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ELECTRONIC KNOWLEDGE OF CUSTOMERS AND EMPLOYEES OF JORDANIAN BANKS AND ITS IMPACT ON THE QUALITY OF BANKING SERVICE: BANKS OF JERASH CITY-A CASE STUDY

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ABSTRACT: *This study aims to highlight the impact of electronic knowledge in the customers of Jordanian banks on the quality of banking services, accuracy, speed of achievement and the extent of their contribution to improve banking services among workers in these banks. To achieve the objectives of the study, a questionnaire was developed and distributed to the study sample which consists of (161) employees working in Jerash banks, and this sample is the total community of the study; the census method was used to represent the community properly. Moreover, the sample was intentionally selected from seven private banks in this city, and data and information were collected by making interviews, and a questionnaire distributed to achieve the objectives of this study. The study achieved its objectives through hypotheses that were tested by several statistical methods, and to know its moral significance, as well as to reach the most important field results that represent the contribution that came out of this study. The study concludes the following: There is an interest in the subject of electronic knowledge in terms of concepts, elements, and advantages through accumulation of knowledge in the Arab administrative library. There is no clear agreement about the rankings (elements) of electronicor electronic knowledge. The level of using the electronicknowledge in the customers of banks is low. The level of relative importance of sub-variants of the dependent variable was high (quality of banking service) There is a significant moral correlation between sub-variables of the independent variable (electronicknowledge) and quality of banking services. There are few studies that joined electronicknowledge with quality banking service. Most of the study's hypotheses were achieved. The study concluded some important recommendations, including: Promote awareness among customers about the electronic field and increase conviction of the importance of electronicknowledge in terms of saving time, fast achievement, reduce costs and accuracy of work. Facilitating procedures and various means of technology and software for the banks in order to ensure that electronic uses to keep up with global banks that deal and compete with them. Applying quality standards in the banks, and focus on the use of information technology in all branches and divisions.*

KEYWORDS: Electronic Knowledge, (IT), Knowledge, Banks, Sector of Electronic Banking Service.

INTRODUCTION

Globalization, the information revolution, communication systems and networks, information technology systems, management information systems, and strategy have affected our lives and left a clear impact on the work of departments and public and private institutions, the trem of electronicknowledge or (Culture) are being searched and verified since the information and communication technology have achieved continuous progress and a large space in the practical life, especially for users of modern technology of various kinds of electronics and electronicworld. The electronictechnology has become a nucleus of all our business in various

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aspects of cognitive, cultural, practical and public life; electronicculture and knowledge are based on electronic knowledge and its numerous tools, which has moved into all our business and become one of the pillars of daily life that could dominate the means to communicate with the whole world; by clicking a button, you can speak and communicate with anyone. Regardless of remote distances as well as different languages and cultures, you can buy and sell from anywhere and enjoy the interaction and communication of the internet such as browsing and viewing and listening to everything that is happening around the world.

The tools of electronicknowledge have boomed to include everything we use such as mobile phones, computers, cars, smart houses, aircraft, wireless, and much more; thus, the technology and electronicknowledge have become high glorious and necessary for human in daily life. The expectations of the administrative regulations for the customers of both internal or external electronic services have increased, so all institutions, including banks should keep up with the latest developments, and build management information systems that can meet with the ambitions and requirements of the age, and this is due to the development of information technology, communications and the effectiveness of their use, especially the banks which need more contact with their counterparts from international banks that sponsor the fields of electronic technology and techniques as well as the transfers of money across numerous and many services, and the payment of bills, financial bank guarantees, accounts and and much more...

Accordingly, the organizations, companies, governments, institutions and their customers should keep pace with electronic knowledge to keep in line with the latest developments and requirements and keep away from computer illiteracy to be able to use the electronictechnology tools, to create a developed and modern society that adopts information technology and communication in public life (home, market, institutions, as well as in entertainment, luxury, transportation and all facilities of life.

There is a difference between education and culture, we find that there is scientific illiteracy (especially in computer and electronicknowledge) culture comes after science, and here you should know that every one can teach and train the use of electronictechnology, because it makes life easier and more simple also it saves time, efforts and money and thus, it creates an educated society based on electronicknowledge that paves the way to create a correlation, accuracy, productivity and economic diversity between individuals and institutions of the technological revolution and to create jobs in the modern knowledge societies.

So, the importance of investing information technology has increased, in coincide with the rapid developments of the world, especially in the field of information technology and telecommunications, the modern organizations have expanded the use of these modern scientific developments to improve the quantity and quality of banking services, and improve the efficiency of electronic channels that offer through which this knowledge services, and these scientific developments and technological productions are continuous work that commensurates with the developed global system. Because of foreign competition, the banks expanded and provided the customers with infrastructure of hardware and software etc., and thus, the progress in this area will continue in order to achieve integration in the relationship with the rest of society, through the provision of banking services.

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Problem and questions of the study

The environment of business nowadays requires the employment of knowledge in departments and jobs in companies through the perception and minds of managers and leaders including: intuition, experience, skills, patterns of thinking, storage, creation, retrieval, transfer, and the extent of their relationship with the market on a hand, technology, competition, innovation, research, development, and achievement of high buiseness value on the other hand. Therefore, we believe that some of Jordanian banks face challenges in determining the quantity and quality of information and its current forms and elements as well as their methods of operation, since there is still a lack of clarity in some of operations and the benefits that can be achieved on a hand, and how they are measured in most organizations on the other hand. The business world has witnessed great development and extensive use of electronic information in order to benefit from the advantages of this technology of speed, accuracy, solving complicated problems, and predicting future variables ... etc. Accordingly all customers who use the technologies of electronic services will be benefited.

The problem of the study is in measuring the impact of electronicknowledge on the customers and employees of the Jordanian banks to improve the quality of banking services presented to them; the problem of the study is based on the following questions:

1. What are the levels of electronicknowledge in customers and employees of Jordanian banks (the study sample)?
2. Can the study sample recognize the importance of electronicknowledge? And how it affects the quality of banking services?
3. How highly level of quality that Jordanian banks use the electronic services?
4. Are there any significant correlation between electronicknowledge in (customers and employees) and the quality of banking service (the study sample)?

Objectives of the study:

The study aimes to achieve the following- :

1- Clarify the concept of electronicknowledge, e-banking services and theways to improve them.

2- Identify the level of use of electronictechnology in Jordanian banks.

3- Identify the level of improvement of banking services in Jordanian banks.

4- Measuring the correlation relation between the use of electronicknowledge and the quality of banking services in the Jordanian banking.

Variables of the study

This study is based on a set of independent and dependent variables, divided into:

First: The independent variables include two sets of sub-variables which are- :

A- General information: gender, age, job title, length of service in the banking business, functional specialization and academic qualification.

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B- ElectronicKnowledge (dimensions): computer hardware and software, Internet services, communication networks, bank cards, ATM and electronic banking.

Second: The dependent variables include the quality of banking services that consist of the following fields: the quality of electronic service, accuracy, speed in completing transaction.

Hypotheses of the study:

1- **The first hypothesis (H01):** There are no correlation relationship of significant differences between the dimensions of independent variable (electronicknowledge) and sub-variants of dependent variable (quality of banking services), and it comes up with sub-hypotheses represented in a correlation relationship with the dimensions of each sub-variant of the dependent variables.

2- **The second hypothesis (H02):** There are no significant correlation relationships between dimensions of public information and dimensions of electronicknowledge.

3- **The third hypothesis :(H03**): There are no significant correlation relationships between the moral dimensions of public information variable sub-dimensions of the variable (presence of banking services.(

4- **The fourth hypothesis (H04):** There are no a significant correlation relationships between the independent variables (electronicknowledge) and the sub-variables of (quality of electronicservices). It comes up with the following sub hypothesis: There is no significant correlation relationshipto between the dimensions of the electronicknowledge and each of sub-variables of dependent variables.

Procedural Definitions

Electronicknowledge: The ability to use computers and electronic technologies to keep up with the life of modern societies. (Humshari. 45, 2013)

Information Technology: tools, techniques, and systems which include the physical parts of different forms of software, databases, individuals, procedures, security and protection that work together in order to form an effective integrated system to achieve the organization's objectives (Slack, et. Al., 2014: 254)

Banking services: they are all related to the management of cash money offered by banks to their customers, such as deposit,withdrawal, convert and transfer, bill payment,lending, funds, financial banking, travelers checks, booking, payment, e-discount for services, credit cards, bank guarantees, financing and others (Kheir Eldin,2015, 112)

The theoretical framework and literature study:

First: the concept of electronicknowledge: the ability to confidently use computers and various electronic techniques of smart devices and sophisticated accessories and software to keep up with the life of modern societies and share with them the services, goods, information, data and knowledge (Zeyadat, 2008).

Also, it is knowledge of the electronicwork and learning to use its modern tools. (Tahir, 2011)

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The electronicknowledge is defined as: the ability of individuals (employees and customers) to use electronicapplications because of their effective impact on business and functional and personal tasks and different duties and tasks. (Titi, 2010)

The electronicsociety is defined as: a modern and developed society resulted by the adoption and entry of information and communication technology in life (workplace, home, businesses, service, and educational institutes, entertainment and luxury, markets and all services sectors). (Al-Harith, 2013)

Electronicgap: this is used to describe the enormous gap or social exclusion between those who have the skills to use information and communication technology and those who do not use them at all or use them in a limited way for economic, social, geographical, religious reasons and others. (Al Madina, 2015)

The entrance to the development of knowledge management:

The cognitive services that banks need to provide them to customers to include:

1- Meeting needs of customer knowledge: The bank needs to enter the competitive banking marketing in the new knowledge-economic climate and the possibility of using all technological means and technologies to constantly meet the evolving needs of customers through:

   A - Speed of response to meet customer needs by providing high-quality banking services at the right time and place.

   B - Providing banking services with sophisticated methods: this is by providing known electronic services.

The entrance to the development of banking cognitive abilities:

This is one of the most important factors that lead to the development of the bank's ability to achieve customer satisfaction and meet their needs as a result of providing the best and distinctive service.

A - Flexibility: the ability to diversify services and marketing at a time when customers need them as well as the flexibility to deal with the marketing variables to help them improve the bank's reputation and enhance customer confidence in the bank.

B - Time: competitive changes led to the rapid change into competition to include the element of time and reduce it for the benefit of both the customer and the bank at the same time.

C - Productivity: The investment and the exploitation of physical, electronic and human assets of banks lead to increase the productivity and achieve better output and quality with the least expensive cost in a positive competitive advantage for the bank.

D - High quality: the bank needs to adopt and apply the concepts of total quality management, ensuring the continuation of high-quality electronic and modern services to stay in the market the possible longest period.

Second: The quality of banking service:

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The concept of quality banking service: this means the electronic banking service provides innovative and modern services through electronic communication networks, for customers without feeling discomfortable as they go to the offices of these banks (Muharma, 2012), or being able to withdraw and deposit money at any time, even if the bank is closed, the customer deals with only data which ensures privacy and enhances secrecy also this relieves the paper work (Sorn, 2014).

The modern banks offer services including electronic banking service such like: showing bank accounts, detailed accounts, both internal and external money tranfser, investment funds, electronic cards services, subscription services, notification messages for payment andpayment of utility bills and property management of beneficiaries.

Forms of electronic banking include:

A - The electronic banking machines: Automatic Teller Machine that is spread in public places and offers many services including:

- Withdrawal and deposit of cash and checks.
- Transfer cash from accounts.
- Check book - pay various bills request.
- Know the account balance.

B -Electronic points of sale:

Machines spread in commercial and service institutes that enable the customer to use smart cards to carry out their payments through debit on the account electronically by passing the card inside these machines linked to the computers of the bank.

C - Home Banking:

The personal account controlled by the computer of home or anywhere else connects to a computer where the bank can be contacted by a password or PIN to conduct and complete the required banking operations, which ensures full confidentiality.

D - Mobile Banking:

Banking services made available service by using the mobile phone; the customer uses a password allows him access to the account to inquire about assets, as well as making deduction to implement any of the required services.

E - Phone Banking or the service of Call Center

The banks run a five day service by making centers for communication and customer service to allow performance of banking service of telephone by using a PIN to operate banking services.

The bank messaging service includes:

-Notification for the monthly salary - Notification for money transfer - Notification to reject checks.

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-Making deposit or promissory note - Granting a financial loan - Review the bank for any reason

-Client can also send a message to the ATM to withdraw amount of money to a person who is in front of the ATM.

Third: The previous studies:

1- The study of (Khumisi, 2014), the e-marketing and its impact on the quality of banking services, a case study in Algeria. The study aimed to identify the degree of the impact of electronic banking services and the extent of customer satisfaction as well as the quality of electronic banking in the Algerian environment, the study used the statistical survey approach, and the study found the following: the level of e-learning among the sample study is low also there is a lack of prospects for electronic knowledge and strategic information industry. The study came out with the following recommendations: finding a suitable marketing environment to prform the e-banking services and look at the experiences of developed countries in this area and pay much attention to this important service n all social aspects and supply the banking sector with scientific qualificated employees.

2- The study of (Fuda, 2013), the effect of using quality on the marketing of banking services- a case study for the National Bank of Omdurman) . this study aimed to analyze the quality of banking services provided by the National Bank of Omdurman from the customers' perspective and the actual service provided to them. The study used the descriptive analytical approach and concluded with a set of results including: the workers at the bank have expertises and high skills in offering high ratio banking services to customers. The study recommended the following: working to increase ATM outlets and choose strategic places in the state and find a scientific method for measuring the performance of employees and motivate them accordingly.

3- The study of (Dacey, 2013), the role of electronicknowledge in achieving a competitive advantage- an applied study in the Syrian government banks. This study aimed to introduce the subject of electronicknowledge management and its role in achieving a competitive advantage in the Syrian banks. The study sample consisted of (54) directors in the upper administration working in (6) banks in Syria. The data was collected by a questionnaire prepared for this purpose. The results showed there are significant relationships between knowledge management and a competitive advantage with the correlation (56.6%).

Foreign studies:

4- The study of Petter, DeLone and McLean, 2013), (Information System Success: The Quest for The Independent Variables: literatures of independent variables that affect the success of information systems were shown, more than 600 previous studeies were tested, the results of the study showed there are 15 factors affecting the success of information systems which are: enjoyment, confidence, the user expectation, external motivation, infrastructure of information technology, task coherence, tast obstacle, trends toward technology, regulatory role, participation of user, relation with developers, field of cognitial experience, management support, process of management, regulatory efficiency.

5- The study of (Kaur and Aggrawal, 2013)|, Exploration of success sactors of information system:

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This study showed the literatures of factors affecting the success of information systems in order to suggest a good sample to the factors related to the success of these systems. The results of the study showed it is important to put a sample for the factors of successful systems which are: factors related to human resources, factors related to planning, factors related to application, and finally factors related to continuous update and assessment of the system.

6- The study of (Chan, 2009), The Roles of User Motivation to Perform A Task and Decision Support System (DSS) Effectiveness and Efficiency in DSS Use: this study aimed to get actual measurements to systems of decision support by using three elements, as well as know motivations that make users perform their tasks and test the correlation with propertoes of decision support system. The study showed that people who used the decision support sustems are more effective to do their tasks perfectly, also the results showed there are significant differences between two of used standards, time and steps, and the results showed that using the decision support systems is highly increased.

According to the mentioned above, the most important characteristic of this current study are:

1- Clarify the two concepts of electronicknowledge and electronic banking services and their contribution to improve banking services in the Jordanian environment.

2- Clarify the most important obstacles facing the application of electronicknowledge and its impact on the performance of banking service.

3- The dimensions of variables and the scale are comprehensive, as the study consisted of a set of questions that covered all aspects of the subject.

4- The total size of the study sample is big, it consisted of (132) valid questionnaires which is equivalent to more than 81% of the total community (161) employees.

5- Diversity and comprehensiveness of the statistical analysis test to cover tests of correlation and effect (inclination) between variables.

6- The formulation of numerous and varied hypotheses to be tested and come up with the results of them.

7- This study connected two significant variables, electronicknowledge and banking services.

8- This study provides feedback to those in charge to commercial banks, to take advantage of them later.

Fourth: Methodology of the study

The study sample:

A procedural streamline planning was formulated to illustrate the nature of relationship between variables, as well as its trend in light of the study's problem, objectives, variables, and hypotheses, and this can be confirmed through the findings of the study.

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The study tool:

The researcher chose the most important dimensions, core and sub-paragraphs that have been adopted by researchers to measure (the electronic knowledge) and thus, a scale of validity and creadibity was developed by referring to the following:

A. Review the literature and the most important modern studies and research related to the subject (electronicknowledge.

B. Designing a questionnaire consisting of several comprehensive items and questions for the basic dimensions of (electronicknowledge).

Validity of the scale

The scale of the study should be tested in order to have a high degree of validity, it must be subjected to (Validity Test) so that it measures the scale in its external, internal, predicting, and distinguishing form to show how the items of the scale are suitable to achieve the objectives of the study.

Here are the most important tests and procedures that have been made on this scale:

A. External Validity:

The researcher has presented the questionnaire to about 10 of arbitirators academic professors (experts) in the major of management information systems, and computer and information technology who work in departments, colleges and universities in the Kingdom of Jordan, the researcher has earned the degree (89%) as approval to estimate the questionnaire to be composed in light of the views and observations of these experts.

B. Content validity:

The researcher has presented the svale to arbitirators to show the clarity of each item of the scale in terms of meaning, significance, composition, design, and judge the validity of using it.

The stability of the tool:

The stability of the scale was measured to ensure the internal consistency of items of the scale; it supports the relationship between item / field, and item / another field. The correlation coefficient of Cronbach's alpha was (92.9%) and thus, this shows that the scale is acceptable, especially as the value of the coefficient of stability of more than (60%) means it is statistically acceptable (AlQadi et al., 2004) and Sekaran, 2006) The following shows that.

Methodology of the study: the researcher used the descriptive analytical approach, which covers the theoretical side of the study by referring to ready-made sources, such as books, periodicals, journals, documents, articles and Arab, and foreign relevant research. The researcher also used the analytical method to analyse the collected data using the Statistical Package for Social Sciences (SPSS) to support the results and hypotheses of the study.

The study community:

The study community consists of all Jordanian banks in the city of Jerash who deal directly with the computerization of banking procedures through preparing and organizing data and

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procedures to be followed. The researcher found that he allocated good time to assess the good use of information technology of the banks' employees who were about (161).

The study sample:

Because the size of the study community has reached about (161) employees, the researcher decided to choose a large sample as a scientific effort to his study using the intentional method for all employees who work in the banks of Jerash for the year (2015).

Justification for choosing the study sample:

The sample of the study was selected intentionally not randomly, and the researcher was familiar with this, and the most important justifications for the selection of the sample as follows- :

-The fact that the banks are the first institutions in Jordan that have implemented the electronic systems and computerization.

- The subject of the study has not conducted before in banks, and thus this can support the researcher with useful results.

-The serious contribution can guide the researcher to important points about the subject of the study, and ans the researcher sees the place of applying the study is appropriate.

Determinants of the study:

The fields of the study was distributed upon the field of time that was for the year 2016, and the field of place that was in the city of jerash, and finally tha field of human including (employees, managers, assistants, heads, auditors, assistants of auditors... etc), most of them hold professional certification in accounting, administrative and computer.

Fifth: the results and discussion of the study

(A) Description and view of the preliminary results of the study variables (General Information): the study adopted a sequence order for the results in accordance with the sequence of the major variables of the study, as shown in the questionnaire of the study.

Gender: Table (1) shows the distribution of respondents according to gender, where the number of males was (124) by (77%), while the number of females was (37) by (23%).

Table (1) the distribution of the banks' employees according to gender|

T	Variable of gender	No.	Percentage
1	Male	124	77
2	Female	37	23
Total		**161**	**100.00**

In rural communities and small cities, there are still restrictions on the work of women in mixed workplaces; also women don't prefer working in banks as the work day is long compared to other jobs as teaching whose employees have about four months off days a year, on the other hand employees of banks have only 21 off days a year. Accordingly, the number of female employees is much lower than males.

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Age:

Table (2) shows the distribution of employees according to age, where the researcher distributed the variable of age to (5) categories, the category (less than 20 years) was the lowest rate, it was only (15) individuals, followed by (41-50 years) who were (14) individuals by (5.36%), whereas the highest rate was the category (21-30 years old) who were (137) by (52.49%).

Table (2) shows the distribution of employees of banks according to age/ n = 161

	Variable of (age)	No.	Percentage
1	Less than 20	15	0.093
2	21-30 years	77	0.47
3	31-40 years	40	0.248
4	41-50 years	14	0.086
5	More than 51	15	0.093
Total		**161**	**100**

This means there is a significant difference in age, and this is due to the existence of a relationship between age, educational qualification, and years of experience. This means that these functions are exercised by different ages of workers.

4. **Job Title**: The following table shows the distribution of employees in accordance with the departments and units of the banks: manager, manager assistant, supervisor, head of department and accountant ... etc. the largest number of employees was for accountants, they were (32) by (19.54%), and this result is consistent with the nature of banking work that need accounting and auditing departments, as for the category of head of departments, it came in the second rank (26) by (16%) , treasurers and auditors were (22) by (13%), then the position of finance officer, there were (12) employees by (0.74%). Finally, the category of manager and manager assistant, there were (8) ones by (0.049%).

Table (3) the distribution of the study sample according to job title in the banks' units and departments

	Variables	Category	No.	Percentage
1	**Jobs at Jordan banks**	Manager	8	0.049
2		Manager assistant	8	0.049
3		Head of dept.	26	0.16
4		Audit	22	0.13
5		Supervisor	14	0.086
6		Accountant	32	0.19
7		Finance officer	12	0.074
8		Data entry	17	0105
9		Treasurer	22	0.13
Total			**161**	**%100**

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Qualifications:

The following table shows the distribution of the study sample according to their scientific and academic qualifications, the largest number of employees was the holders of bachelor degree, which is consistent with the nature of work, the bachelor's graduates were (146) by (55.93%). Followed by the holders of (Diploma degree of colleges), they were (49) employees by (18.77%), then the degree of (Master), there were (20) employees by (7.66%) and the category of (other certificates), there were (35) employees by (13.40%).

Table (4) distribution of the study sample according to qualification/ n = 161

	Variable	Category	No.	Percentage
1	**Qualification**	Diploma	59	0.36
2		Bachelor	75	046
3		High diploma	9	0055.
4		Master	6	037.
5		phD	0	.0
6		Others	12	0.074
Total		**6**	**161**	**100**

As for the PhD holders, they are rarely available since the nature of banking work doesn't fit their certificates and qualifications in diploma terms of salaries and long hours of working and therefore the banking work is limited to those who hold bachelor and diploma degrees. The categories of employees were distributed upon the following:

Profession specialisation

Table (5) shows the distribution of the study sample according to the profession specialisation, as noted from the table above, the highest number of employees in banks was mostly from the administrative sciences, there were (53) employees with the percentage (32.95%), and this is consistent with the nature of work that is mostly administrative and it meets with their abilities and skills. Then the specialization of (Computer Science), there were (33) employees by (%), Also, this result is consistent with the nature of banking work that masters the computer skills of various branches: programmers, data entry and maintenance technicians... etc. the category of other specialisation was (27) employees by (16%), then holders of accounting degree were (43) by (26%), since the nature of banking work requires auditing, registering and auditing assets, documents…etc, and finally, those who hold (law) degree were (5) by (3%) which is low percentage.

Table (5) the distribution of the study sample according to profession specialization/n = 161

Profession specialization	No.	Percentage
Accounting	43	0.26
Computer sciences	33	0.20
Management sciences	53	0.32
Law	5	0.031
Others	27	0.16.
Total	**161**	**%100**

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Duration of career service:

Table (6) shows the distribution of the study sample according to their career service in the banks. The duration (from 15 to less than 20 years) was in the first rank and this is an indicator to job security and stability, there were (50) employees by (31%), then the duration (from 3 to 5 years) was in second rank, they were (44) employees by 27% of the total number of the study sample. This category includes newly appointed individuals with short experience, then the group (from 10 to less than 15 years) was in the third rank including (26) employees by (16.47%), followed by the category (from 5 to less than 10 years) that came in the fourth rank, was with a good number, and those who have an experience of more than (20 years old) were (25) employees. Finally, the category of (less than one year) was (9) employees by (0.055%), it was the least percentage.

Table (6) the distribution of the study sample according to duration of career service

Duration of career service	No.	Percentage
Less than 3 years	9	0.055
3 to less than 5	44	0.27
5 to less than 10	22	0.13
10 to less than 15	26	0.16
15 to less than 20	50	0.31
20 years and above	10	0.062
Total	**161**	**%100**

As for the number of employees in each bank operating in the city of Jerash, the following table shows the distribution of these banks.

Table (7) the distribution of the number of workers in the banks of Jerash City

Banks	Number of workers	Percentage
Islamic bank	**42**	**26%**
Housing bank	**33**	**20%**
Jordan bank	**23**	**14%**
Amman Cairo bank	**13**	**0.088%**
Islamic arab bank	**14**	**0.086%**
Arab bank	**17**	**10%**
Ahli bank	**19**	**11%**
Total	**161**	**100%**

The highest percentage of workers was (26%) for the Jordan Islamic Bank, and the Bank of Jordan has got the percentage (23%) followed by (20%) for the Housing Bank and and the lowest percentage was for Cairo Amman Bank with (0.086) and the reason for increasing the market share of Islamic bank is the fact that the local community is religious one and influenced by tribal customs and Islamic values that consider other banks usurious and do not deal in accordance with the Islamic sharia in banking dealings.

(B) Describing and viewing the independent preliminary results (e-knowledge):

It is seen from the answers of the study sample regarding their use of information technology and electronic knowledge, the arithmetic mean of last year for information technology variable

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was (3.494) and standard deviation (0.516), which is a high level, the distribution of answers was processed according to the five-Likert scale as follows: (5-3.5) very high (3.49-2) average and (1.99-1) weak, and so on for the rest of sub-variants of the nine items of information technology variable, and the following table shows the results as follows: the arithmetic mean of the variable (individuals and training) was with a mean (3.558) and standard deviation of (0.689). it was in the first rank among the sub-variables, whereas the sub-variable (Maintenance) occupied the second rank with a mean (3.556) and standard deviation (0.857), and the variable (protection against risks) occupied the third rank, with the arithmetic mean (3.525) and standard deviation (0.742). On the other hand, the variable of databases was the least percentage among sub-variables, with a mean (3.146) and standard deviation (0.798). The means for the rest of sub-variants of information technology ranged from (3.480 to 3.446) and standard deviation (0.707 to 0.793), respectively (3.397, 3.146, 3.166, 3.480, 3.517).

Table (8) the arithmetic mean and standard deviation of electronicknowledge dimensions from the standpoint of respondents

	Variables	**Arithmetic mean**	**Standard deviation**	**Variation coefficient**	**Level of importance**	**Order**
1	Equipment	3.517	0.712	0.20	%70.34	4
2	Software	3.480	0.707	0.22	%69.60	5
3	Artificial intelligence	3.416	0.798	0.23	%68.32	7
4	Data bases	3.146	0.798	0.25	%62.92	9
5	Telecommunication networks	3.446	0.793	0.22	%68.92	6
6	Security and privacy	3.397	0.743	0.21	%67.94	8
7	Protection against dangers	3.525	0.742	0.21	%70.50	3
8	Individuals and training	3.558	0.689	0.19	71.16%	1
9	Maintenance	3.556	0.857	0.24	71.12%	2
Information technology as a whole		**3.494**	**0.716**	**%21**	**70.78%**	**---**

The ranking of relative importance, the sub-variable (individuals and training) was in the first rank, followed by (Maintenance) in the second rank, and so on for the rest of variables as in the seventh column of the table, and this means that the sub-variable, which came in the first rank, is the most widely used in banks.

The training is a necessary basis to keep up with the evolution of computer technology, and the computer does not integrate without equipment which is the key element to create a database. Thus, the lower order of the sub-variable (any element of electronic knowledge) means that the lack of importance and usage by members of the study sample.

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(D) Describing and viewing results for the sub- variable (quality of banking work).

161 respondents answered the question how could the electronicknowledge with its nine elements help the quality of banking service, the answers of respondents were distributed upon total form, (53) items, and (9) sub-variables, and they will be displayed briefly as in the case of the first independent variable (e-knowledge).

Table shows (8) values of arithmetic means and standard deviations for the study sample of the nine sub-variables of quality of banking service, the value of arithmetic mean to stimulate job service was (3.659) with the standard deviation for the dependent variable (0.500), which is relatively a high value. The highest value of mean was (3.721) for the sub-variable (build effective supervisory systems) with a standard deviation (0.662) whereas the least value of mean was (3.616) for the sub-variable (simplification of work procedures) with a standard deviation (0.066). The other values of arithmetic means ranged from (3.317 to 3.608), as in the following table.

After making an initial examination for the answers, it was noted that the highest arithmetic means were (3.676, 3.717, and 3.655) for the sub-number variables (9, 3, 7), and the highest arithmetic means for the sub-variables (2, 4, 8) were low (0.662, 0.803, 0.632) and this is an evidence that employees (respondents) agree in their answers, through experience and objective judgment on the questionnaire.

Table (9) values of arithmetic means and standard deviations of the dimensions of the dependent variable (banking service) as a whole

	Variables	Arthmetic mean	Standard deviation	Variation coefficient	Level of importance	Order
Stimulate career service		Q	0.500	%13	73.18	5
1	Size of banking service	3.648	0.667	%18	72.96	7
2	Quality of banking service	3.676	0.632	%17	73.52	3
3	Speed of service	3.666	0.828	%22	73.32	4
4	Efficiency of service	3.618	0.609	%16	72.36	8
5	Ease work procesures	3.616	0.660	%18	72.32	10
6	Build effective supervisory systems	3.721	0.662	%17	74.42	1
7	Efficiency of audit	3.655	0.803	%22	1 .73	2
8	Reduce mistakes	3.608	0.774	%21	72.16	9
9	Accuracy of feedback	3.717	0.803	%21	74.34	2

The researcher explained that the high values of arithmetic means are attributed to the use of electronicknowledge that added a lot to buiseness and changed its nature and reduced many of mistakes.

As for the electronicknowledge and customers, table 9 shows the answers of customers regarding their level of knowledge of electronic works and how to deal with equipment and software provided by the banks in the city of Jerash. The answers were as follows:

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Table (10) distribution of the level of electronicknowledge in Jerash banks

Banks	The level of electronic knowledge of the banks' customers/from banks' employees prespective
Islamic bank	**41%**
Housing bank	**50%**
Jordan bank	**46%**
Amman Cairo bank	**56%**
Islamic arab bank	**44%**
Arab bank	**57%**
Ahli bank	**55%**
Total	

By observing the previous table, the customers of the Islamic bank have the least level of electronic knowledge by 26% and this due to the fact that the majority of customers there are civil and military retirees, and they deal with the Islamic bank to deliver their salaries because they consider this bank is consistent with the provisions of Islamic Sharia regardless of the level of electronic services provided by the bank, the majority of this bank is old people with a low level of electronic knowledge.

The answers of the banks' employees were between (40-60%) which is a relatively result, and this result confirms there are more reasons beyond the lack of electronic knowledge in the customers of the Islamic bank; these reasons are cultural, political, social, economic, and environmental that led to a wider electronic gap compared to the level of banking services presented in the developed countries and the local banking service. One of these reasons, the government neglects the city of Jerash, they don't market the city from tourist, local, regional and global sides, also there is a lack of industrial sector that supports the commercial activities; there aren't commercial centers, hotels, or smart companies, institutions, or organizations that deal with technology, also there are prevelant norms in rural and tribal communities that restrict any change and feel afraid of every new.

Sixth: Testing hypothesis and interpreting results

Testing correlations of the study variables:

The correlations between the study variables are illustrated according to the classification of data, and Table (9) shows the correlation relations of the independent variable (electronicknowledge) with its different dimensions, as well as the dependent variable, and Spearman's rank correlation coefficient for the study variables as follows:

(A) General information that links the electronic knowledge dimensions of the relationship (information technology):

Table (10) shows that there are positive and negative relationships between the dimensions of the variable (general information) and dimensions of electronicknowledge, the positive correlations were (41) and the negative ones were (59) out of (100), and this means that the majority of sub- variables is not necessarily associated with the electronic knowledge dimensions. As the level of general information variable increases in a side, it will be decreased on the other side. As for the positive correlations, when the variable of general information

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increases, it will be increased on the other side as well. The positive and negative values were between weak and moderate from moral power. The category of age has a negative relationship with the dimensions of electronicknowledge.

Table (11) Spearman relations (between general information and electronicknowledge)

Variables	Equipment	Software	Artificiali ntelligence	Data bases	Networks	Security & privacy	Protection against dangers	Individuals &training	Maintenance	IT as a whole
Gender	0.004-	0.008	0.059	0.011	0.052	0.037-	0.018	0.061-	0.129-	0.011-
Age	0.002-	0.045	0.047-	-0.515**	0.076-	0.038-	0.055-	-**0.318	-0250.**	0.034-
Job title	**0.073	0.090	0.061	0.003	0.029-	0.009	0.029	0.114	0.040	0.035
Duration of service	0.047	0.046	0.042-	0.025-	0.026-	0.008	0.036-	0.012-	0.021-	0.113-
Qualification	0.040	-*0.506*	0.410-	0.007-	0.005-	0.009-	0.023	0.074-	0.000	0.015-
Profession specialization	0.066	0.086	0.075	0.075	0.019	0.211**	0.089	*0.136	0.103	0.148*
Profession experience	0.027	0.067	0.107-	0.006	0.025-	0.013	0.015-	0.004-	0.003	0.001-
Using IT	0.006	0.048	0.035-	0.029-	0.043-	0.003-	0.009-	0.008-	0.071-	0.030-

The job title category got the most positive relationship with the variable of electronicknowledge and information technology as well as the category of profession specialization. This means that profession specialization plays a clear role in how to deal with the variables of (electronic knowledge) I is clear from table (5) that is previously reported that there is a significant correlation relationship between each of qualification, job specialization, and the duration of experience with most of the information technology dimensions. Thus, the first major hypothesis can be achieved.

Table (12) Spearman's correlation coefficient for dimensions of electronicknowledge and banking services

Independent variable	Stimulate creativity (dependent)
IT	0.629 **

(**) = Is Significant correction at level (0.01)

Relations of general information with dimensions of stimulating banking services:

Table (13) shows the correlation relationship between dimensions of general informationand the sub-variable (banking services), it is noted that a large part of these relations is weak and

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moderate on one hand, and negative and positive on the other hand. The number of positive relations was (50) and the negative was (50) as well, this means that not all general information has a direct relation with stimulating dimensions of banking services, the most positive relations were: profession, job experience and academic certificate, and this is consistent with real life, those who have profession qualification can use information technology perfectly, and thus they can develop work in terms of creativity, type, speed of achievement, sufficient accuracy, reduce mistakes. As for those who hold scientific certificates, the highest levels of scientific qualifications and degrees demonstrate the accurate professionalism and specialization to perform work sufficiently and perfectly.

Table (13) correlation coefficients of (Spearman) for general information with dimensions of (banking quality of work)

Variables	Size of creativity	quality of creativity	speed of creativity	effeciency of creativity	Ease work	Build supervisory systems	Effeciency of audit	Reduce mistakes	Accuracy and speed	Stimulate creativity as a whole
Gender	0.022	-0**0.35	-**0.618	0.017-	0.132	0.266**	0.026	**0.323	**0.501	0.008-
University	-0.412**	0.200	0.130	-0.046	*0.404*	-00.13	0.343**	0.110-	**0.238	0.019
Age	-0.013	0.001-	0.520**	0.011	0.058-	0.065	0.143	0.047	-**0.338	**0.243
Profession	0.441**	**0.530	0.448**	0.820**	0.43**3	-0.108	0.414**	**0.357	0.003	**0.355
Experience	0.304**	0.130	0.522**	0.362**	0.116-	0.034-	-0.114	**0.347	**0.425	0.053-
Qualification	0.353**	**0.330	-0.022	0.701**	140*0.	**0.425	0.129	0.122	0.077	0.125
Certificate degree	0.491**	0.060-	0.107	0.719**	0.219	**0.642	0.080	**0.322	0.015-	**0.433
Job experience	0.512**	0.120	0.129	0.230	-*0.816*	**0.503	-0.088	**0.645	**0.920	0.122
IT experience	-00.11	-0**0.50	0.083	-0.557**	-00.17	0.031	0.650**	0.133-	0.322-**	**0.418-
Using IT	0.071	1**0.97	0.360**	0.606**	*0.313*	**0.414	0.717**	1540.	**0.737	0.118

The relationship with the years of experience to stimulate dimensions of creativity as a whole was negative (-0.482), which was the largest negative value, whereas the lowest value was for the variable of gender with (-0.008) which is too weak.

It is noted that the number of significant relations was (58) where the third sub hypothesis was achieved and the correlation value ranged between the highest value (10.97) for the variable (electronicknowledge) and (the quality of the banking work) and the lowest correlation value was (-0.008) for the variable of (gender). The rest ranged between (-0.008 to 971.0) and the number of significant relations was (58) out of (110), whereas the non significant value was (52) out of (110). And thus the main third hypothesis was achieved.

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D-The relations between electronicknowledge and motivate banking works:

The following table shows the correlations between dimensions of (sub-variables of electronicknowledge), and the dimensions of the dependent variable (quality of banking work), the first hypothesis confirmed there is significant correlation relationships between electronicknowledge and the quality of the banking work, and the significant correlation was (0.629), which is under the confidence level (0.01), and it is a result of the relationship of technology dimensions as a whole and dimensions of banking work as a whole. The first hypothesis stated that there is a significant correlation relationship between (hardware, equipment, software, artificial intelligence, databases, networks, security and protection against dangers, personnel training, and maintenance), and the quality of the banking work.

Table (14) shows correlation coefficients of (Spearman) between dimensions of electronic knowledge and the sub-variable (banking)

Independent and independent variables	Size of creativity	Quality of creativity	Achievement	Effeciency quality	Ease work	Build supervisory systems	Reduce mistakes	Accuracy and speed	Dimension of creativity as a whole
Equipment	**0.282	**0.315	**0.311	**0.299	**0.291	**0.238	**0.339	**0.275	**0.429
Software	**0.325	**0.362	**0.382	**0.385	**0.288	**0.336	**0.286	**0.206	**0.440
Artificial intelligence	*0.239*	**0.205	**0.230	**0.301	0.193	**0.281	0.183	**0.280	**0.433
Data bases	*0.237*	**0.349	**0.271	**0.325	**0.282	**0.259	**0.228	**0.260	**0.387
Telecommunications networks	**0.308	**0.337	**0.264	**0.293	**0.351	**0.351	**0.274	**0.205	**0.406
Security and privacy	*0.298*	**0.367	**0.232	**0.277	**0.281	**0.310	**0.302	**0.325	**0.500
Protection against dangers	*0.140*	**0.410	**0.321	**0.261	**0.246	**0.263	**0.320	**0.256	**0.369
Individuals and training	0.38**6	**0.366	**0.401	**0.320	**0.229	**0.410	**0.329	**0.280	**0.438
Maintenance	**0.559	**0.499	**0.356	**0.303	**0.410	**0.321	**0.240	**0.269	**0.496
Information Technology dimensions as a whole	**0.490	**0.498	**0.675	**0.655	**0.459	**0.480	**0.610	**0.512	**0.629

The results of the table shows that the achieved results ranged between (0.629 - 0.140) which are all significant whereas the lowest value was for (artificial intelligence) and (reduce mistakes), whereas there is no correlation between the sub-variables (electronic knowledge), and the level of confidence of the values of the correlation was (0.01, 0.05).

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In light of the results we conclude the following:

- There is a significant correlation between the dimensions of electronicknowledge and the dimensions of the quality of banking work.
- There is a significant correlation between the two variables (hardware, equipment) and (banking work).
- There is no significant correlation between the two variables (hardware, equipment) and (quality of banking work).
- The relationship was medium (46) out of (81). It is more than half
- The first main hypothesis was achieved as well as the sub-hypotheses (1-1), (1-2), (1-3), (1-4), and thus these results supportthe main content of the fourth hypothesis.

Test the effect of correlations (gradient) for the variables of the study:

To verify the validity of the proposed expectations for trends of effects between the study variables, the multiple regression coefficients were used to know the impact of strong significant relations on independent and dependent variables on a hand, or independent and dependent sub-variables on the other hand. The data was addressed and sorted by using SPSS program to know the value of correlations whether they are higher or lower than the arithmetic mean values, and in case there is a significant correlation, this means it is significant and it there is not a significant correlation, this means it is not a significant one, and so for all the variables. The hypotheses were tested as follows: -

The effect of electronicknowledge on banking work:

Table (13) shows the correlation coefficient, the values ranging between (-0.02 to 0.325), and the highest value was for the sub-independent variable (maintenance) of the sub-dependent variable (volume of work in banks), and the significant relations were (3) out of (9) whereas the insignificant ones were (6) out of (9), and the values ranged between moderate and weak. The following table shows these values.

Table (15) shows the results of simple regression for the effect of electronicknowledge on all nine dimensions (hardware, equipment, software, artificial intelligence, databases, networks, security and protection, protection against dangers, individual and training, and maintenance) as well as the dimensions of dependent varaiable of banking quality that also include nine dimensions (size of banking work, banking type of work, the capacity of achievement, efficiency of banking work, ease work, building supervisory systems, efficiency of audits, reduce mistakes, and accuracy of the speed in reverse), the results showed that there is a clear impact of electronicknowledge on the quality of banking work with the factor explanation (56%) of their functional performance at banks, and the value of (B) was (0.632), meaning that any change in one unit of electronicknowledge leads to a change in the value of (63%) in the banking work. The value of (F) is significant by (191.758) and the level of significance (0.000).

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Table (15) correlation coefficient of electronicknowledge for the quality of banking work as a whole

Sig	F	B	R^2	R
0.000	191.758	0.632	0.425	0. 652

According to testing the fifth major hypothesis, there is a significant correlation of electronicknowledge in the quality of banking employees and this due to the inability to accept the main hypothesis and accept the alternative hypothesis.

Eighth: Conclusions and recommendations:

1. Conclusions: The conclusions were sorted according to their topics, as follows: -

Electronicknowledge

The level od using technology increased by members of the study sample working in the banks, the dimension of (individuals and traning) has got the highest arithmetic mean (3.558), the (maintenance) got (3.556), (protection against the dangers) got (3.525), whereas the least value was for the variable of databases by (3.146).

There is a clear difference in the importance of the banking working elements where the element (building supervisory systems) was the highest value of arithmetic mean by (3.721) followed by the feedback (3.717), while the element (reducing and processing mistakes) was ranked the last, which is the least value by (3.608), while the arithmetic mean of (the quality of the banking work as a whole) was greater than the value of (IT) by (3.659). This means, the study sample recognises the importance of banking work.

Hypotheses related to the availability of electronicknowledge dimensions and correlation relations with general information were achieved.

There are moderate positive correlation relations between elements of electronicknowledge in the measurement of internal consistency.

Banks have enjoyed a high level of attention for using information technology and electronicknowledge, which is a positive sign, especially the fact that banks rely on the interaction of employees and customers in generating electronicknowledge, and they lack the ability to spread the culture of electronicknowledge.

Banking work

There is a positive correlation between electronicknowledge and banking work.

The order of electronicknowledge areas that affect the quality of the banking work differs in accordance with the values of arithmetic mean to demonstrate the importance of each of the areas, which all were were above the level of the arithmetic average (3.50).

Most of the objectives of the study have been achieved.

Conclusions related to the sample of correlations:

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1. The banks (the study sample) used the information technology and its applications in their departments and units.

2. There is a clear difference in the use of information technology constraints.

3. There is a clear difference in the dimensions of banking work quality.

4. All of electronicknowledge dimensions contributed to adopt the concept banking work quality, which confirms the ability of these banks to recognise the dimensions of this knowledge.

5. All of electronicknowledge dimensions contributed to achieve its objectives and increase the functional level.

Conclusions related to a sample of effect:

The dimensions of electronicknowledge have a significant effect on the quality of banking work.

There were (6) values significant out of (9) in the form of the proposed research with varying degrees of values.

RECOMMENDATIONS

In light of the findings above, the researcher recommends the following: -

1- The banks should study the possibilities of expanding the electronic services that can provide fast services in a position to maximize the benefits provided by these applications as well as reduce the cost.

2- The banks' customers and employees should recognize the importance of electronicknowledge to gain high quality standards of banking services.

3- The employment of electronicinformation technology to design systems that fit with customers' need to banking transactions.

4- Provide the banks' employees with neccessary skills of information technology.

5- Increasing research and field studies that link electronicknowledge with the quality of banking in Jordan.

6- Taking advantage of expertises and experiences of some Gulf and foreign banks to develop the quality of banking services.

7- Banks should keep their employees (workers and makers) and transfer knowledge to new staff.

8- The need to consolidate the term of electronicknowledge or information technology used in the Jordanian research, so that it becomes a term with synonymous in the Arabic language, and this is the responsibility of the Arabic Language Academy, the Ministry of Higher Education and Scientific Research, and the Ministry of Communications and the Jordanian information technology.

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