

Impact of Information and Communication Technology Investment to Achieve Excellence in Banking Services Quality: An Analytical Study of the Views of a Sample of Workers in a Number of Government and Private Banks in the Province of Dohuk Iraqi Kurdistan

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Abstract

The research discussed the information and communication technology investment in the pursuit of excellence in the provision of banking services with high quality in the banks of the province of Dohuk and their impact in facilitating the task that lies upon themselves to implement the plans and programs of development and improve the quality of services provided to beneficiaries, the importance of the research is triggering from the banks as a service organization specializes in the package production of banking and financial services, which is one of the main pillars to achieve the proper construction of banks, And the banking sector considered to be one of the most important economic sectors and the most sensitive and vulnerable to revolution communications and information that contributed to its progress and prosperity, especially in recent decades, which is used networks and connected computers with each other for banks development to apply to high technology systems which will exchange data and access to the Legal banking business based on the pillars of sophisticated electronic, Moreover, banks constantly sought to achieve a high quality of services, especially in light of growing competition in this sector by identifying the requirements of customers and work to meet the various strategies of marketing, because the quality is the price of entering the market and excellence which does not achieved only through the possession of these banks to sophisticated technology. And thus achieve access to quality services in banks and these services cannot achieve its goals unless its production and presentation were in a distinct level of quality, hence the importance of the subject technology investment in the provision of quality services in banks including banks of Dohuk province. So research aims to follow up the strengths and weaknesses in the implementation of programs in the province of Dohuk banks Depending on the foregoing and the importance of excellence in the provision of services under the efficient use of information technology and communications, the current research seeks to determine the impact of information and communication technology in the pursuit of excellence in the provision of services in the light of the analysis of data collected by Form questionnaire distributed to a sample of (47) as director of Sections the number of people from government and private banks in the province of Dohuk, right down to display a set of conclusions, as well as providing the necessary recommendations and proposals in this area.

Introduction

The banking sector considered to be one of the economical active sectors which contributes in achieving the economical development in the state and back service considered to be one of the most important services affected by information and communication revolution, in this research the researcher tried hard to focus on information and communication investment to achieve the excellence in the quality. Services in the province of Dohuk banks according to essential changes for the quality of services which must be consider for the sake of applying and investing information and communication technology to achieve excellence with high efficiency in banks. And the administration has passed banks in the developed countries, to advance stages, in the conceptual interpretation of the quality of services and the implementation of successful applications of this interpretation. Banks in developed countries ranked in various stages of quality until it reached a comprehensive software application for the quality of services. The basic stage the precedes the application of information and communication technology curriculum investment to achieve excellence in the services quality is a stage to achieve quality (Quality Assurance), and the banks in Kurdistan has begun making a great efforts in order to implement and investment information technology and communication to achieve excellence in the quality of services in effort to get to achieve competitive advantage in the banking market. And consistent with the above and for importance of information and communication technology and its role in achieving excellence in the provision of banking services we have found appropriate to study these important subjects to the level of our banks to determine its position and down to find the nature and effect of correlations between them. The research has taken his theoretical and practical course accordance with the following:

First: Research Methodology

Second: Theoretical side

Third: Practical side

Fourth: Conclusions and recommendations

First Topic: Research Methodology

1- Research's Problem

Application and investment information and communication technologies to achieve excellence in the quality of banking services in Iraqi banks considered to be relatively modern subjects in comparison to other countries, and this reflected to the reality of these services, and the facts of the tools and administrative methods adopted in these banks. The concept of banking services quality considered to be from the basic pillars that are based upon the banks. And it was clear for us through our modest looking over there a lack in perception and awareness of the relation between information and communication technology and excellence in banking service quality, whether on a theoretical (academic) or applied level, which prompted us to examine this relationship in our banks and down to determine the link and impact between them. In addition to what was preceded, the problem of the research can be determined through the following research questions:

1. Do researched bank management have a vision for the variables of research (information and communication technology and banking service quality)
2. Is there are a correlation between the variables of research
3. Does information and communication technology affect in achieving the excellence in service quality.

Second: The importance of Research:

This research endorsed a great importance, and this importance stems the role played by the banks as a sensitive service sector and effective specialized in production a package of banking and financial services and of the main pillars to achieve the proper construction of the economy in the region, and these services cannot achieve its goals unless it is produced and presented in distinguish level of quality, and moreover the importance of the service quality in banks goals achieving in the required manner, and this requires the provision of information and communications technology developed in the banks surveyed, hence the importance of the application subject and investment information and communication technology to achieve excellence in the banking services quality , including banks in the province of Dohuk

Third: The objectives of the Research:

This research seeks to achieve a set of objectives, which includes:

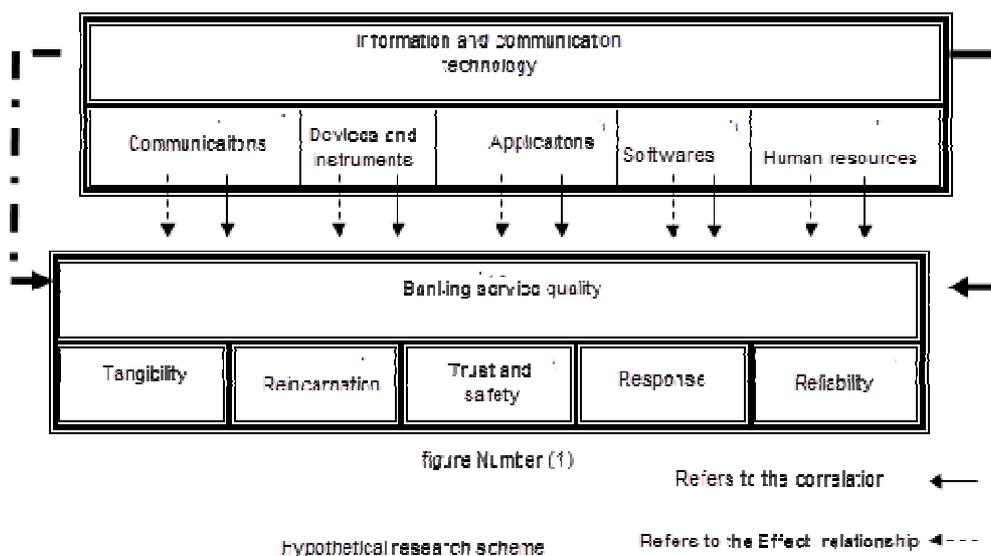
- 1- Knowledge and application and investment information and communication technologies to achieve excellence in banking services quality in the province of Dohuk banks, and this is being done through the construction of the necessary knowledge in this field, and the statement of the tools and methods applied to the development of these conceptual frameworks into action.
- 2- Identifying information and communication technology components which contribute in achieving the excellence in the banking service quality at the given test the nature and strength of the correlation and impact between them.
- 3- Diagnosing to which extension there is a commitment to the investment information and communication technology application in the surveyed banks.
- 4- Providing and set of proposals for the departments of surveyed banks, which can contribute to improve banking service quality offered. In order to achieve marketing programs targeted to customers in those banks.

Fourth: The Location limits: Banks are in Dohuk province

- 1- Timelines: temporal boundaries for this research stop a the period in which they conducted the field side which is the period extended for 12 /2012 – 3 /2013/
- 2- Research limitations: The limit of the research consists of two foundations which are information technology characterized as independent variable and the banking service quality as a variable follower.

Fifth: Research Scheme:

Research adopted a hypothetical scheme, which its variables were derived from related theoretical propositions, the scheme indicated a correlation between variables, as well as the effect one –way information and communication technology characterized as independent variable and excellence quality banking services quality characterized as dependent variable.



Sixth: Research Hypotheses:

To achieve the goal of the research, researchers develop hypotheses that focus on testing the application and information and communication technology investment, to achieve excellence in the banking services quality in Dohuk province banks. And these assumptions are:

- 1- There is a significant correlation between the positive information and communications technology in terms of terms of its components and achieve the provided service quality in terms of the variables in the surveyed banks.
- 2- No significant effect on information technology and communications in terms of its components in achieving the provided services quality in terms of the variables in the surveyed banks.

Seventh: Methods of collecting data and information

In order to implement the researches methodology, several methods was employed to obtain data ns information, it has been relied on the available references, including internet to cover the theoretical side. While the questionnaire form adopted in the practical side and which considered the main method, it has been drafted in line with research variables by using the mentioned studies in the theoretical side which discussed those two variables. And it has been observed in the formulation of the questionnaire paragraphs the simplicity and clarity, as well as subjecting them to scientific and objective tests to measure their persistence and virtual sincerity.

Eighth: The community and the study sample

The community of this research consists of managers and heads of departments in the banks of the province of Dohuk, and the estimated number of members of the research community of about 70 people. It has been taken a representative random sample of community.

The study rate of (60%), forms of study questionnaire were distributed on this sample estimated of 47 forms, and have been retrieved, and it has been shown the number of forms suitable for statistical analysis (35) form, and were analyzed using appropriate statistical tools.

Ninth: Validity and reliability form test

Form was presented to a group of academics professors in the field of banking information system at the University of Dohuk and Mousel University, they have been briefed on form paragraphs, and they made a series of observations about it, their observations have been taken by the researches.

And a steady questionnaire test was conducted through distributing it to experimental sample of administrators in the banks, then researches repeated distributing same questionnaire on the same sample after two weeks , and it turned out the answers were identical which is estimated (71%) which demonstrate a high degree of answering stability on the questionnaire paragraphs, and forms were analyzed and extracting the value of Alpha Cronbach's, coefficient, the index has reached the total of the questionnaire about (0.83) and its statistically acceptable value compared to humanitarian sciences.

Tenth: statistical tools used:

Researchers use in analyzing data of this study a range of statistical tools that are appropriate to the nature of the variables of the research, most notably the arithmetic mean and frequencies, percentages and simple linear regression and simple correlation coefficient and the Spearman alpha Cronbach's coefficient.

The second topic

First: information and communication technology conceptual framework

lately much talk about the ability of the various economic sectors to keep pace with developments in the world of technology and business, and keep abreast of developments, including the enormous that occur in the field of information technology, and perhaps the banks are one of the most vital and polarizing economical for everything new, which will help her to performance its business, and immunize themselves from any threat, including information technology all forms of technology used in the creation, storage, processing, and output the data and exchange, and unite ideas in all sources about the components of information technology and communications, which include (material requirements (equipment) - software - application-communications-human resources (which led to the adoption in our search to determine the current role in achieving excellence in the banking marketing service, with the following explanation of each:

- 1- **Devices and Instruments** : It's a group of a tangible compositions material that is used as a cornerstone in the construction and installation of electronic Computer, both parts internal or external , one of the most important technological developments that have sprung up after the second half of the last century, and took the intervention of the various areas of life, including the banks, and include fax, computers and electronic management base system information stored, processed and output the possible results . Such as buildings and power supplies, etc., and the infrastructure for information technology prepared from data and peripheral devices, and internal networks and equipment input and output Computers have developed over the past years a tremendous development it has shifted from large-scale complex and expensive devices to high precision micro computers carried in a pocket . Banks face many challenges in determining the type of hardware and manufactured equipment to technological information, as it is usually high costs compared with software and other than those imposed on management a comprehensive study to choose the type of these devices, thereby hindering its goals in managing its functions (Thabit, 2005.74).
- 2- **Software:**
It is and Old term appeared with the beginnings of the emergence of old computers and is a set of commands and directives that are written by the programmer to work compatibility between individuals and the computer, and the term software start to spread slowly especially with the development that was accompanied by other elements of the infrastructure such as computers and networks. As well as increase the size of the data (al-Tai 0.2001, 14), and is an integral component of the physical elements of the information and communication technology is well known.
The software tool used by hardware and equipment in the performance of their work, a set of directives implemented in the CPU of the data in the manner that will ensure the achievement of the objectives of the bank, which needs qualified technical staffs to work and systems design and programming. Without hardware and software become physical equipment of the computer just blocks metal and plastic without interest, as the work of the CPU for data collection depends on the directives that link them to carry out the treatment by those software.) Salmi 0.2004: 16). The software represent the components of intangible lists to manage the physical components through a set of commands and the suggestions, also contributes to the processing of data and turn it into information, storage and submitted them as useful outcomes for business performance, including that fits all areas of business in banks (the Arabs, 2004.3) and software represents most expensive element compared to the rest of the other parts because the cost of preparing process the software and develop them continued to climb being depends primarily base on the human element. (al-Hashimi, 2003.36). Software works to provide a means of helping individuals to achieve several gains being considered as an intermediary between the beneficiary and the information stored in the computers (Laudon & Laudon, 2000, 195).
- 3- The applications: which represent the practical side of information technology through its contribution in solving problems faced by the management of the organization service, and use many technologies in addition to computers for the purpose of information gathering, processing, storage and dissemination, which achieved an effective contribution in the performance of administrative work in terms of storage massive information and treatment on the one hand and in the electronic communications, file management and solving the problems of the traditional printing on the other hand (Hmhari, 2001.366). , such as operating systems, and supervising systems is one of the most important sources of basic which serves for any information system in any bank activity. In order for the information and communication technology to achieve their the fundamental objective in supporting the user administrators and achieving the objectives of the bank's strategy it requires a full knowledge about critical applications of information and communications technology and in the administrative operations of the banks, including the (account the end-user, office automation, transaction processing, transaction reports, supporting the confidentiality of data and information, attribution Executive) (O'Brien, 1998, 13) and thus help beneficiaries applications to find possible solutions to the problems

faced by the private organizations as well as their contribution to the development and improve performance (Haag & et.al., 2007,16).

- 4- **Communications:** The public sense of telecommunications means is the involving, exchange and transfer information with others, a process of interaction that occurs when converts a person or entity that (the sender) message and responds to this message the other side (the receiver) in a form which satisfied the sender, communications, is a process of interaction and effect between the sender and the receiver depending on the content of the message sent. The workers spend most of their time contacting either reading or writing or listening or talking or viewing, as communication is one of the oldest aspects of human activities, representing active humanly whatever evolved and arrived to contemporary shape through the history stages and through the time and the development of civilization, until it reached the modern communications technology and the emergence of modern computer networks (Ali 2005.23). computer networks means a set of computers linked with each other, and scattered in different places in vicinity, and remote?, And allows users to exchange and share resources and information at any time anywhere. And is defined as a group of computers linked with each other, and enables communication between individuals working in the banks from one place to another (Krajewske & Ritzman, 2005, 514). The need to rely on communications in the bank in the field of transmission and exchange of information and data between banks and the constituent parts of any bank or its environment, and between the outer perimeter and which represents the environment under which banks work, which became characterized by universality, which showed a great need for speed as it began to networks running start networking Interior and wide area networks and the end of global networks (Salmi 2001.35). Through the communications individuals become can communicate with each other through a variety of means such as computers and peripherals that connect to each other, which allows users to share resources and network-connected devices such as a printer, modem, and disk drive built and other (fixed 2005.7).
- 5- **HR (Human Resources):** infrastructure elements do not stop at the computers and accessories or other software, databases, and even networks of local and global, individuals skills are and their expertise are all important dimensions to accommodate the use of that infrastructure and handled efficiently and effectively , and in this context individuals skills in any organization or bank play active role in improving the use and development of infrastructure for the bank in setting goals and plans for individuals with skills in the field of information technology and communications, and develop it firstly and not delay it in any case. And management of individual's skills associated closely between the infrastructure and the level of use and the spread of their services and their applications. (Turner & Lankford, 2005, 39) related to skills of individuals working in any organization or bank in all sections and units as the need for infrastructure elements that lie in every unit and every department in the bank to increase the efficiency of these sections and improve the services and products they offer. The impact of information technology on human resources are different it extends from managers and head departments and the people who employ all their possible energies to invest all the necessary resources to implement plans of information technology, some of them have to subject for training courses to expand their knowledge and strengthen their information related to computers and their applications contemporary. (Hmhari, 2000.363). human resources importance increased by the increasing the available information in the bank in making any decision , it requires them to take care of the a big and significant side , which is how to convert this tremendous information and determine the places where can be useful and this requires software and advanced information technology for the sections and people of all components of the organization in form of allowing them in logical connection which leads to the integration of the bank like a single activity performed by a single individual (al-Saiani 2002.9).

Second: Banking Service Quality

Service quality is composed of two words (Service and Quality), as for the quality considered to be a key demand for all the organizations, whether they are municipal or industrial, which is the reason of the success of many organizations generally, particularly service organizations.

Pointing there are many definitions for the quality, but most of them are far away from the objectivity, for the clients quality may be is the best and most proper, and according to Oxford dictionary it is defined as the degree of excellence. But the National American Institute for standards, he defines the quality is a group of features and specifications which characterized by the producer, which make them qualified to satisfy the consumer through meeting his needs and desires (Al-Ali ,2000,49).

So it can be say: that the quality in not mental concept, but as well as an emotional concept, relying on it:

- 1- Satisfying more customers

- 2- Employing more employs
- 3- Sales and profits and greater market share
- 4- Continuity in the long term

And for the second word which is the Service, (Boon) has defined it as intangible work which fill needs and customers desires. (Mula Hassan , 2006 ,62). But (Kotller) has defined it as any action or intangible performance offered by other side, and it does not result in transferring the ownership for anything, and their product could be combine or not with material production. (Kotller, 2006, 204). And American marketing society the services as an activities and benefits which offered for sale, or offering associated with the sold goods. (Sumaidaie, Joseph, 2005.19).

And the concept of the quality is connected a direct connection in offering service and service quality indicates basically to the commitment of the senior management, and the type of exceptional services provided by the staff t customers.

The exceptional services offered here required to be directed towards the customer, where the employees feel personal responsibility towards our customers. And also know the quality of service from the internal and external point of view, internal point on works on the basis of commitment to the specification which is design service itself, which express the point of view of the administration, while the external point of view express the positions or the attitudes of the customers about the services offered for them.(Krajewski & Ritzwan, 2000,88), the service quality considered to be a measure of degree to which level of service is promoted in order to meet the customers expectation, and the quality which customer perceived for service is the difference between the customers expectation for the service quality dimensions and between the actual performance, which reflects the availability of these dimensions already (Dmour 2002,14). So that means the service quality in brief means the following: (Kortel, 2009,188)

- Customer complaints to a minimum.
- Access to zero defects.
- The absence of crises with customers and with service providers.
- Superiority over competitors and reach the summit.
- Attract new customers and continuously

According to Gummesson the provision of high-quality service offered to the customer are mainly depend on the level of participation and commitment by employees or workers in the organization.

But nevertheless, it should realize that the commitment and vision of leadership to senior management will remain is the basic conditions for service quality. (Musiiime, et al, 2007, 627).

The concept of banking service quality means that the bank design and deliver its services correctly from the first time (Mula, 2007, 56) (Khalid Ahour) that the banking service quality does not differ from the concept of service quality in general, they are designed to provide high quality service to customers in order to satisfy them, and meet their needs and desires continually, it lies in the customers perception and express them (Khalil Ashour 2007,7)

(Al-Nimer, Al Murad, 2002,217) indicated that the banking service quality lies in customers realization and formed in the light of their expectations, Al Barawi defined them , as a group of features and specification which must be owned by banking service, in order to be able to fill customers desires and needs, and gain customer satisfaction and his loyalty for the bank, with reasonable cost , which can be achieved through depending on all the sources and needs available for the organization, such as communication and information technology and its components.(Al-Barwari,2008,41).

And this means that the banking service quality is measured by extension match between the level of offered service and between its anticipation, and according to this, the banking service quality measured as following: (Al-Barwari, 2008,48)

If the expected quality is greater than the perceived quality, then the banking service quality could be less than satisfactory, and moving toward customer's non-acceptance.

If the expected quality is less than the perceived quality, then the banking service quality could be more than satisfactory, and moving toward perfect quality.

If the expected quality equal to the quality of perceived service, it will be satisfactory, and the gap between customers expectation and his perceives known as gap (5), as the customer's satisfaction depend on other four gaps analyzing accompanied with providing perfect quality to the acceptable quality, and for confirmation (Kotller,2000) presented a sample for service quality applicable to the banking service to evaluate its quality, it is determined five basic gaps, which cause failure in the banking service performance which is namely: (Keywords and al-Tai, 1999.268 (f) to Wausau, 2007.106 -107) and (Enaijat, 2005.64-65)

- a- First gap: customer expectations and management perceptions
- b- Second gap: management perceptions service standards
- c- Third gap: service standards and provided service
- d- Fourth gap: Provided service and customer's perceptions.

e- Fifth gap : expected service and perceived service

It is clear that these gaps can be created through the mismatch to be getting with what actually happened. Based on the foregoing researchers sees that the goal of banking service quality is to search for all that is new leads to raise the level of customer expectations and be the basis to achieve their expectations, it can define the concept of banking service quality as an integrated strategically administrative system directed towards the satisfaction of the beneficiary from the service by developing the service and improving methods of submitting the contribution of the members of the team and its emphasis on continuous improvement of processes and introduction services, which leads to the result and increase the loyalty of customers to the bank in the present and the future as part of a cost acceptable competitive, as well as the above, the idea of good service alone is not enough to ensure quality of service, but the important things is here that this idea is accompanied with a good information and communication technology ,which helps a good implementing an carefully, reliance of sophisticated technology and a good system of communication is vital and critical to stay on that initial success, which achieve the new idea, the service of height quality hard to be quickly imitated at least with comparison it is only a good idea for service not on a high level quality to implement it , and may be the reason of this, that the good service – is not just providing a good service – coming from all personnel and their use of information technology and the available communication in the bank not from top management alone or the management which responsible for designing and marketing the sole service. (Omer, 2007,231) therefore marketing decisions must be based on the quality of service for the following reasons (Dmour 2005.435)

1. Quality affects the size of the demand for the service.
2. Qualities is one of the most important sources of profit and succeed, it seeks to reduce the cost of service.
3. Quality considered to be a way of making competitive position for the organization comparing to the competitive organizations

For this reason, the only way to transfer the customer to a defender of the bank and its services is through the replacement of customer satisfaction, including the so-called happiness (Customer Delight) and by providing good services exceed expectations is supposed to be to outperform customer expectations for quality of service is the driving force of the bank, the goal of the foundation, and the reason for its presence in the arena. For this reason, the focus must be - at all levels, processes and information and communications technology - is to know the customer's needs and expectations in order to excel them.

Dimensions of banking service quality:

The banks seek for distinction in providing services to the bank's customers and to the labor market and this distinction can only be achieved through upgrading to the outstanding level of quality in providing services.

Studies have addressed the issue of the quality of research and services from multiple angles, and pointed out these studies and research that the quality of services being evaluated from the perspective of the bank customer and the perspective of the labor market, and from the perspective of the institution that provides the service, from the perspective of value that are reflected by the service. To simplify and facilitate the concept of quality, we have different views in the book to determine the type and number to keep the quality of service some of whom identified three basic dimensions are: (Mualla, 2007, 55)

- a- Physical dimension
- b- Facilities
- c- Individuals works to implement the service

While (Alak and Mahmoud) understands the service quality is represents the outcome of the interaction between the customer and the elements concerning to the management of the bank and within this framework have been identified three dimensions of quality of service, namely, (Keywords and Mahmoud 16.2003)

- a- Physical quality: includes tangible aspects and means the bank's reputation and its image among the public
- b- Organizational quality: includes bank's reputation and the image of the bank among customers
- c- Interactive quality: it results from the interaction between the staff of the bank and its customers

From other point of view, quality have for basic dimension, which are the superiority and achieve and or exceeding the expectation and values and harmonize specifications. (Massey,200:46).

The (Ajarma) has identified ten keep a (credibility Credibility, security, ease of access to something Access, telecom communication, understanding and knowledge of customers Knowledge Customer, Tangibility, Reliability, response Responsiveness, sufficiently Competence, courteous Courtesy) (Ajarma 0.2005 0.333). He (Lovelock) to the presence of eleven standard used by the customer to evaluate the quality of service, namely, (reliability, courtesy, accessibility, safety, reliability, degree of understanding of the service provider customer response, merit, competence, Tangibility, communication, tact (Lovelock, 2004: 4 – 5)

Here we should put a question on the high degree of importance, which is: How can the banks (states banks for example) to take account of these dimensions and achieve them in their banking services?

To answers this question, researchers return to recall that, the first step is to identify the basic dimensions in direct relevance with the educational process and the needs of the customer to enter the labor market.

Based on what was shown it was clear that the number of basic standards for the banking service quality is defer one to another researcher and the administration of the bank can study and analysis all the standards addressed by the researchers and the selection criteria relied upon by the customer in evaluating the quality of banking service and focus them, and many researchers and writers resort to integrate and unify the ten criteria with five standards, which researches agree with these five dimensions of quality service, which are (Reliability, Responsiveness, trust and safety, Reincarnation, Tangibility)(Mulla Hassan, 2006,68)

- 1- **Reliability:** includes harmony in performance, and reliability of the service, and also means the bank is doing the service in the right way comparing to the first time, and respects its promises. and considers to be one of the most five stable standards in determining the perceptions of service quality at the customers, and reliability known as the fulfillment of the obligation to provide service to in high trust and prohibitively (Kolter, 1997, 475), any accomplish is not true from the beginning in the area of delivery and service, and solving problems and pricing, reliability considered to be from the fundamental factors in the banking industry. Banks need to be aware of the expectations of customers about the importance of reliability and dependability in banking services is more than knowledge and expectations met, but that the bank's failure to provide services of high reliability means declining the field of acceptance (Tolerance) with customers (Mulla Hassan 2006.70).
- 2- **Response:** the response means having the will to help the customers and provide them with service and immediately , and this dimension focus on the courtesy and kindness in dealing the customer's demands ,question, complaints, and problems which requires a balance between responding and events accompanied with them. (Ajarma,2005,334) and this dimension focuses on achieving high and quick response for the changes in the banks environment, and here banks required to posses the high flexibility for response to this changes. And the most important changes occur on the environment in the needs of the labor markets and changes in economical and social system development. The high response and fast should not be limited on the external environment, but it should focus on responding to the requirements of the internal environment of banks. And after responding to the service quality, and the responds reaches to the customer through the long time of waiting to receive assistance(answers, questions, attention problems, as well as the flexibility and the ability to provide a service recommending to the customer's needs) and for the sake of excellence responding dimension, bank is recommended to be confident of processing image to deliver the service and processing the applications from the customer's point viewing , which is more than banks point view, specific standards of speed and the limited period which reflects vision of the bank for interior demanded procedures which are may be is much different from the customer's requirements for speed and the limited period (Alddewaje , 2003,20).
- 3- **Trust and safety:** this dimension means providing banking services to the customer in a secure environment without risks as much as possible, as much as the customer declines as possible a to prefer the bank which offer him a degree of security, which is the credibility and safety, merit , sympathy. And use indicator express the degree of feeling safe and trust in the service provided and who provide it, which means related to the perceived risk extension for the results of receiving the service form this organization or who is offering it or both. (Dmour 2002,366) and the performance of the bank and not incorporating damages to the customer, and the dealing with it clearly leads to gain the trust of the bank customer which dealing with (Kotler,2000:403).
- 4- **Reincarnation (personal attention):** This dimension consists of three dimensions integrated into a (easy access, communication, understanding the customer), which means a whole (attention to the customer),which means the degree of care to the customer and fostering him in particular way. Meaning the bank has to work in offering service to the customers by paying attention to him, and the essence of emotional interaction is to reach to the customer through personal relationship and recommending the customer is unique and special. The customer need to feel he is well understood and important to the bank which gets service from him(Ajarma, 2005, 336)
- 5- **Tangibility:** Banking services –like other services – characterized with intangibility, and to achieve these services it goals it needs a range of physical manifestations which embody this service, also tangibility known as a facial aspect for physical facilities and material supplies and people and material of communication. All of these provide us with physical clarification and customer's vision about the service, especially the new customer which will use it in offering the quality, and service makings which focuses on the tangibility in its strategies which are the banks and other. Banks often uses the

tangibility to improve its image and ensure the communication and quality indicators for the customer, most of the banks includes tangibility with other dimensions to create and innovate banking service strategies quality, (Alavichat 2001.83)

The relative importance of the dimensions that govern them on the quality of customer service could be clarified in Table 1))

Table(1) Relative importance for quality's dimension

| Dimension | Relative importance |
|---------------|---------------------|
| Reliability | 32% |
| Response | 22% |
| Certainty | 19% |
| Reincarnation | 16% |
| Tangibility | 11% |

Reference: Aljarma, Tayeseer,2005, Bank marketing , first addition, page 33

The third topic

Field Side (choosing research scheme and hypotheses)

The third topic

Side of the field (the test scheme of research and hypotheses)

This section deals with the identification of the nature of the relationship and the impact of information and communication technology investment to characterize the quality of banking services, and devoted this section to verify the validity of the default scheme for research, at the level of the banks surveyed, and as follows.

First: the description and diagnosis of research variables

Description and diagnosis of the variables after the investment information and communication technology

The table indicates (2) to Frequency distributions and percentages of the variables which express the dimensions of information and communication investment technology in the surveyed banks, respectively, Where the percentage of the General Agreement (agreed strongly and agreed) (87.4%) in the surveyed banks , and it can be note from the table the existence of very high agreement is toward the appliances and equipment in the sample; reaching (91.3%) and mean (4.28) in the surveyed banks. In general, the agreement rate was a good push toward variables Information and Communication Investment Technology in the surveyed banks indicates a high interest in investment in information technology and communications

Table (2)

Repetitive and relative distribution of the sample's answer of the individuals in the surveyed banks towards information and communication investment technology

| Independent variable dimension | Answer scale | | | | | | | | | | | The arithmetic mean |
|--------------------------------|----------------|------|-------|-------|---------|------|-----------|------|--------------------|------|--|---------------------|
| | Strongly agree | | Agree | | Neutral | | Not agree | | Strongly not agree | | | |
| | No. | % | No. | % | No | % | No. | % | No. | % | | |
| Human resources | 13 | 37.1 | 17 | 48.5 | 4 | 11.4 | 1 | 2.8 | - | - | | 3.66 |
| Tools and Equipments | 12 | 34.3 | 20 | 57.1 | 1 | 2.8 | 2 | 5.7 | - | - | | 3.75 |
| Communications | 10 | 28.6 | 18 | 51.4 | 3 | 8.6 | 2 | 5.7 | 2 | 5.7 | | 4.28 |
| Software | 17 | 48.6 | 14 | 40 | 2 | 5.7 | 2 | 5.7 | - | - | | 4.01 |
| Applications | 21 | 60 | 11 | 31.4 | 1 | 2.8 | 1 | 2.8 | - | - | | 3.98 |
| General medium | | 41.7 | | 45.68 | | 6.28 | | 4.54 | | 1.14 | | |

N=35

Third topic

Field Side (test researches scheme and its hypotheses)

This section deals with the identification of the nature of the relationship and the impact of investment information and communication technology to characterize the quality of banking services, and devoted this section to verify the validity of the default scheme for research, at the level of the banks surveyed, and as follows.

First: the description and diagnosis of the research variables

Description and diagnosis of the variables after the information and communication investment technology

The table indicates (2) to repetitive distributions and percentages of the variables expressing the dimensions of information and communication investment technology in the surveyed banks, respectively, where the percentage of the General Agreement (agreed and strongly agreed) (87.4%) in the surveyed banks, Noted from the table and having a very high agreement about some appliances and equipment in the sample; reaching (91.3%) and mean (4.28) in the surveyed banks. In general, the agreement rate was a good push toward variables Investment Information and Communication Technology in the surveyed banks indicates a high interest in

information and communications investment technology

Table (3)

Repetitive and relative distribution of the sample's answer of the individuals in the surveyed banks towards information and communication investment technology

| Independent variable dimension | Answer scale | | | | | | | | | | Banking service quality dimension |
|--------------------------------|----------------|------|-------|------|---------|------|-----------|------|--------------------|------|-----------------------------------|
| | Strongly agree | | Agree | | Neutral | | Not agree | | Strongly not agree | | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | |
| Reliability | 7 | 20 | 9 | 25.7 | 9 | 25.7 | 6 | 17.1 | 4 | 11.4 | 3.28 |
| Response | 9 | 25.7 | 18 | 51.4 | 6 | 17.1 | 2 | 5.7 | - | - | 4.03 |
| Trust and safety | 11 | 31.4 | 16 | 45.7 | 8 | 22.9 | - | - | - | - | 4.10 |
| Reincarnation | 9 | 25.7 | 16 | 45.7 | 7 | 20 | 3 | 8.6 | - | - | 3.91 |
| Tangibility | 6 | 17.1 | 15 | 42.9 | 8 | 22.9 | 2 | 5.7 | 4 | 11.4 | 3.53 |
| General medium | | 29 | | 42.3 | | 21.7 | | 7.4 | | 4.6 | |

N=35

Second: test the correlation between the information communication technology dimension and the banking service quality in order to test the first main hypothesis, which provides the existence of significant correlation between the information and communication investment technology and communications in banking service excellence quality and sub assumptions arising from it, it was resorted to correlation simple factor and the results was, as shown in table (4)

According to the values of the correlation coefficient shown in the table (4) it shows the existence of a significant correlation between the components of a positive Information and Communications investment Technology (combined) and excellence in terms of banking services quality nominally as the value of the correlation coefficient (0.712) at the 0.5 level of significance. This value reflects the strength of the relationship and harmony between the components of the pairing and Information and Communications Investment Technology adopted by the surveyed banks achieved excellence and quality of banking services through the reliability of the services provided, And thus we accept the first major research hypothesis which confirmed the existence of a significant correlation between the two variables of the main research (information and communication technology and excellence in the quality of banking services) as for the correlation dimensions of information and communication technology and communication (individually) and achieve excellence in the quality of banking services provided, the data (Table 4) confirms to achieve it crossed the value of the correlation coefficients for the existence of a significant correlation between each dimension of information and communication technology and communication of (b human resources, equipment, communications, software, and applications) and excellence in the quality of services, which amounted to (0.565 0.797, 0.517, 0.478, 0.665), each of them respectively. At that there is signal to the coupling of each dimension of information and communication technology adopted by the surveyed banks (individually) with achieving of excellence provided quality banking services, and suggests that the possession of the surveyed banks the personnel who possess the skills, experience and trained in the use of modern technology can give banks a larger chance in the pursuit of excellence in the quality of banking services and strengthen its position in the banking market .depending upon what she offers of sub hypothesis hypotheses, which stipulates the existence of a significant correlation between each dimension of information and communication technology and excellence in the quality of services provided in the surveyed banks

Table (4)

The results of the correlation between investment information and communications technology and the quality of banking services in the surveyed banks

| Dependent Variable | Information & Communication Technology |
|--|--|
| Tools & Equipment | 0.565 |
| Human Resources | 0.665 |
| Software | 0.478 |
| Communication | 0.517 |
| Applications | 0.797 |
| Total Indicator: Information & Communication Technology Dimension | 0.712 |

N=35 *P<0.05 N.S= not significant.

Source: Prepared by the authors based on results of electronic calculators.

Third, analyze the impact of investment information and communication technology to achieve excellence in the quality of banking services. In order to test the hypothesis second major effect on the impact of

investment information and communication technology to achieve excellence in the quality of banking services and what arising out from it of sub-hypotheses at the level of the banks surveyed; been using simple linear regression analysis, which clarify from it the following :

According to new data (Table 5) to the results of the analysis of simple linear regression between the independent variable (Information and Communication Investment Technology) and the dependent variable (marked by the quality of banking services), where is cleared and had positive significant effect information and communications investment technology in quality excellence of banking services (positive correlation) and so in terms of value (β_1) when positive moral level of significance (0.05) and adult (0.513), , the value of (t) estimated (6.83) the value of the probability (P-Value = 0.000), this effect came in the framework of a model moral value (F) calculated it (54.30) the value of the probability (P-Value = 0.000), a so is the moral value at the level (0.05) and the degree of freedom of 1.33, as was the coefficient of determination for this model (R²) (0.432), and this means that the investment of information and communication technology sets (43.2%) of the changes that occur in the excellence of services banking quality and (56.8%) of the changes in the quality of banking services back to the other variables included in the model and did not accept the premise that the main second-level surveyed banks, With respect to the acceptance or denial hypotheses Sub-premise second major in government and private banks have been testing simple linear regression, as follows:

1- Effect of Human source in achieving the excellence in banking service:

On the level of the surveyed banks it was clear that there is a positive and moral effect between the dependent variable (Human source) and independent variable (excellence in banking service quality) in the surveyed banks, And so in terms of value (β_1) positive morale at level of significance (0.05) and adult (0.452) as the value of (t) calculated with (4.92) the value of the probability (P-Value = 0.000), came this effect in the framework of a model moral value (F) calculated where (36.16) value of the probability (P-Value = 0.000) and thus is a moral value at the level (0.05), as was the coefficient of determination for this model (R²) (0.319) this means that the human resources sets (31.9%) of the changes that occur in the excellence in the quality of banking services, and (68.1%) of the changes excellence in the quality of banking services back to the other variables not included in the model, and the table (5) shows that.

2- Effect of Tools and Equipment in achieving the excellence in banking service quality

Table (5) shows the existence of positive and moral effect between (Alajhoh and equipment) and the dependent variable (excellence in the quality of banking services) in the surveyed banks , and so in terms of value (β_1) positive morale at level of significance (0.05) and adult (0.388) as the value of (t) have calculated (5.32) the value of the probability (P-Value = 0.000), this effect came in the framework of a model moral value (F) calculated it (42.88) the value of the probability (P-Value = 0.000) and thus is a moral value at the level (0.05) and the degree of freedom of 1.33, as was the coefficient of determination for this model (R²) (0.443) this means that tools and equipment are determined (44.3%) of the changes that occur in the excellence in the quality of banking services and (% 55.7) of changes excellence in quality banking services back to the other variables not included in the model.

3- Effect of Communication in achieving the excellence in banking service quality

In the surveyed banks it is clear that, the communication is effecting positively and morally in banking customer service, And so in terms of positive and morale value (β_1) at level of significance (0.05) and adult (0.317) as the value of (t) calculated with (4.00) the value of the probability (P-Value = 0.000), came this effect in the framework of a model moral value (F) calculated it (16.01) the value of the probability (P-Value = 0.000) and thus is a moral value at the level (0.05) and the degree of freedom of 1.33, as was the coefficient of determination for this model (R²) (0.229) this means communication sets (% 22.9) of the changes that occur in the excellence and quality of banking services (77.1%) of the changes in the quality of excellence banking services back to variables other than communications, these results were presented in table (5).

4- Effect of Software in achieving the excellence in banking service quality

Is clear from the results shown in the table (5) that the software affects positively and significantly in excellence quality banking services in the surveyed banks , and so in terms of value (β_1) positive morale at level of significance (0.05) and adult (0.383) as the value of (t) Mahsubhlha (4.65) the value of the probability (P-Value = 0.000), came this effect in the framework of a model moral value (F) calculated it (22.61) the value of the probability (P-Value = 0.000) and thus is a moral value at the level (0.05), and a degree of freedom 1 0.33), as was the coefficient of determination for this model (R²) (0.374) this means that the software identifies (37.7%) of the changes that occur in excellence quality banking services and (% 62.3) of changes in the excellence quality banking services back to the other variables is software.

5- Effect of Interior Communication in banking customer service

The application affect positively and morally in excellence of banking service quality in the surveyed

banks, , And so in terms positive morale of the value (β_1) at level of significance (0.05) and adult (0.330) as the value of (t) calculated with (4.79) the value of the probability (P-Value = 0.000), came this effect in the framework of a model moral value (F) calculated it (22.94) the value of the probability (P-Value = 0.000) and thus is a moral value at the level (0.05) and the degree of freedom of 1.33, as was the coefficient of determination for this model (R²) (0.298) this means that applications define (29.8%) of the changes that occur in the excellence and quality of banking services (71.2%) of the changes in the quality of services of excellence dating back to the variables other than the applications and the table (5) shows that

Table (5)

The impact of investment information and communication technology in achieving excellence in the quality of banking services

| Dependent variable Independent variable | Information & communication Technology | | R ² | F Calculated | P-value |
|---|--|-----------------|----------------|--------------|---------|
| | β_0 | β_1 | | | |
| Excellence in banking service quality in surveyed banks (Total indicator) | 1.361 (5.56) | 0.513 (6.83) | 0.432 | 54.30 | 0.000 |
| Dependent variable Independent variable | Human resources | | R ² | F Calculated | P-value |
| | β_0 | β_1 | | | |
| Excellence in banking service quality in surveyed banks (Total indicator) | 1.367 (3.55) | 0.452 (4.92) | 0.319 | 36.16 | 0.000 |
| Dependent variable Independent variable | Tools & Equipment | | R ² | F Calculated | P-value |
| | β_0 | β_1 | | | |
| Excellence in banking service quality in surveyed banks (Total indicator) | 2.69 (10.28) | 0.388 (5.32) | 0.443 | 42.88 | 0.000 |
| Dependent variable Independent variable | Communication | | R ² | F Calculated | P-value |
| | β_0 | β_1 | | | |
| Excellence in banking service quality in surveyed banks (Total indicator) | 2.724 (9.18) | 0.383 (4.65) | 0.374 | 22.61 | 0.000 |
| Dependent variable Independent variable | Application | | R ² | F Calculated | P-value |
| | β_0 | β_1 | | | |
| Excellence in banking service quality in surveyed banks (Total indicator) | 2.889 (8.64) | 0.330 (4.79) | 0.298 | 22.94 | 0.000 |

*P≤0.05 N.S= not significant () indicates value of (t) calculated
 N=35 D.f= (1,33)

First: Conclusions: the research reached to a range of theoretical and field conclusions as follows:

- 1- It was clear that the information and communication technology possess a several components and with many different labels but there is a certain amount of the agreement is the most common which are (human resources, applications, tools and equipment, communication, software)
- 2- The Investing of Information and communication technology considered to be an active tool have a relation in achieving the excellence in the quality services provided.
- 3- It was clear that the dimension of the tools and equipments achieved the highest rates in the area of availability through the opinion in corresponding to the rest other information and communication technology components in all the surveyed banks
- 4- Investing information and communication technology became a basic necessity, and in the future will be a requirement which can't be bypassed to achieve the quality and excellence, and in the end will affect the customers satisfaction
- 5- There is a significant correlation between the information and communication technology investment and the dimensions of the quality of banking services. This shows that investment in information technology and communications closely to achieve.
- 6- Results in simple linear regression showed there is a moral effect to invest information and communication technology investment in the dimension of the banking service quality offered

collectively or individually, which both confirms and clearly the impact of investing information and communication technology in banking service quality for the surveyed banks

- 7- The two researchers concluded too, that there is a vision among the surveyed individuals in the surveyed banks toward investing information and communication technology variables, opinions and answers were close by them on each variable and each element from those variables.

Second: Suggestions

- 1- In order for the bank management to practice their activities successfully, it must increase its attention in investment in information and communication technology, and give it the key role to obtain the necessary information which helps in achieving the quality in provided services
- 2- It is very necessary for the banks in Dohuk to work and to be guided in the banking service quality, and this come from the accurate determination to the type of services they offer for their customers and use the tools and procedures and application and modern systems which able the workers to perform the service in good level , and work to measure periodically the performance of the workers in the bank, with the necessary to ensure the speed and the accuracy and safety and respond which reflect and determined image and reputation of the bank in the banking market
- 3- It is necessary to originate administrative units specialized in information and communication technologies matters in general and surveyed banks, in particular carrying out tasks of following this technology and develop systems and methods of applying banking services and creating a new application for itself in order to bring it toward excellence quality of provided service.
- 4- need to focus on human resource and elevate it by developing their potential and abilities by involving them in training courses and practical in order to increase their skills and experience and to be able to deal with information technology and modern communications, and which is characterized by the rapid sophistication, enabling them to meet the new requirements for work.
- 5- encourage staff for communications services and the Internet on joint cooperation between the customer and the service provider, so the management of the bank is gaining a reputation for good relations and this is what will be reflected on customer satisfaction, as they lead to attract the largest possible number of customers
- 6- Needs to turn the surveyed banks towards a modern methods in the field of information and communication technology, such as computers internet , and applying modern software which helps to provide the services in require speed and reliability and safety
- 7- Despite reaching the presence of liaison relationships and the impact of this research, but the issue needs to more deep field research as part of future studies and the need for the expansion of such studies and independent in the field of information technology and the quality of services in the banks of the region.

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