

# Perception and Ranking of Internet Banking Service Quality from Banker perspective in Public and Private Banks in Egypt

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## ABSTRACT

*Internet banking provides alternatives for faster delivery of banking services to a wider range of customers. Internet banking has gained in increasing popularity and has attracted the attention of both customers and bankers. This paper aims to collect decision maker's perceptions and ranking of the Internet banking service quality in public and private banks in Egypt, this study uses seven key decision makers were also approached using semi-structured interviews to get the broader picture, where data was interpretively analysed and coded using Nvivo. The outcomes may help the management of banks develop effective strategic planning for the future of electronic banking in developing countries like Egypt.*

**Key words-** *Internet banking, Electronic Service Quality, Public Banks, Private Banks, Decision maker*

## 1. INTRODUCTION

The Internet population has been increasing dramatically because of the significant power of World Wide Web and global e-commerce. The most common and popularized use of e-commerce is to replace and enhance traditional market channels by opening web-based storefronts. In this type of e-commerce, organizations offer their

products and services on the web and generate revenue from actually selling them to their customers (Molla, 2006) (Turban et al., 2010). One of these is, banking which is a leading industry in the development of electronic business (e-business); as it allows customers to achieve rich financial information and conduct services via the Internet (Stoneman, 2000) (Taş and Nanehkaran, 2013).

As a result, the Internet is the best channel for the provision of banking services and products to customers; especially as it has an impact on banking performance as well as customer's daily life. From a bank's perspective, using the Internet is more efficient than using other distribution media because banks aim at achieving an expanded customer base (Ali and Niaz, 2010) Internet banking refers to the use of Internet as a delivery channel in which to perform banking activities such as transferring money, bills payment, balance inquiry, transaction history, loan applications, and insurance services (Sadeghi and Hanzaee, 2010). Thus banks are now considering the

Internet as part of their strategic plan (Juma, 2013).

With the rapid spread of e-commerce, a number of new products and delivery channels have been introduced such as ATMs, internet-banking, mobile banking and remote electronic banking one after another. Among the major initiatives Internet Banking has brought to the customers the much-demanded convenience, this provides benefits to the bank, as it decreases the cost per transaction, and the customer, who is offered an increased convenience (Hassan et al., 2012).

Today, every bank provides the service of the Internet banking. Hence, it is important for banks to determine the key factors that influence the customer adoption of Internet banking. Web presence and the provision of services through the Internet is no longer the main issue, but rather, the quality of service provided. There are many factors that affect the customer perception regarding the quality of internet banking service, some of which are: web design, security, trust, product diversification, credibility, collaboration, access and communication (Kumbhar, 2011). In this regard, the study at hand aims to understand the decision maker's perceptions and ranking of the Internet banking service quality in both public and private banks in Egypt.

## 2. LITERATURE REVIEW

### 2.1. INTERNET BANKING SERVICE QUALITY

Internet Banking (IB) is one of the best alternatives for traditional banking (Rotchanakitumnuai and Speece, 2004). It

has become the self-service delivery channel that allows banks to provide information and offer services to their customers with more convenience via the web services technology (Ahmad and Al-Zu'bi, 2011). It is one of the most important factors in the business economy today; especially as it is considered a lower-cost delivery channel and a way to increase sales (Singal and Padhmanabhan, 2008). Thus, IB contributes to increasing the efficiency of the banking operation as well providing more convenience to customers (Jun and Cai, 2001). Recently, more and more brick and mortar banks have been moving to the Internet which is a fast, easy, advanced, highly informative and modernized way of banking, in order to sustain their competitiveness in the market place (Sadeghi and Hanzae, 2010) (Joseph et al., 1999) and to keep up with the high customer expectations (Hassan et al., 2012) (Slu and Mou, 2003). Hence, IB is more flexible compared to retail banking (Safeena and Date, 2010) (Đukić and Kijevčanin, 2012).

It is important for the banks to know the factors that influence the customer adoption of IB through focusing on improving their banking service quality (Slu and Mou, 2003). Service Quality is an important element of value and is a key strategic asset of companies regardless of whether it is a product or a service that enable organizations to distinguish themselves from other competitors (Vazifedoosta et al., 2013) (Tri and Yuli, . However, many banks still lag behind their customer's ever-increasing demands and expectations (Joseph et al., 1999) (Manyi, 2011) (Tri and Yuli, 2011) despite the fact

that, customer satisfaction has always been regarded as a key success factor of organizations (Mefford, 1993) (Molla, 2006) (Manyi, 2011).

## 2.2. DECISION MAKER AND CUSTOMER PERSPECTIVES

In the banking service, quality represents the quality perception from the point of view of service provider such as bank management, and employees. It is apparent that the banks need to provide customers with high quality services (Ghobadian, 1994) to survive in the highly competitive Internet banking industry because quality lays emphasis on the importance of the management and the supply-side quality and there is an important role of the process in determining the quality of outcome (Edvardsson, 1998). (Elbadrawy et al., 2014) stated that the concept of service should be approached from the customer's perspective of the outcome. From the consumer's perspective, that service can be considered as an experience whereby the consumer is expected to make a choice to satisfy his needs in an emotional way through the interaction with service provider. As the customer is the main concern of the whole business process in designing, providing and evaluating the level of quality particularly in the banking industry, banks should have better understanding of how customers perceive and evaluate the quality of the electronically offered services to provide high quality services that fit their purposes to better address their customer needs and to retain them. Therefore, delivering high quality e-services is a prerequisite for achieving customer satisfaction, where only through customer

satisfaction can the company gain loyal customers (Huei-Chen, 2007).

A study by (Sohail and Shaikh, 2008) investigated the main dimensions that affect customer perception of online risks. Personal risk, privacy risk and performance risk embodies the customer perception on quality of online services. Another study by (Raman et al., 2008) analysed quality of Internet banking services provided by banks in Saudi Arabia. The results identified three factors that influence users' evaluation of quality of Internet banking services: efficiency and security, fulfillment and responsiveness. (Sohn and Tadisina, 2008) suggested six e-service quality dimensions for the Internet banking. These are ease of use, appearance, reliability, customization, communication, and incentive. Another study has put forward a 6-dimension model for e-service quality assessment based on their empirical study in Internet-based financial institutions (Loonam and O'Loughlin, 2009). In an explorative study on Irish online banking context by (Jham and Khan, 2009) stated that there are ten dimensions that affect online retail banking, which are: web usability, security, information quality, access, trust, reliability, flexibility, responsiveness, self-recovery, and personalization/customization. In 2009, (Swaid and Wigand) aimed at evaluating the service quality of Internet banking services in India from customer's perspective. The results showed that customers are satisfied with quality of service on four dimensions such as reliability, accessibility, privacy/security, responsiveness and fulfilment, but least satisfied with the "user-friendliness" dimension.

In 2009, Sung et al., concluded that there are six main e-service quality dimensions that could be used to measure the web quality; website usability, information quality, reliability, responsiveness, assurance, and personalization. In the same year, a study by (Alanezi et al., 2010) used website design, reliability, responsiveness, personalization, information quality, system quality for developing e-government portal. In 2010, (Ho and Lin) extend Sung's dimensions to include security and ease of use. A further study by (Jain and Kumar, 2011) developed a multiple item scale for measuring Internet banking service quality. The five dimensions were customer service, web design, assurance, preferential treatment, and information provision.

Additionally, (Sabiote et al., 2012) determined number of e-service quality dimensions; Efficiency, Responsiveness, Privacy/security, Reliability for railway ticket reservation website service. In 2013, a study by (Deshwal et al., 2013) revealed that there are six main dimensions that affect e-service in tourism. Finally, several e-service quality studies have referenced and referred to the dimensions studied by (Latimore et al., 2001).

### 2.3. EGYPTIAN BANKS

The Egyptian banking industry is basically composed of two types, public and private and these two types will be used in this current study. All specialized banks are state owned and are assigned the task of providing long term finance for real estate, agricultural and industrial development. They mainly cater to the needs of the private sector and depend in their fund rising on borrowing from financial institutions (Alaa, 2009).

There are currently 39 banks in Egypt, 5 public and 34 private banks. The five public sector banks are the largest operating banks in terms of balance-sheet size, accounting for nearly 50% of total bank assets. They have a significant market share in retail and corporate banking services through large branch networks and close relationship with state-owned companies (Hussien and Abd El Aziz, 2013).

### 3. METHODOLOGY

After reviewing literature related to Internet Banking service quality, a number of research questions can be raised. The most important is: Which factors contribute more towards satisfaction of customers in the banking system. It has been clear that most of the service quality research has focused on service quality dimensions and its adoption based on the basic definitions only from the customer perspective, leaving the decision makers' perspective under studied. Thus, an exerted considerable effort in filling this gap by extending previous research conducted by the authors on service quality domain by explaining the rational approach in identifying the dimensions and items of web-based service quality based on the evaluation of the criteria (Nvivo, 2012). The current research extends the work by investigating the perception and setting the importance of each dimension in Internet Banking environment from the banker perspective. The previously determined e-service quality attributes are as follows (Nvivo2012):

1. Usability reflects the ease of navigation in which the site contains functions that help customers find what they need and allows them to move easily and quickly through the pages.

2. Reliability refers to the ability to perform the promised service reliably and accurately.
3. Responsiveness refers to the willingness to help customers and provide prompt service.
4. Privacy refers to degree to which customers believe the site is safe from intrusion and personal information is protected.
5. Incentive indicates encouraging consumers to browse and use the website by rewarding them.
6. Fulfillment includes accuracy of service promises, having products in stock and delivering the product within the promised time.
7. Efficiency refers to the ability of the customer to get to the website, find their desired product and information associated with it and to check it out with minimal effort.
8. Assurance refers to the knowledge and courtesy of employees and their ability to inspire customers' trust and confidence.
9. Empathy refers to the caring and individualized attention the firm provides to its customers.

In order to gain better understanding of the relationship between e-service quality dimensions and Internet banking, a qualitative approach was appropriate for the study at hand, where a semi-structured interview was conducted with key decision makers at banks (5 private banks and 2 public banks) who have the highest market share. Interviewees' are from Cairo and Alexandria, who are responsible for the development of the website. This section will start by transcribing and interpretively analyse the interviews, while statistically analysing the e-service quality dimensions

ranked by interviewees using SPSS. Finally, interviews are coded using Nvivo.

In this research, Nvivo was used to assist the researcher in analysing the data; a preliminary set of codes was established prior to analysis, based on the key factors that were drawn from a review of literature. It is used to simplify and organize the qualitative data analysis; Nvivo10 software is used to code the data from the interview transcripts into the nodes in the software with the process of content analysis (Easterby-Smith et al., 2002). It allows the researcher to 'lay out' the data to visualise better any patterns as they emerged.

## 4. RESULTS

### 4.1. INTERPRETIVE INTERVIEWS

This section will interpretively analyse how does decision maker in both bank sectors perceive and rank e-banking service quality dimensions to individual bank clients.

#### Private Banks

##### Case Study 1 (QNB)

Based on the bank survey and the Quality Management Department, the interviewee stated that customers are satisfied as they can access their bank account through the bank's website anytime and from anywhere. Also, the complaints are not related to the bank website and are mainly related to the Internet connection. The interviewee was confident because the numbers of clients that go to the bank physical places are frequent and they mainly go to open online account to serve the online services (Netabank, E-mail@bank, FonaBank and PortaBank). Then, an employee discusses the steps of creating and using the online account, and can show the

customer a demo of the system on the bank website.

When asked about the Internet service quality dimensions perception, the interviewee mentioned that the website Usability has better structure and ease of use because it has simple language. Also, the interviewee stated that the Reliability, where information is accurate but not updated because the information may be delayed 48 hours due to server problem. Responsiveness was ranked number two, where the client may contact the call center or the branch to solve the problem as soon as possible thus it is not well provided electronically. Privacy is well provided as no problems recorded. The Incentives dimension is not available, as the bank provides only discount off as a reward (Incentives) for using the online services. Similarly, Fulfillment dimension indicates that the bank's website already offers updated products and services that meet customer expectations but the client has to visit the branch because not all services can be fulfilled online. Regarding the Efficiency dimension, she believes is well taken care of as customers to pay bills or transferring money with no cost, minimal time and effort. For the Assurance dimension of the website is provided because it includes all the bank information thus it affects customer trust positively. Finally, Empathy was an aspect that works more physically and not electronically based on the types of customers segment, which are elite and unique. The bank already opens physical location for elite customers.

Case Study 2 (Citibank)

The second interview highlighted that the clients use the bank website with no any raised problems because they informed the interviewee about "speediness of execution of their requests". The steps for applying to an online account are simple and easy. The client can visit the branch or contact the call center or filling the form direct from the website in order to receive an Internet pin.

The interviewee opinion about the service quality dimensions is as follow. First, the bank website 'Usability' is well designed to attract customer and clear layout for easy navigations. Also, it is very user friendly and easy to formalize with. This helps customer to execute his business easily with no obstacles if not the client won't use the e-services. Also, website 'Reliability' allows the client to see the last 90-day transactions with details or download them for review and have a record of previous statements for the last year. Likewise, the client can send confidential and secure messages directly to the Customer Service but it is not well provided because the client will not have a quick response 'Responsiveness', it will take time so she preferred the client to call or visit the bank.

The website Privacy is protected and secured never encountered any issues. It is keeping customer information secured and it is a top priority for all of the bank team. The bank ATM Personal Identification Number is never stored as a cookie. In addition, the bank website will terminate the online session to help protect against unauthorized access. All data sent to and from the website is scrambled and reassembled between the bank and the client computer to protect the personal and financial information, also, a

highest level of encryption commercially available. There is a new enhanced Secure Sign-on process for online service that does not require customers to continually re-enter the ATM/Debit or Credit card number and the 4-digit cash withdrawal PIN. In addition to a user name and password, the customer will be requested to choose 4 Challenge questions and their answers during the sign-on process, then randomly only 1 question will appear during log-in (after entering username & password) as a second level of authentication.

This bank has Incentives system but it is just for the client who use bank credit card not the website. In other words, every time the client uses the bank Credit Card, they receive reward points.

The Fulfillment dimension enables the customer to bank on command. It provides most of the services online; it allows the customer to view banking accounts in details, unbilled transaction from credit cards, downloading statements, foreign exchange rate and interest rates also the client can manage the change of username and password, order statement of account. Similarly, it can transfer funds between the client accounts or to other Citibank Egypt customer, pay credit cards bills and order manager checks. Also, the bank has an option called special offers that announce about the latest and new products and services for the bank. It is Efficient because there is no software, service or set up fees. All you have to pay for is the cost of your modem call. Also, anytime the client like, it is available 24/7. The interviewee believes the website is a way to show bank capability and system it does not have any impact with

staff qualifications or courtesy as there are no direct contact with any employees; Assurance. The page of each client is called "My Home" it includes summary of activities and balances on all active accounts (checking, savings and loan accounts), option to export account activities. The client can edit the items in this summary by clicking on Change account summary preferences under Home preferences; this option shows what you would like to do. Also, it enables the client to edit the information concerning transactions, entered upon the sign on. Likewise, this option enables the client to hide accounts that he does not want to have displayed on My Home screen, thus empathy is well provided.

#### Case Study 3 (CIB)

She mentioned that the majority of the clients are satisfied and have a great knowledge about the website and they use it because most of the bank services are available online so they can execute the transactions electronically.

However clients are facing some problems when going from page to another as the website slowness and down most of the time due to the Internet connection problem also, the bank design is not user-friendly.

The client can have an Internet banking account by following online easy steps. Firstly, the client should log in using debit card number and its pin then click on the Internet banking service then choose Register now.

She identified that the bank website provides five dimensions, which are reliability, privacy, fulfillment, efficiency and assurance. The information in the website is accurate and reliable because it gives the

client an option to the client to view the updated balances of accounts, credit cards, deposits, loans and investment funds. Also, the information is well organized but not easy to use.

Moreover, privacy is the most important and well-provided dimension. It is in the top priority. The client financial transactions are protected and secured by Debit card number and its pin then IB username and password. Also, it provides a challenge question and its answer; it is protected using secured socket layer (SSL), which is the most secure form available commercially. The Internet banking sessions will be terminated after 15 minutes to prevent any unauthorized access. However, the bank can make it more secure if the bank applies the option in which the system selects each time different letters to type from the password. The fulfillment dimension is provided because most of the banks products and services are available and be fulfilled to some extent. The services are transferring between client's accounts settlement of credit cards, save a template transactions for later use. Also, the client can require for some services such as chequebook on any current accounts, update mailing address, send inquiry. Although, the interviewee is accepting the customer availability in the physical premises to some extent because the clients are aware about the bank products and services from the bank website but he will not take an action until convincing by the employees. However, there are some services that cannot be fulfilled electronically such as transferring between the clients to another client account and transferring to any account worldwide because it requires digital signature. Also,

the website is very efficient because it includes most of the services thus no need to visit the bank physically. It saves time, effort and cost. The website is trustable (Assurance) because it includes most of the information with high privacy which reveals the employee knowledge that may influence the customer's trust and credibility.

Despite the fact that, there are two dimensions that are partially provided and should be improved which are the website design, Usability is not well perceived because some customers have lost in the website, which means that site navigation is difficult so they visit the physical branch to ask about the service location in the website. The other dimension is the Responsiveness in which the website performs the service right from the first time. It gives quick confirmation message for any payment through the website and mobile phone however if the client face any problem, the website cannot support and solve it immediately. It takes time to solve online.

Furthermore, there are two other dimensions that are not provided online at all. The website doesn't provide Rewards online but this is does not affect the customer negatively. The interviewee thought that it would have positive impact if it were available. Also, the bank website does not paying any personal attention (Empathy).

#### Case Study 4 (BNParibas)

The client can access such a service after a subscription. Accordingly, the client has to fill in the application form at the branch. Then, both user name and password will be sent to him in 2 separate mails. Once the client receives them, he becomes a



subscriber and he will be able to use the service.

As the client's opinion is important that suggests improving the bank products and services. The bank takes every complaint seriously. The bank has a complaint form which includes a short description of what occurred and what the client suggest however till now no any complaints about the website.

The interviewee mentioned that the website usability dimension is well provided as there are no any complaints raised from the customers. The clients can access any information at any time anywhere with no need to come to the branch. Also, all the website information is well provided as it allows the client to display balances and statements of transactions recorded over the last 45 days. In addition, it can manage their accounts by transferring funds between accounts registered on the same bank, transfer to any account within this bank locally or worldwide, give instructions to transfer funds abroad. In addition, this IB service allows the client as to keep track of your card transactions also; the client can keep track of the fixed term deposits, loan position and other accounts.

Privacy is the first and most important feature to look for because the website is secured and each client has his own password and user name. Several data security technologies have been used for instance the client will receive a confidential ID and password to access account information. After 100 logins with the same password, the account will automatically ask you to change it. Furthermore, in the case of 3 repeated fraudulent attempts, access to the

account is immediately locked out also, the identification data and information concerning the client accounts is encrypted with SSL technology. For total security, the bank recommends that the client have to clear the browser cache and close the browser after each session.

As the website includes most of the bank products and services which reflects the employee's knowledge thus inspires customer's trust. However, the website does not respond quickly and cannot help the client to solve any problem immediately but he can contact the bank through different ways, sending emails, Call the Customer Support Desk or Call the branch directly or visit him/her. Thus, most of clients call the branch because it will take time to reply the email. Also, the website does not provide any rewards and no individual attention.

Overall, she stated the bank website is satisfied and useful for the clients because the service is free and convenience to them. However, the online banking services in Egypt are not used in large amounts due to unfamiliarity with these services.

#### Case Study 5 (Faisal Islamic Bank)

The interviewee stated that the client has to download and print the application form and the instructions then fill the form and submit it to the branch. All data and correspondence address should be correct in order to send the clients their username and the password. They have some complaints about the website in which it is slowly due to the Internet connection problems and it does not send the passwords through emails easily which may lead to customers dissatisfaction. The bank website suffers from its Usability because it is not user friendly because

client's questions about the system shows that the menu design is difficult to understand and it contains many advertisements and no search methods. Also, the website has the option to translate the website language however, there are some pages are not translated.

Also, the interviewee mentioned that all information is available and accurate on the site but sometimes due to the slowness of the site the customer cannot find his specific information because the site may froze in some pages (Reliability). Due to the website slowness in response and in solving problems thus they have to visit the bank to solve the problems immediately however, till now no major problems raised but when there is a minor problem, the customer is calling the customer service. The website can save cost but it can't save effort or time due to slowness of the site. Slow to move from page to another (Efficiency).

Concerning the privacy dimension, the bank website did not use cookies to collect personal information. Website is highly secured and safe to use for instance if the customer has to pay some bills so he will enter his ID number and password then after finishing the first payment, a statement will raise to ask him if he want to pay another one or not, if yes, he has to enter his password again, it sounds annoying but it saves the customer's account to make sure no one has a chance to get into his account. Also, fulfillment dimension is provided to some extent as the bank provides most of the services and products on the website however some of the services are deactivated so the client has to go the bank physically to fulfil it. As a result, the assurance dimension

is not well provided due to the deactivation of some services and frozen of some pages thus this will decrease customer's credibility and trust. Last but not least, neither Rewards nor Empathy are provided electronically because the banker wants to keep an eye on his customers and his requirements. He thought that it is better to provide these dimensions offline.

Finally, it is useful especially due to the circumstances of the country as the security is a critical dimension thus the bank should take care of this criterion to feel safe to shift and use the Internet banking to avoid thefts followed by responsiveness and fulfillment and in the future the bank will activate a bank support team through the Internet to answer about any problem at the spot (Responsiveness).

### **Public Banks**

#### **Case Study 1 (NBE)**

The interviewee believes that the bank is considered the largest and successful operating banks in Egypt. The bank provides an Internet banking service for retail and corporate, however this study is focusing on retail banking. The clients have a great knowledge about the service and they use it heavily. However the clients are not highly satisfied because IB service is in its first stage which allows only to inquire about the following services for instance check all accounts "Credit / Debit / Savings" and print statements of account their own, Time deposits / Loan accounts, including tables premiums also, savings and Certificates of investment, including interest rates and the dates of disbursement vouchers and recoverable amount for each certificate. Credit Cards of various types in addition to

the ability to print statements of accounts, current balance and minimum monthly repayment required. The second stage for IB service will allow the clients to pay and transfer money online but it is not launched yet.

Also, he mentioned that there is no online registration procedure for clients who live inside Egypt; they have to visit the nearest branch to subscribe in such a service then they can activate service by entering both ID (sent by the branch to the customer's e-mail address) and the Passcode (sent to customer's mobile phone number).

However, the registration steps for clients Outside Egypt is done through a specific link then the branch will send the customer's ID to the customer's email address as well as the steps of activating the service and a text message (SMS message) will be sent to the customer's mobile phone number which was mentioned in the subscription form, this SMS will contain the Passcode which will be used in creating the initial password upon contacting the call center.

When the interviewee asked about the perception of some dimensions specifically for the bank website as long as it is in the first stage, she mentioned that the bank website design and navigation is good and easy to understand in any language in no time as the bank doesn't have any complaints till now thus the clients can access their data at anytime and anywhere with minimal effort. Also, The information is accurate and reliable as the customers check their accounts with no any problems but the data is taking time to be updated, this problem faces some of the public and private banks in Egypt. Also, it is highly protected the

financial data because every customer has own username and password.

For the assurance dimension, she said that so far the website has a lot of information about the bank service that inspire the customer's trust and confidence. Nowadays, the website has provided important information that there are wrong an email sent to the clients thus it shows the bank Internet provider aware about the website so the bank sent a notice for the clients. However, the interviewee thought that face-to-face interaction enables them to act with customers easier with more confidence also there is no any rewards for stage one, thus no incentives and empathy online.

Concerning the responsiveness and fulfillment dimensions, they are not well provided in this stage because the website is only for checking the accounts and providing just information about the bank's products and services. It is not ready to solve problems or fulfill any service. Thus, the client has to visit the physical premises till the website launch the second stage to activate such dimensions.

#### Case Study 2 (Banque Misr)

Another interview was established to recognize the decision maker's opinion about the online service quality in the bank website. The interviewee states that the website has slow Internet connection and it provides its clients with some services without visiting the physical branch including: checking the balance of current accounts, getting information on to credit cards and checking the currency exchange rates thus it is an easy website to deal with and the confidentiality of the information is acceptable as long as it is an informative

website. These services are considered as complaints because these are not enough services for customers especially due to the revolution, as they preferred not to go the bank. Also, the interviewee thought that the website does not allow complete transfer transactions on the account, this problem for the public Egyptian banks on the other hand, it is normal for private bank inside and outside Egypt to transfer between accounts. Also, the clients who live abroad, they are dissatisfied because they do not have the option to access his account so they shift to another bank. The customer has to follow simple steps that live in Egypt to have online bank account. The client has to download and fill the application then sign it with the verified signature, finally present the application to the branch or to the Card Center to verify "signature authentication" in order be approved form the bank.

With regards to the Internet service provider, the website is used for checking the balances so its design is understandable and useful (Usability). Also, it has simple and easy search method with different languages Arabic and English. The reliability and availability of information are well provided which makes the client checking their financial information easily. Also, the financial data are highly protected and secured because each client page is prepared on the basis of its own account number it will not be repeated or similar such as National ID. This gives safety and high confidence to the customer because the confidences of his calculations is not rumored and sees by the client. The site is smooth and easy to deal with because it

saves time and cost. The important thing is not to visit the bank due to the traffic jam.

Most of the dimensions such as responsiveness, fulfilment, assurance, incentives ad empathy dimensions are well perceived through phone and face-to-face interaction not through website. The website does not show any employee knowledge that encourages customer's trust. It is just providing the clients balances only.

#### 4.2. INTERVIEWS STATISTICAL ANALYSIS

This following table summarizes how each bank ranked the criteria based on the importance of each one from his/her point of view where 1= most important, 2=Extremely important, 3= Strong important, 4= Very important, 5= Important, 6= Relatively important, 7= Neutral, 8= Less important, 9= Least important.

Variables can be ranked according to their importance, as per customer response from their own point of view. To be able to rank the overall importance, the mean is calculated, as shown in the table below. According to this measurement, dimensions can be ranked from the most important to the least important as follows; Privacy, Reliability, Usability, Responsiveness, Fulfillment, Assurance, Efficiency, Empathy, then Incentives.

**TABLE 1**  
**Private Banks Interviewees Ranking**

Ranking	Dimensions	Private Banks Mean
1	Privacy	1.3
2	Reliability	2.5
3	Usability	3.1
4	Responsiveness	4
5	Fulfilment	4.6
6	Assurance	6
7	Efficiency	6.5
8	Incentives	7.8
9	Empathy	9

After analysing the ranking of each dimension, it was noted that private bank interviewees realize the importance of almost all the dimensions, however they were ranked differently based on their importance level. Privacy was regarded as essential; where mean of respondents ranked it as the most important dimension (1), followed Reliability with (2) and Usability with (3). Also, Responsiveness and Fulfillment are considered very important (4, 5). Regarding Assurance and Efficiency dimensions with means (6) and (7) respectively. Incentives dimension was regarded less important by (8). Finally, Empathy was weighted least important by (9) regarding it an important dimension.

**TABLE 2**

**Private Banks Interviewees Ranking**

Ranking	Dimensions	Private Banks Mean
1	Privacy	1
2	Reliability	2.5
3	Responsiveness	2.5
4	Assurance	4.5
5	Usability	4.5
6	Fulfilment	6
7	Efficiency	7
8	Incentives	8
9	Empathy	9

After analysing the ranking of each dimension, it was noted that public bank interviewees realise the importance of almost all the dimensions, however they were ranked differently based on their importance level. Privacy was regarded as essential; where mean of respondents ranked it as the most important dimension (1), followed Reliability and Responsiveness with the same mean (2.5). Also, Usability and Assurance are considered very important with mean (4.5). Regarding fulfillment and Efficiency dimensions with means (6) and (7) respectively. Incentives dimension was regarded less important by (8). Finally, Empathy was weighted least important by (9) regarding it an important dimension.

### 4.3. Nvivo Results

The use of Nvivo 10 software enables the researcher to simplify the process of analysis, by displaying the number of responses coded at each node. Also, shows the hierarchical theme structure and nodes that was the result of the data analysis. It is the idea that software cannot replace or duplicate analysis of the data by the researcher (Abdul Nifa, 2013). It allows comparisons to be more easily made, Hence, it is quicker, more accurate, can query it later and add new coding schemes and the researcher was able to determine the pattern, which existed in the data to draw conclusions on.

#### Nvivo Private Banks

Based on the above nodes, the researcher can declare the word frequency related to each variable for both bank types. The following section will display the word frequency for the private banks.

##### Usability

Some interviewees declared that “Usability” dimension is well provided and no complicated in most of the bank website as the customers do not complaint about the navigation and design. Thus, most of the websites are user-friendly.

“It is not complicated in structure, function and it has easy and simple search. Thus it is user-friendly.”

“It has better structure and easy to use.”

Well designed to attract customer and clear layout for easy navigations. Also, it is very user friendly and easy to formalize with. This helps customer to execute his business easily with no obstacles if not he won't be encouraged to use the e-services.

Others stated the customer always return to the customer service because it is difficult

to find what they want easily, thus customers have to call or visit the bank to ask about simple questions.

“The website design is not well perceived because some customers have lost in the website, which means that site navigation is difficult so they visit the bank to ask about the service location in the website.”

“It is not user friendly” because client’s questions about the system shows that the menu design is difficult to understand and it contains many advertisements and no search methods. Also, the website has the option to translate the website language however, there are some pages are not translated.

#### **Reliability**

Most of the private banks agree that the “Reliability” of information is available and accurate but only two banks realize the websites are not updated because the process of transferring from account to account is not reflected immediately “Updated” because the information may be delayed 48 hours. Also the pages may take time to load “Freeze” due to the Internet connection for instance the confirmation message page.

“The information is accurate and updated for serving the customer purpose.”

“It is well provided and updated as it allows the client to display balances and statements of transactions recorded over the last 45 days, from specific accounts registered under the client’s subscription.”

“The information is accurate and reliable because it gives the option to the client to view the updated balances.”

“It is well perceived. It allows the client to see the last 90-day transactions with details or download them for review and have a

record of previous statements for the last year.”

Two interviewees state “All information is available and accurate on the site. But sometimes due to the slowness of the site the customer can’t find his specific information because the site may freeze in some pages.”

“The information is accurate for serving the customer purpose but not updated because the information may be delayed 48 hours due to server problem.”

#### **Responsiveness**

Accordingly, most of the banks agreed that the “Responsiveness” is not well provided as the website can support to solve any problem quickly. This will make pressure on the bank customer service department to spend time to explain the information to the customers as a result the customers take the burden to visit the branches to know whether the process performed correct or not. Also, if there is any problem facing the customer, they contact the call centre or the branch to solve the problem as soon as possible due to the lack of bank support team through the Internet. Correspondingly, the feedback delays through the electronic channel as the requests and problems returns to the customer’s main branch not a unit for electronic service. Moreover, the customer service in the branch gave priority to handle the requests of customers sitting in front of them in the branch. As a result, both dimensions (Reliability and Responsiveness) are ranked to be highly important criteria than the usability dimension. The feedback delay through the electronic channel as the requests and problems returns to the customer’s main branch not in a unit for

electronic service and the customer service in the branch gave priority to handle the requests of customers sitting in front of them in the bank.

“The website cannot help the client immediately.”

“The website cannot support and solve it immediately. It takes time to solve online.”

“The website is slow in responses and in solving problems to the clients thus they have to visit the bank to solve the problems immediately.”

“The client will not have a quick response, it will take time”

“The client may contact the call center or the branch to solve the problem as soon as possible.”

One interviewee accepts that this dimension is well provided because “customer can use the quickest and most secure way in the Internet banking is to use the 'My Messages' area to send an email to solve any problem.”

### **Privacy**

It is the super criterion as it ranked in the first order; it is well provided for most of the banks each client has its own username and password. Some banks do not need to enter the entire password every time however the computer system selects each time different letters to type. Thus it is difficult for the hackers. As a result, most of the banks need to imitate a specific bank because it uses more secure technology to stress confidence in customers.

“The first and most important feature to look for because the website is secured and each client have his own password and user name. Several data security technologies have been used.”

“It is the most important and well-provided dimension. It is in the top priority. The client financial transactions are protected and secured by card number and pin then protected by username and password and by challenge question and its answer.”

“Website is protected and secured never encountered any issues.”

“The Website is highly secured and safe to use.”

“It does not need to enter the entire password every time however the computer selects each time different letters to type. Thus it is difficult for the hackers to hack.”

“There is no any problem raised regarding this issue.”

“Security is our top priority. The Internet banking session is terminated to prevent unauthorised access. The bank takes the client Personal Internet Banking security and privacy very seriously. Protecting the client and his money takes a bit of know-how and the right software. The bank uses all the resources that protect the client.”

### **Fulfilment**

Most of the banks stated that it is well provided partially because most of the information about the bank product and services are available but they cannot fulfil them online, customers have to visit the banks.

“The offers always are updated and the customer can fulfill any product or service.”

“It is well provided that allows the clients to display balances and statements of transactions recorded. They can manage their accounts by transferring funds between accounts. In addition, it allows the client as to keep track of the card transactions. Hence

the customer can fulfill the service electronically.”

“The bank’s website already offers updated products and services that meet customer expectations but the client has to visit the branch. Some services can be fulfilled to some extent.”

“This dimension is provided because most of the banks products and services are available and be fulfilled completely. However, there are some services that cannot be fulfilled electronically such as transferring between the clients”.

“It enables the customer to bank on command. It announces about the latest and new products and services for the bank.”

“It is provided to some extent as the bank provides most of the services and products on the website however the services are deactivated so the client has to go the bank physically to fulfill it.”

#### **Efficiency**

“**Efficiency**” is well provided because the website enables customers to find the desired information with minimal effort, cost and time. However, one interviewee mentioned it is not well provided because the customer spent a lot of time to find what they want. This makes more load on the customer service department and make the customers unsatisfied with the e-banking. Thus, it can save cost but it can’t save effort or time due to slowness of the site. Slow to move from page to another.

“The bank is taken care of this dimension as customers can pay bills or transferring money with minimal cost, minimal time and effort.”

“The bank provides its services with no fees and more efficient because no paper is needed. All services are online so no parking.

“There is no software, service or set up fees. All you have to pay for is the cost of your modem call. Also, anytime the client like, it is available 24/7 (although some transactions may not be available during system updates).”

“It is very efficient because it includes most of the services thus no need to visit the bank physically. It saves time, effort and cost. The Internet banking is definitely better due to the traffic jam, searching for parking and waiting in long queue.”

“It facilitates the clients to make any transactions online and no need to come to the branch.”

“It can save cost but it can’t save effort or time due to slowness of the site. Slow to move from page to another

#### **Assurance**

This dimension “**Assurance**” is well provided in four private banks and it is not in the other two banks but it works offline in all banks as customers ask the employees about something and he answered well however, this may crowd the bank. One of the interviewees realise that the bank website is a way to show bank ability and system but e-banking services doesn’t have any impact with staff qualifications or courtesy as there is no direct contact with any employees. This may make the bank more crowded. However, it is useful to be provided as some mentioned that when the website is secured then it is confident.

“Yes, the website site includes lot information that inspires customer’s assurance.”



“Yes, it includes all the bank information thus it affects customer trust positively.”

“Yes, it is presented because the website includes most of the information with high privacy which reflects the employee knowledge that may influence the customer’s trust and credibility.”

“Yes, the website includes all the bank information thus it inspires customer trust and decrease number of clients visiting the bank.”

“It is not well provided due to the deactivation of some services and frozen of some pages thus this will decrease customer’s credibility and trust.”

“No, it is a way to show bank capability and system but e services don’t have any impact with staff qualifications as there is no direct contact with any employees.”

#### **Incentives and Empathy**

Lastly, there are two dimensions. First, “**Incentives**” is ranked to be the least one so it is not well provided in Egypt bank websites. This criterion can be more effective in the physical branch. However, only one out of six provides rewards online. Second, “**Empathy**” is similar to Incentives because the website is providing the same to all customers i.e “impersonal” but also there are two websites that provide individual attention to the customers.

“Most of the banks said that” No rewards, No bonuses for customers, No encouragement to clients” electronically.

One interviewee states that websites “Offers discounts while transaction is executed through the Internet banking”.

For the “**Empathy**” dimension:

“The website is providing same service to all customers i.e “impersonal” “no customisation”

“It is not well provided electronically. It is well perceived physically because the banker wants to keep an eye on his customers and his requirements. He should be at ease when communicating with the clients.”

“This aspect works more physically and not electronically based on the types of customers which are elite and unique.”

“This dimension can happen face-to-face interaction. “

“No individual caring electronically”

“Till now no the bank is not doing so.”

“The bank makes customer analysis to send customers the offers that are more relevant to them for caring.”

“A page for each client called “My Home” it includes summary of activities and balances on all active accounts also the client can edit the information concerning transactions. Also, it allows what you would like to do Likewise it enables the client to hide accounts that he does not want to have displayed on My Home screen”.

#### **Nvivo Public Banks**

Moreover, the researcher can also declare the word frequency related to each variable in the public banks. See Appendix 1.

#### **Usability**

In this sector, the interviewees stated that “**Usability**” dimension is well provided in terms of search, design and navigation as the customers do not complaint about the website.

“This is ok with customers about checking their balances as well as the site design are understandable and useful. Also,

it has simple and easy search method with different languages Arabic and English. “

“The design and navigation is good so far and we have no complaints till now.

#### **Reliability**

The bank decision makers agree that the “**Reliability**” of information is available and accurate as long as checking balances only.

“The information is accurate and reliable as the customers check their accounts with no any problems. However, the data is taking time to be updated but this is a system problem that faces banks in Egypt.”

“The reliability and availability of information are well provided which makes me built trust on the site. This is very useful to me as a customer, as well as an employee.

#### **Responsiveness**

Correspondingly, the public banks agreed that “**Responsiveness**” is not well provided the information are not updated and are delayed. It works better through physically and phones. However, this dimension is highly important criterion.

“The website is only for checking the accounts and providing information for the bank’s products and services. Not to take any action for any help.”

“This dimension is well perceived through phone or offline not through website.

#### **Privacy**

The public bank decision makers agree that “**Privacy**” is the most important criterion as it ranked in the first order; it is well provided for most of the banks each client has its own username and password.

“The financial data are highly protected and secured because each client page is prepared on the basis of its own account number it will not be repeated or similar

such as National ID. This gives safety and high confidence to the customer because the confidences of his calculations is not rumored and sees by the client.”

“The website highly protects financial data because every customer has his own password and bank id to enter his account.”

#### **Fulfillment**

The banks stated that “**Fulfillment**” is not well provided because most of the information about the bank product and services are available but customers have to visit the banks to fulfill.

“The website has full information about the bank’s products or services but the client has to go the bank to fulfill it. Thus it is not highly provided.”

“The website doesn’t provide such dimension. The client has to call or visit the bank to ask and accomplish about the bank product and services.”

#### **Efficiency**

“**Efficiency**” is well provided because the customer to find what they want easily. This makes the customers satisfied by the e-banking. Thus, it can save cost, effort or time.

“The site is smooth and easy to deal with because it saves effort, time and cost. The important thing is not to visit the bank due to the traffic jam.”

#### **Assurance**

The decision makers are not agreed on this dimension “**Assurance**”. One stated that well provided and the other one declared that assurance is not well provided online but it works offline as customers ask the employees about something and he answered well. However, it is important to be provided as some mentioned that when the website is secured then it is confident.

“The website does not show any employee knowledge that encourages customer’s trust. It is just providing the clients balances only.”

“The website has provided important information that there was wrong email sent to the clients thus it shows the bank Internet provider aware about the website so the bank sent a notice for the clients. This may inspire trust for clients. However, the interviewee thought that face-to-face interaction enables them to act with customers easier with more confidence.”

#### **Incentives and Empathy**

Finally, the two dimensions “**Incentives**” “**Empathy**” are not well provided in Egypt bank websites. Both criteria can be more effective in the physical branch.

#### **Incentives**

“No Rewards Online”

“No, I don’t think so. Or I don’t know what is happen in fact. But if this occurred it would be a significant impact on customers such as encouraging them to use such e-service.”

#### **Empathy**

“There is no individual attention online. It may happen offline.”

“Not online but yes if physical because any complaint, the employee act and respond actively and this make customers have more trust.”

### **5. CONCLUSION**

The banking industry is changing rapidly due to technology. Banks are forced to improve and develop with the aim of building bigger market share, improving customers’ perceptions of service quality and achieving customer loyalty. The absence of human-to-human interaction with human-to- machine

interaction has serious implications for dimensions to be used when evaluating e-service quality for purposes of customer satisfaction and loyalty. The main objective of this study was to examine the perspective of the Internet banking service quality through interviewing the decision maker representative in order to get the broader picture. Thus, an understanding of the dimensions and relative importance of the Internet banking service quality is of crucial importance to banks. Also, service quality has become a key driving force in enhancing competitive advantages. If online providers understand what dimensions customers utilize to judge quality and form their satisfaction, they will then be in a favorable position to monitor and improve company performance.

Generally, this study discovered that whether private or public banks, most of the bank’s customers are well educated, in the age group between 35 and 50 years old, and they are technology oriented. Also, all bank’s websites provide clients with a convenient, time saving and a low cost service due to the traffic jam, searching for parking and waiting in long queue. All interviewees agree that Internet banking is the future because it is very beneficial on a large scale for corporate firms along with individuals and made banking at a fingertip literally and it is very much needed to most of the customers as it makes life easier for the bank and the customer. Also, they think that Internet banking even more important during the country’s uncertainty; where most of the customers may shift to the online services in order to avoid any danger and it will minimise employee’s work load thus banks

should increase the awareness about these services to support the services to be existed after few years.

Although Internet banking has a great potential, it will dominate the banking industry in Egypt due to the conservative type customers. This is mainly because of the Egyptian culture nature and the high number of illiterate people. Hence, banks have to change their strategies to contact the customers through their email. Moreover, all interviewees approved that Privacy dimension is the first and top priority in the banks.

The importance of the findings for the bank decision-makers processes is obvious. For private banks, the interviewees are satisfied; as the website provides most of the dimensions. However banks should improve some dimensions as they seek to improve customer satisfaction levels, in their effort to increase loyalty, retention rates and attract new customers. On the other hand for public banks, they are not highly satisfied because both banks websites are just informative.

From these conclusions, Bank managers should focus on high quality services, and improve service quality effectively. Also, these findings reinforce the need for banks managers to place an emphasis on the nine dimensions of service quality. Most of the banks should improve the Responsiveness dimension in order to avoid any delays in response and fulfillment dimension to enable all products and service to be fulfilled electronically. Also the bank should provide incentives and empathy online to meet encourage customers to use the website by setting rewards or some offers with easy navigation.

In this sense, the service quality dimensions identified may help firms identify strengths and weaknesses of their online services. Management can also devote valuable corporate resources to enhance performance of salient service quality attributes identified by this study.

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