8	Website is orderly and easy to use	3.65	1.053	Medium
4	20	The site is characterized by beauty and distinctively attractive in design	3.64	971.	Medium
5	13	Electronic services provided by the site is comprehensive	3.62	997.	Medium
6	14	Answers to electronic inquiries are confidential	3.51	1.053	Medium
7	2	electronic services Network are available during holidays	3.42	996.	Medium
8	1	Electronic services are Permanently available without interruption	3.35	1.151	Medium
9	3	Delete unnecessary information continuously	3.35	982.	Medium
10	9	Electronic services are available in more languages.	3.35	1.109	Medium
11	6	Instructions on the website are clear.	3.33	1.098	Medium
12	19	Administration responsible for providing e-services supports individuals who are dealing with it.	3.15	1.275	Medium
13	16	Emergent problems related to electronic services is quickly resolved.	2.96	1.312	Medium
14	15	Website provides information consistent with work requirements.	2.94	1.232	Medium
15	18	The University provides sufficient information about its services through its electronic site.	2.94	1.311	Medium
16	7	Web design provides options of warning and alarm in case of misuse.	2.92	1.279	Medium
17	21	Design contains a digital tools to collect, evaluate and use information.	2.88	1.266	Medium
18	17	Electronic service is provided correctly from the first time.	2.74	1.164	Medium
19	10	Electronic services in the field of distance learning are available.	2.70	1.268	Medium
20	12	Video conferencing service is available via the Web site.	2.68	1.413	Medium
21	11	Training programs are available on the website.	2.64	1.239	Medium
		The quality of electronic services as a whole.	3.20	640.	Medium

Table (3) shows that arithmetic averages ranged between (2.64 -3.68).

Paragraph (4), which states that "information available is updated constantly ", ranked first and reached an arithmetic average of (3.68), While paragraph (11), which reads "training programs are available on the websites" ranked last and reached arithmetic average of (2.64). The arithmetic average of the quality of electronic services as a whole was (3.20).

Second question: What is the impact of electronic services on the performance of Al Balqa Applied University, as seen by its employees?

To answer this question, arithmetic averages and standard deviations of the impact of electronic services on the performance of AlBalqa Applied University, as seen by its employees, was extracted, table (4) shows that.

Table (4) displays arithmetic averages and standard deviations of electronic services in Al Balqa Applied University as seen by its employees in descending order according to arithmetic averages.

Rank	No.	Paragraphs	Arithmetic averages	Standard deviations	Class
1	32	Contributed to ease the burdens of daily routine	4.15	925.	High
2	30	Contributed to reducing the costs required to perform the work efficiently	4.11	898.	High
3	31	Improved the quality of output	4.10	808.	High
4	35	Increased control and correcting deviations.	4.05	1.097	High
5	34	Contributed to achieving greater flexibility in work procedures	4.03	892.	High
6	37	Helped to accomplish the tasks and work without delay.	3.99	896.	High
7	38	Helped to shortcut the steps that I do at work.	3.97	907.	High
8	39	Helped in the development of performance with regard to records and official documents.	3.96	894.	High
9	44	Contributed to increase the volume of electronic services provided to others.	3.95	947.	High
10	41	Contributed to the preparation of reports, and then submit them to the direct President.	3.93	943.	High
11	40	Increased the safety and protection for different transactions	3.89	956.	High
12	45	electronic services created a system of interconnection between various categories for better performance.	3.86	842.	High
13	36	Coordinated between different roles to ensure there is no contradict	3.85	921.	High
14	33	reduced errors in routine work I do frequently	3.83	1.074	High
15	27	Contributed to audit work required within the required performance	3.82	961.	High
16	26	Provide specific models for discharging information without defect.	3.81	919.	High
17	25	provide software to dump the data and information efficiently	3.79	963.	High
18	23	Increased ability to relay information efficiently	3.77	928.	High
19	24	Contributed to access information from different sources.	3.74	953.	High
20	22	Contributed to respond with others (colleagues, students)	3.73	955.	High
21	29	Ease making appropriate decisions.	3.71	1.175	High
22	28	Provide any other laws, regulations and instructions to guide the work performance.	3.69	938.	High
23	42	Provide instructions and explanatory information when a particular defect occur.	3.68	1.038	High
24	43	Provide training programs that reflected positively on the performance improvement	3.64	1.069	Medium
		The impact of electronic services on the performance as a whole	3.88	549	High

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