

Information Technology and its influence on the Lebanese Banking Sector

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Abstract: *In today's turbulence economic, and social comprehensive meeting of computing, information, communications and knowledge based society. The fundamental change of approaching implemented solutions is based on how much we depend on human capital. In terms of thinking, acting, working, as well as living. The development of high speed networks with the measurement of innovative technology has witnessed declining in cost of computing power, which in return potential applications undreamed to become from the past. Data, voice, video and images may nowadays be transmitted around the world in micro-seconds. This explosion and development of technology is shifting the banking industry from branch banks and paper to' digitized and networked banking services. Resulting in knowing that changes is eminent in the management systems and the internal accounting of banks. Currently, the fundamental altering is the delivery systems of banks that use to cooperate and interact with their customers. Banks, in general worldwide, are still fighting to discover a technological solution in order to meet the challenges of a speedily -changing environment. It is obvious that this new technology is shifting the banking industry eternally. Banks with the capability to integrate and invest information technology will become dominate in the extremely competitive global market. Bankers are persuaded that investing in IT and skillful employees to meet the future challenges of market and customers' demands. Its potential and effects on the banking industry future is great.*

Keywords: *IT facilities, banking, information technology, computers, job satisfaction.*

I. Introduction

The information technology (IT) usage, is generally referring to computers and peripheral equipment, has seen marvelous growth in service industries in the recent time, such an example is the banking industry, where IT related products in the internet banking has become a pillar banks various services to customers. This is to state that the IT decreases the need of manpower contributes to the banking sector an increase in profits. Moreover; banking technology is recognized as the information and communication technologies that are employed by banks to bring special services to its customer in safely and reliably. Both banks and customers have been progressively profited from the implementation of state-of-the-art information technology throughout the last two decades to deliver its habitual work.

Several benefits derived through the information technology are: branch productivity, customer service, faultless fund transfer, risk management, real time information system, and innovation in service delivery. The development in information technology has opened up new markets, new services, new products, and well-organized delivery channels for the banking sectors.

This particular development of technology and the progress of worldwide banking networks have increased significantly the funds transfer from one place to another and provision of interior banking services to its customers. The implementations started in the banks industries during the early 2000s with a core focus on solutions, complete automation of banks, and centralization of operations.

Information technology offers a possibility for banks to construct new systems that address a broad range of customer needs that includes many that may not be conceivable today. Technology innovations are making impact in the reshaping the banking industry through guiding and introducing new financial products with a specific delivering to its customers. Various literature had presented studies which concluded the positive effects concerning the relation between banks' performance and IT as such operational costs can be reduced by the use of IT (the cost advantage), and an internet service which makes it simpler to accomplish standardized long with low value-added transactions (e.g. account transfer, balance inquiries, bill payments).

1.1-Statement of the problem:

Competition has cautioned banks to search for innovations and development that will keep their clients and still win more which pushed them to develop new requirement of efficacy for maximum effectiveness and efficiency, the use data innovation and internet banking. The information technology adoption in banking sector is due to the fact that, linguistic boundaries should have been put to an end to enable cheaper and easy communication. In spite of the implementation of information technology in banking sectors, the various targets stated as observation has however demonstrated, disheartening to view that, some among numerous undertaken

are not attempting to standard thus bringing more harm than good to shareholders, probable investors among other users.

Banks today seems to be primarily involved in the dividend declared and revenue to be made, thereby dismissing sight of the essential and more vital areas like composing transaction equipment's work to standard, giving security to investors fund in order to win more investors to the company and intern make enormous profit. Banks today can't go along entirely with the statement of purpose/corporate mission with information technology. Much bank administration does not plan to meet the service quality, for instance, the required number of clients to be attended to by a cashier in the day by day working hours to control against long line is dismissed irrespective of the way that, automated teller machines (ATM) is presented. This dilemma caused delay in transactions.

In spite of this innovation, Information technology", banks still find it hard to appropriately sort out transactions thus leading to loss of trust by clients. Furthermore the banks have found it a challenge to produce and meet up with their tasks to shareholders and different partners of the banks. Irrespective of the truth that banks are making much yield, they even suffer from liquidity troubles which is said to be as a consequence of insolvency. Assessing the introduction of information technology owing to its purposes, it is not a matter with how much technology is offered but how well it serves possible users. This unclear atmosphere then present a fertile ground for the researcher to look at the effects of the information technology that have on the Performance of the banks so as to understand its important impact on their operations to guarantee their growth and profitability.

1.2-The purpose of the study:

The purpose of this study is to demonstrate the role of the new technologies and the massive changes that have brought to the banking sector with impact on employees, officers, and customers of banks. Therefore, the aim of this study is to show the importance and the role of information technology on improving the banking sector success.

This research is proposed to answer the following questions:

- 1- What is the impact of information and technological change, and how it can enhances the performance of banks in Lebanon?
- 2- What is the role of information technology in improving the operation and achieving growth of commercial banks in Lebanon?

The outcomes of the study should reveal the increasing importance of information and technology, and its role on the operations of commercial banks in Lebanon. Thus, to enhance the Lebanese banking sector to put into practice the new technologies at all levels, transactional level, and executive level and managerial level.

1.3- Limitations of the Study:

This research will be based on the significance of information technology in commercial banking in Lebanon. It will examine the extent to which banks hold information technology (computers, office automation) and determine the responsibility which has had on the customer (i.e. if they prefer the modern and new ways of banking operations or the old ways of banking operations). This study may be limited to some banks for they are sluggish and not collaborative on the part of the individual of the public.

II. Literature Review

2.1 Introduction

Information Technology (IT) is the foundation for national development in a rapidly changing global environment, and this challenges us to plan bold and courageous initiatives to concentrate on a host of fundamental socio-economic issues such as dependable infrastructure, expert human resources, and other vital issues of capacity building. As well, numerous banks have installed up-to date new and modern computers that will allow them attain multimedia connection on the Extranet, Intranet and internet and achieve better communication. According to Gates (1995, "The personal computer has already had a huge effect on business. But its greatest impact won't be felt until the PC's inside and outside a company are intimately interconnected". The study shows that achieving a flourishing and an efficient communication commercial banks require to connect their computers to the internet through such networks as the wide area networks (WANs), or the local area networks (LANs). By using this network, the bank staffs can work on the same document at the same time either by sending or receiving emails externally and internally. Aig-Imoukhuede (2003), mentioned that "to bring banking services closer to a customer and to guarantee the opportunity to use them anytime a customer wants, the on-line-real-time phenomenon which has been the single most important change to banking operations over the last ten years." He states that online banking services must be available to customers all time so as to make a customer familiar and closer with banking services. In my own vision, as respect to Aig-Imoukhuede (2003) reports, banks have installed up to date computers connectivity that allow them

accomplish improved communication of data, documents and information in offering modern day banking services to the clients, this as a consequence has brought new customers to support the banks. Managers and other staffs of banks must to be able to gather and search for data from numerous diverse types of sources, analyses them, choose the appropriate ones and organize them in such a way to let them to build decisions based on the prepared data.

2.2-Overview of Technology and Banks Transformation in Lebanon

The changes of the latest technologies have brought to banking are huge in their impact on employees, officers and customers of banks. Computers are getting more complicated; they have given the bank customers a high level of expectations, and have given banks a prospect that they could only dream about. Progresses in technology are improving the delivery of banking products and services to be more effectively and conveniently than ever before - thus building new bases of competition. Quick access to significant information and the capability to act rapidly and efficiently will differentiate the successful banks of the future. The bank gets a critical competitive advantage by having a straight accountable and marketing customer service atmosphere and new, updated business processes. Decision support systems and Consistent management give the bank that competitive edge to build ahead in the banking marketplace.

The Lebanese banking sector was greatly influenced by the civil war in the 70's, where eighty percent of the Lebanese infrastructure was damaged during the years of (1975-1990) that resulted in superseded of twenty percent. It puts back the revolution of information technology in the Lebanese banking sector. It became a strategic need for the Lebanese banks to apply the new technologies at managerial level, transactional level, and executive level. In the 1990's they began applying IT capabilities to alter the work organization, cut costs, increase the productivity and deliver the most excellent services to their customers and raise their profits. The majority of the Lebanese bankers consider that IT will allow them to face the overseas competition and the probable consequences of the pending peace. Ovia (2000), noticed that commercial banks have enhanced essentially the information technology deployment in their banking operations. He accomplished a research and found out that banks nowadays offer flexible and smooth means of operating accounts in several branches regardless of where the account or the bank is domiciled. Though, he said future banking requires additional electronic doctrine and mix up of bits-based money and further banking transactions, as a replacement of paper. Even so, paper based transactions are currently being substitute by electronic-based transactions.

2.3 Technological Revolutions, Information and Growth

Although, this technological progresses occur over the past 100 years in numerous sectors, such as communications, transport, medicine, and electrification new ones are much more powerful and comprehensive. Their most important characteristics include interaction and convergence of several filaments of technological change, among social consequences far deeper and far harder to foresee. They fall into three essential categories or chain of technical changes: in biotechnology, in materials, and in information (Hallberg and Bond, 2000). Information Technology has broadened the Lebanese banking sector and as a consequence of this it has altered the banking nature in a competitive environment in which they domiciled or operate. A wide opening has thus been practiced for banks around the world and they are now taking due benefit of these innovations in the face of competition to offer better and faster customer services that improve productivity (Akinuli, 1999; Ovia, 2005). Technological development facilitates payments and makes suitable alternatives to cheque and cash for making transactions. Such novel practices have guide to the growth of a really global, seamless and Internet allowed 24-hour business of banking. Technological advance concerning payments are significant due to the truth that it will be possible to outsource fairly a number of the banks responsibility in the payments system. Moreover, banks regulation instead of concentrating on conceptual can be more focused and much technologically dependent.

A good number of banks embrace the utilization of ICT infrastructure in their operations due to ICT revolution in terms of speedy operation, innovation rate, and cost per unit (Akinuli, 1999). In today's business, deregulation, competition, and globalization have forced Banks to present service 24 hours around the world.

2.4 Overview of Information Communication Technology (ICT)

Information communication technology is as a broad-based term, as described by Wirsiy and Shafack (2002) that includes gathering, obtaining, organization, storage, packaging and retrieval, and distribution of above multi-media, by a combination telecommunications and computers. Improvement in information technology has carried about great growth in banking sector across the world. This is since information communication technology has produced dynamic and dramatic changes in the worldwide system of banking. Igwe, (2005), noticed that the appearance of the electronic mail and PC s on each desk, the internet and its

function have delivered astonishing results to banking. The fundamental presence of computer and information technology in financial organization has enhanced significantly.

Information technology to business nowadays is broadly acknowledged, whereas big businesses have been utilizing computers for a few times currently due to development in information technology. The strategy of the Information technology has been highlighted in different area both prescriptive and empirical research studies. According to Womboh and Abba (2008), they assumed that information technology (IT) and information communication technology (ICT) are related and similar concepts that can be utilized interchangeably.

Bank Audi (Lebanon), in 2014, marked the profitable closure of numerous projects of transformational business for IT. A new another online banking solution was offered to all the Bank's clients. This solution permits serving clients professionally by catering to the requirements of the increasing number of technology-aware customers throughout capabilities that improve significantly their online experience and facilitates the vision of customers' relationship with the Bank. The IT team started testing, evaluating and driving -edge technologies such as Software-Defined Networks, Network Virtualization, and Security-as-a-service . That mobility makes the workforce powerful and improves the quality customer service by making productivity active to Bank's employees , An Enterprise Mobility Management (EMM) solution is implemented by Bank Audi's IT in mid-2014 where employees became assuredly use and process mutual information in mobile workflows, where the enterprise's data is always secure. 2014 as well witnessed the new Bank's Tier 4 data center completion, the first in Lebanon. Business stability and Significant Information Technology infrastructure will be supported by this new data center.

2.5 Technology Adoption in the Lebanese Banks:

The majority of the Lebanese banks have put for themselves excessive standards of excellence in terms of technology, high-tech facilities, customer orientation and customer service with all aspects of operations completely computerized. The banks also make wide use of communication technology to offer off-site banking services including ATMs.

At the early stage, Lebanese banks began to construct their databases and mechanize their work strategies. Most banks have accepted readymade packages for their inner operations. As of now, these banks are supplanting their old data frameworks and their information system. . The bank's branches are forecasting to offer state-of-the-art services to their clients allowing a fast growth of the bank's performance in an exceedingly competitive marketplace. Diverse methodologies are followed in the Lebanese banks to implement and secure the new innovations and technologies. Banque du Liban et d'outre-mer (BLOM), for instance, has built up its own banking information framework. While Bank Audi took after another methodology and acquired an on-line information system, offering a real time on line branch network with an advanced banking and customer information to users ,senior management, center supervisors, end clients and business analysts. Information systems are planned to run during this year, both in BLOM and in Bank Audi. The main reasons behind developing or adopting new information systems are:

- Rapid geographical growth has forced banks to change their off-line systems to an on-line system connecting the branches to the head office through the information transfers system.
- Rebuilding bank's processes with a specific end goal to decrease staff costs which constitute a vast part of the working expenses and an overwhelming weight on its working profitability.
- Inappropriateness of the old frameworks with the vital need of incorporating new advancements and technologies like telebanking ,ATMs etc .and so forth keeping in mind the end goal to offer the high quality services to the clients and challenging on an equal foot with the outside banks.

2.6 Impacts of Technological Change on the Functioning of the Bank

The Impacts of technological change on the banks functioning has been considered in numerous countries by some researchers: Webster (1997) found a significant positive relationship between the bank performance and the technological change. He additionally clarified that when the level of technological change is higher the profitability of the bank becomes higher.

Inside the Lebanese framework , numerous analysts have been proficient however were situated to diverse useful studies and focuses: Azzam (2010) for instance concentrated on the impacts of NICT on the bank's marketing technique in Lebanon and clarified that new data and communication advancements, the internationalization and globalization of markets have significantly changed the economies of the twentieth and twenty-first centuries , and subsequently current administrative marketing approach. The impact of latest innovations (Internet or other) has fundamentally changed the banking servicing procedure and all marketing plans.

Distribution channels (accounts bank websites, ATMs, smart phones) are developed to become actual smart computer media that cooperate with clients and facilitate a wide range of banking transactions. Toufaily

(2004) highlighted the impact of electronic banking on the performance of the Lebanese banking sector applying a personally qualitative questionnaire managed working with official banks recorded by the Lebanese Banks Association and inferred that working banks in Lebanon accepting e-banking innovation flourishing in enhancing quality of products and services presented to their clients. Moreover the global expense of the bank has been decreased and the commercial relation with the customers has been improved and became more useful. The study had finished two years after viable usage of e-banking advancements by banks in Lebanon, and this influenced the performance outcome particularly that the organizational performance results that the consequences are seen at least following three years of e-banking implementation as Toufaily emphasized in the limits point of her study. In general, it seems that NICT upsets the functioning approach of banks regarding organization, productivity, production, and distribution from numerous points of view:

At the production level, banks are utilizing NICTs to accomplish the following three purposes together, industrialization of procedures, reduces in the production costs and conversion to a management of flows. The pool of measures in the banking field concerns primarily payments, investment securities, and loans. This lets the banks to gather their investments and to attain economies of scale (by distribution it fixed costs over bigger dimensions). NICTs adapt banking management by improving transition from a conventional management of stocks to become a management of flows which implies the control and monitoring of trade with a twice effort: integrating process from A to Z and their continuous dealing. In reality, in the majority of their operations, for example, market operation, or operations in applying for payment approval by credit cards, banks have not the capability to select operations except gradually as they bring about. Therefore, the risk management is element of intervals being shorter. It presents the bank as an information manager whose criterion and function of performance is to gather process and transform the information.

At the Distribution Level the best impact while considering the effect of NICT on banks is that on their distribution. "Excellence in channel management will be a source of competitive advantage for market share and value creation" (Gueret & Kunstler, 2000). Influenced by the shock signal of network, banks are encountering virtual change. Minimizing operations cost, overseeing clients relationship, offering online products and the danger of new competitor are all enormous difficulties. Internet permits an extraordinary decrease in the keeping money operations costs. The bank must apply a new advance strategy, by arranging its channels and networks and, so that every customer can select his means of contact, depending on his particular behavior, whether to set up a relationship or to obtain a benefit" (Cheteux, 2000). The achievement of the bank in face of its clients relies on handling variations of its organizational device in general. In fact, "to remain their place in the economy and the confidence of their clients, banks must begin a mutation affecting their organization" (Mizrahi, 2000). Every bank attempt to offer its customers the most suitable replies on their demands and requests, in order to streamline the completion of its internal capabilities portfolio.

The sum of activities of a bank is then written in a dual purpose: the customer satisfaction—which involves the customers' use of obtainable financial services, and the economic efficiency—that is the resource of profit. The purpose covered by the bank in operating new technologies is thus the continuous growth of its profitability and competitiveness with being adequately innovative to present its clients the most excellent services and products and therefore its competitors. At the productivity level enhancing productivity has been forever and remains a strategic purpose for banks. In an extremely competitive environment, productivity has developed into a key factor in the process and ability of the banks development. Technological improvements such as progresses in computers, microcomputers, telecommunications and further lately development of speech production techniques have altered the framework of practicing the profession of a banker. The automation and operations outsourcing effects are important on banks they are positive both on the network's productivities and on bank and since it decreases the number of employees needed for the accomplishment of several operations. If these productivity gains are mutual to nearly all networks an essential difference perseveres in their application' strategy: Increasing productivity by dropping the number of employees regularly; and rising accessible commercial time by developing the profitable operations. It is attractive to indicate the variables and the indicators applied by managers and economists as they seek to determine the impact of technical alteration on productivity and productivity. Major applications; the reward accruing from automation are based on three-directional; Customer, Bank and Employee.

For the customer; Banks are responsive of customer's need to make new services and plan available. IT has increased the level of competition and required them to incorporate the new technologies in order to satisfy their customers. They have already developed and implemented a certain number of solutions among them:

- Self-inquiry facility; Facility for logging into specified self-inquiry terminals at the branch to inquire and view the transactions in the account.
- Remote banking; Remote terminals at the customer site connected to the respective branch through a modem, enabling the customer to make inquiries regarding his accounts, on-line, without having to move from his office.

- Anytime banking- Anywhere banking: Installation of ATMs which offer non-stop cash withdrawal, remittances and inquiry facilities. Networking of computerized branches inter-city and intra-city will permit customers of these branches, when interconnected, to transact from any of these branches.
- Telebanking; a 24-hour service through which inquiries regarding balances and transactions in the account can be made over the phone.
- Electronic Banking; This enables the bank to provide corporate or high value customers with a Graphical User Interface (GUI) software on a PC, to inquire about their financial transactions and accounts, cash transfers ,cheque book issue and inquiry on rates without visiting the bank. Moreover, LC text and details on bills can be sent by the customer, and the bank can download the same. The technology used to provide this service is called electronic data interchange (EDI). It is used to transmit business transactions in computer-readable form between organizations and individuals in a standard format.

Information is centralized and updates are available simultaneously at all places, single-window service becomes possible, leading to effective reduction in waiting time.

For the bank : During the last decade, banks applied IT to a wide range of back and front office tasks in addition to a great number of new products. The major advantages for the bank to implement IT are:

- Availability of a wide range of inquiry facilities, assisting the bank in business development and follow-up. Immediate replies to customer queries without reference to ledger-keeper as terminals are provided to Managers and Chief Managers.
- Automatic and prompt carrying out of standing instructions on due date and generation of reports.
- Generation of various MIS reports and periodical returns on due dates. Fast and up-to-date information transfer enabling speedier decisions, by interconnecting computerized branches and controlling offices.

For the employees: IT has increased their productivity through the followings:

- Accurate computing of cumbersome and time-consuming jobs such as balancing and interest calculations on due dates.
- Automatic printing of covering schedules, deposit receipts, pass book / pass sheet, freeing the staff from performing these time-consuming jobs, and enabling them to give more attention to the needs of the customer.
- Signature retrieval facility, assisting in verification of transactions, sitting at their own terminal and avoidance of duplication of entries due to existence of single-point data entry.

2.7 Previously Proposed Suggestions and Recommendations:

The adoption of Information Technology have been improved the Banking operations. The utilization of information technology (IT) can have significant implications for a banking operating performance, risk profile, organization's financial condition, and should be included into the reliability and safety assessment of every organization. The outline for the Federal Reserve's managerial strategy with IT consideration is provided in SR 98-9, "Assessment of Information Technology in the Risk-Focused Frameworks for the Supervision of Community Banks and Large Complex Banking Organizations."

The implementation of the Uniform Rating System is important for rating the Information Technology (URSIT). The URSIT is an interagency test rating system accepted by the Federal Financial Institutions Examination Council (FFIEC) agencies to assess the activities concerning IT in financial institutions. The URSIT rating framework is basically based on a risk valuation of four broad areas: management, audit, support and development and acquisition and delivery. The following components are utilized to assess the general IT functions inside an organization and reach at a compound URSIT rating.

III. Methodology

3.1 Introduction

A qualitative methodology is used to complete the study in order to test the procedures and the processes to recognize the information technology impact on banks performance and offers probable solutions and recommendations that can develop the IT implementation and make it more effective for the employees to implement in the banking transaction. There is a complete explanation of the method that I use it in my research, data analysis and sampling are also clarified by referring to the literature review. Considerations, validity and reliability are explained also.

3.2 Overview of the Methodology:

This research might be started with the appropriate methodology and research plan, the customers is the sample for the study since they are all accessing services in the commercial banks with the help of information technology in Lebanon. This study arbitrarily chooses some samples across the sample area at different places. The data are collected for this study from the respondents, who are all utilized information technology based service minimum one year time frame and having savings bank account. This study is planned on the descriptive research design basis. The instrument of the survey has been formed with three parts; first one deal with the

respondents' demographic profile, the next part looks for ensuring the influence of factors on service convenience of customers with the information technology adoption. The last part includes constructive strategies to advance the enabled IT service from the customer's viewpoint. The survey tool was pretested; thus questionnaire has been considered for data collection. Collected data has been examined by using multiple linear regression analysis, principal component factor analysis, simple percentage analysis, and T-test.

A questionnaire survey is organized in order to access the banking customers' perception in Lebanon regarding the banking service provided. Several questionnaires will also be concerned to the employees, IT staffs and bank managers in order to obtain an understanding of what type of electronic application services and IT systems were accessible in the selected bank. The responses are considered with a five-point rating scale, where (SD)=1 strongly disagree, (D)=2 Disagree, (N)=3 Moderate, (A)=4 Agree, (SA)=5 strongly agree. So the information will then be observed and the conclusion then be resulting from the questionnaires and most probable to give answers to questions established by this research. This will facilitate in this research work the clarification and expanding of our direction sense.

The questionnaire was separated into four sections. Section A summarizes essential demographic information concerning the banks such as, bank's age, capital base and the branches' number nationwide. Section B describes information about the usage and adoption of information technology banking services. Section C determined the supposed benefits and importance of internet banking and the respondents were asked to indicate the extent to which they agree/disagree with a variety of statements. Due to commercial sensitivity and confidentiality of the banking information the questionnaire was intended in a manner that did not necessitate the respondents to expose their names.

Survey question	Response category	Frequency (N)	Percentage (%)
Age	1 to 5 yrs.	5	56
	6 to 10 yrs.	3	33
	11 to 15 yrs.	1	11
	Total	9	100
Number of branches	< 5	2	16.7
	6-10	1	8.3
	11-20	1	8.3
	>20	8	66.7
	Total	12	100
Capital (asset base)	US\$21000- US\$35000		25
	US\$36000- US\$50000		33.3
	>US\$50000		
	Total	8	100

Table 3: Duration of internet banking usage

Duration of using information technology	Freq	%	Valid %
1-2 years	4	33.3	36.4
3-5 years	6	50.0	54.5
>5 years	1	8.3	9.1

Total	11	91.7	100
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3.4 Data analysis

Mainly (56%) of the respondent banks indicated they had been working for a period extending from one to five years, whereas 33% had been operating for 6-10 years. A vital number (62.5%) of banks have assets valued over US\$50 000 and have been in business for a period varying from three to five years.

The Usage and adoption of Information technology in banking; all the investigated bank respondents signified that they provide internet banking services either to individual customers or corporate customers. As shown in table 3 below, 36% of the banks for less than three years have used information technology banking; whilst 55% of the banks indicated that they have used information technology for between 3-5 years as a delivery channel. ICT in particular perform a significant role in the financial industry and this is one explanation why the banking sector is with the most intensive in using ICT (Shoebri, 2005). With the enhance of Internet services and cash machines obtainable in different locations, the majority of habitual troubles have been mitigated and, in several cases, solved; as a result, the degree of customer services improved became easier, and the customer experience driven out to be more flourishing. It is obvious that the new technologies, mainly in ICT, allows banks to offer a good service to customers not simply in branches and other servicing sites, but as well in domiciles, shop stores and work places as well as in a myriad of further channels (Al-Hawari et al, 2005). Where the ATMs in the branches shorten the customers actions and reduces the personnel costs, the amount of human attendants is also significant and differ according to demand, particularly for dropping waiting times for specific services, offering human communication and servicing elder and with a reduction of informed customers, who still appear to have a preference to people as a substitute of machines as interfaces for their dealings.

3.5 Reliability of the information collected and its validity

Reliability is the stability degree of the measure of research instruments or variables... In establishing the reliability, the following was used: the questionnaire item were placed on a scale of (SA) strongly agree, (A) agree, (N) neutral, (D) disagree, (SD) strongly disagree. The reliability of the collected information and its validity has a profound consequence on the research quality. While doing this study, the researcher was limited with some number of banks, so there may be a possibility that the outcome achieved may not be replicated totally if another researcher did the same study with the similar research tools. Moreover, this research does show consistency and reliability with the literature review and it demonstrates agreements with other present researches and studies in the field of the banking sector.

On the other hand Validity refers to the degree with which a research instrument measures what it claims to measure in addition to the population it is planned for. It refers to the honesty of the tool and population of study. It indicates that it must measure the characteristics it is proposed to measure.

3.5 Findings and Conclusion

There are definitely no doubts that the majority of the banks have taken the IT benefit to improve their operations. Today nearly all of them have website on the Internet for the purpose to offers executive services and support quality of service delivery, and expand their services internationally. IT continues to grow quickly as the key fundamental technologies of semiconductors, and network connections that advance at exponential rates. Stable developments in the underlying technologies make achievable new IT applications that influence all areas of society, involve the households, economy, the R&D enterprise and government. The usefulness of IT applications throughout society tends to proceed rapidly. The efficient use and implementation of IT are the consequence of a complex process that needs not only the technology adoption but also variations in institutions and organizations.

The research finds the truth that say that IT has a significant and great impact on the banks on Lebanon. The findings show that IT leads to of the employees and customer's time saving obviously, reduces the expenses and making the network transactions easiest. The outcome of this study is limited just to the data collected from the journals and books and about information technology and its impact on bank area and from the primary data collected from the result of the interview and questionnaire survey performed by the researcher. As the research was accomplished in a limited period of time further variables and factors are not considered. This may have an effect on the study result. We cannot refuse that the development of technology was an essential need of the present era. Businesses must embrace and adopt new technologies to offer excellent business operation and best services to their customers. Regarding to the bank adaptation of information technology, the bank industry is not an exception. Thus, the banking industry needs to work on improving its operations customer services and products by spending more on IT. Banks should allocate more resources to improvement of secure IT systems, services and products.

IV. Conclusion

From our research we can pronounce that the information technology has a positive impact on the growth, support and image of commercial banks in Lebanon. Customer satisfaction is one of the most important attainment of organizational targets. Information technology has also helped the banking system to decrease the fraud rate. Current day banking activities are not manual, they are computerized which makes it hard to make any alterations; such actions can simply be traced where corrective measure occupied. Information technology has also offered better and well-grounded infrastructure to accelerate transaction, increase stability and improve banks operation.

Lebanese Banks have been able to get benefits from information technology, service delivery, and electronic banking in the area of improved effectiveness and efficiency of their operations so that additional transactions can be done faster and most easily, which will undoubtedly effect considerably on the general performance of the banks. The customer in contrast, stands to enjoy the advantage of fast service delivery, reduced handling of cash, which will raise the volume of income.

V. Recommendations

The impact of information technology on Lebanese commercial banks performance has been discussed broadly in the above chapters. Though, it is only suitable to make convinced recommendations that may be helpful to the improvement of this intention. Information technology must be completely funded and obtain total support from the management. Financial constraints are element of the problems that limit the efficiency of information technology in the banks. So, appropriate enlighten mediums and programs must be set in place to improve communication involving the banks and their customer. This will facilitate the flow of information hereby remaining the customers fresh and updated. Moreover, committee must be setup to observe the implementation and performance of information technology in the banking industry. These must be periodic reviewer of the arrangement techniques to make sure that they outfit the purposes of the organization. So the most important is to prioritize the client before the technology. It is significant to first and foremost recognize the needs of the customer before presenting technology. The technique chosen must be applicable to the overall mutual objective so as to avoid loss or stagnation. Moreover the generators in banks have to be run on stand-by to stay away from disruption in the electricity flow, which can decelerate the rate of operations. This is since the majority of information technology advancement requires electricity to function.

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