

## **Impact of digitization on the banking sector-A case study of Riyad Bank**

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### **Declaration**

This Research work is a combined effort and work of Dr. Puja Sunil Pawar and Ms. Maha Al-Raddadi under the group Research work in Economics Department in college of Business Administration, Princess Nourah BintAbdulrahman University, Riyadh, KSA

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## ABSTRACT

Digitization is the conversion of data into a digital format with the adoption of technology.

Adoption of digitization is very important for the banking sector. By embracing digitization, banks can provide enhanced customer services. This provides convenience to customers and helps in saving time.

**The importance and Impact of digitization in Banking Sector needs attention so as to improve the banking sector services and satisfaction for its customers and thus overall improvement in the banking sector**

**Riyad Bank is one of the oldest and reputed bank with large number of customers in the Kingdom of Saudi Arabia Therefore, we consider the case of Digitization in Riyad of digitization on bank under our analysis. It is capable to represent the overall impact the banking sector inKSA**

This study aims primarily to clarify the complementary relationship between " Quality of interbank digital services" and Customer Services and how to attract them and Customer Satisfaction with Bank Services.

**respondents were Survey and questionnaire method is used to obtain data. More than ١٠٠ met for theirfeedback on digitization services of the bank. Respondents were also employees of the bank and both new and old customers**

**Keywords: Digitization, impact, technology, survey questionnaire**

## 1. INTRODUCTION

### Introduction ١,١

Digitization is the process of converting data into digital format. Digitization means the adoption of technology. Digitization is not an option for the banking industry, rather it is inevitable because every industry is being digitized and banking sector is no exception.

By embracing digitization, banks can provide enhanced customer services. This provides convenience to customers and helps in saving time. Digitization reduces human error and thus builds customer loyalty.

Today, people have round-the-clock access to banks due to online banking. Managing large amounts of cash has also become easier. Digitization has also benefitted customers by facilitating cashless transactions. Customers need not store cash anymore and can make transactions at any place and time

The importance of banks in economic activity is one of the main pillars of the national economy, where commercial banks play an important role in facilitating economic transactions and financial transactions. Commercial banks play an important and prominent role in financing both private and public investment operations. In addition to its acceptance of private and public sector deposits and its direct contribution to the purchase of shares and shares in local companies, issuing the lists of founders of new industrial companies and participating in the purchase of certificates of deposit, bonds and locally issued loans, commercial banks play their primary role in financing investment operations through the national economy. Credit facilities and bank loans for all sectors operating in the country.

Banking institutions in Saudi Arabia have begun to invest heavily in the latest IT solutions to facilitate services to their customers and reduce the cost of their labor. Smart banking has become an important sector that generates returns year by year.

In view of the importance of the role played by the banking competition in the development and activation of the banking sector in the Kingdom, we wanted to shed light on this search for the status of competition between Saudi banks with respect to digitization, especially, Riyadh Bank.

## 1.2 Objectives of the study:

This study aims primarily to clarify the complementary relationship between " Quality of interbank digital services" and Customer Services and how to attract them and Customer Satisfaction with Bank Services.

It also seeks to achieve the following objectives:

\* To define the concept of digitization and its importance in the banking sector

\* Understand the importance of quality services to customers

Analysis of the quality of digitization using banknotes\*

\* To make recommendations in this regard to the relevant authorities.

## 1.3 Hypothesis of the Study states that-

1. There is a significant statistical impact on the level of the importance of the total marketing of digital banking services.
2. There is a significant statistical impact at the level of importance to the benefits of customers from the use of banking digitization.
3. There is a significant statistical impact on the level of importance of improvement in the marketing of digital banking services.

The importance of this study stems from the fact that it aims at shedding light on how to exploit the science of the quality of digitization in the marketing of banking services, which constitute the backbone of commercial banks in a highly volatile competitive environment that changes from time to time.

## 2. REVIEW OF EMPIRICAL LITERATURE

### 2.1 of literature Review

The banking sector is one of the most stringent and quality economic sectors in terms of accuracy of work and output, which is aimed at the new vision in terms of focus on quality in general, and banks will not find it difficult to shift to the new national plan that will be reflected on the business sector.

Recent studies by PricewaterhouseCoopers (PwC) and Ernst & Young indicate that customers in the Middle East and North Africa region prefer to deal with banks that offer digital banking services. In addition, the digital banking sector faces a number of challenges, including: examining the impact of technology integration in banking operations, setting up regulations to protect banking across machines, balancing customer satisfaction on the one hand and maintaining honesty and accuracy in relation to. On the other hand

In general, the past two centuries witnessed big waves of development and revolutions among all sectors including the technology, social, political and economic. Within the economic sector, the banking industry stands out among many industries and activities due to their effective role in accomplishing the economic desired growth rate and for its commitment in progressing economic improvement. Since the technology revolution impacted everything from the individual lifestyle, up to the work techniques; the banking industry was not isolated from its impact. Therefore, the banks adopted new strategies to utilize the new technology trend in a way that bring customer and reduce the operation costs to the minimum (Al-Jabri & Sohail, 2012)

Consequently, the digitization evolution affected the methods used by banks in delivering services, to be more innovative and convince to customers (Al- Husem&Sadi 2015). According to Al Ajmi (2010) m, the banking services go through many development phases in order to shift from the traditional banking activates to be fully digitized banking.

As a result, technology revolution has urged banks to resort easy techniques that do not require a lot of effort and time to be executed by customers (Awan, 2016). For that reason, but by moving banks rapidly to be more electronic than traditional in their services, the banks invested huge amounts in their infrastructure and technology to be more innovation in the provision of services and expanded customer service (Saleem & Rashid, 2011).

A recent development to saving money may be the development from calming vendors giving web-based organization towards oneself innovation. This transforms the connection between banks and their customers starting with bank client confronting disappointments and outrage on staff, and calls focus agents towards robotized internet-based channels, and in the same time administering most of the services of the client. This promotes more potential funds and efficiencies same time hypothetically moving forward customer service, with giving the bank staff opportunity ready on concentrate on higher value and additional customer specific inquiries ( beaglieri&Karmarker, 2014)

A developing technique for paying through electronic channels that originated under punctual utilization by 2002 might have been the utilization of payroll cards that functioned a whole lot a credit or debit card: a bank might post an employee's paycheck of the account, frequently issued by visa or Mastercard. Towards late 2003, exactly 14 million families utilized such instruments, essentially making them "unbanked" as those acts went on a chance to be known ("global financial development report, 2014)

As that amount and kind of electronic fiscal transactions increased, that more weight there might have been to acknowledge electronic marks. Previously routes legitimately worthy as tying and as secure concerning illustration marks on paper. Therefore, the central board advocated implies to decrease that number for paper checks due to their huge expense. In October 2003, Congress passed and the president marked under law, the check transaction act which went under impact in October 2004 (Wilson, 2015)

This enactment constructed it lawful for banks will clear checks electronically by sanctioning advanced images along the lines. Hosting should exchange paper checks go of the banks for inception or aggravate banks secure agreement with other banks and association on do that fill in.

The national reserve, hosting noted the quick build to electronic transactions, which reach fivefold in the past decades should be precise. moreover, it is expected that in 2004 these might surpass the number from claiming paper checks and therefore needed on keep on going pressing for that only the tip of iceberg efficiency of the electronic transactions(Wilson, 2015)

The industry is changing as new internet- based entrants identify niches and supply extraordinary services, bringing new esteem should customer same time old fashioned accepted benefits of the business models have disappeared (Christensen, 2003) this is result for the following reasons:

1. The web helps expense reconfiguration as it facilitates expense control and methodology reconfiguration by fill in elimination worth of effort shifting fill in avoidance, and worth of effort sharing, web-centric contract frameworks lesson worker preparing costs, would simpler with navigate, and furnish simpler get will create database over customary frameworks.
2. The internet facilitates self-service: universal web access coupled with ongoing technologies gives shoppers for a chance to entry or overhaul majority of the data towards at whatever time and from anyplace. This diminishes the interest of client administration divisions. Consumers could also perform additional perplexing interactions for example ascertaining credit payoffs and deciding upon what amount of extra installment to vital will be required should qualify to contract protection conciliated.
3. The internet can enhance revenue by permitting administration suppliers to cross sell refinance and seek after other revenue generating chances.
4. Asset/ Risk oversight economy will be enhanced through web connectivity as information can a chance to be communicated seen and imparted once an immediate ongoing support (Jiju Antony, 2006)



As confirmed by Mahdi (2011) among the service sectors the Saudi banks come as first when it comes to utilize technology in offering their banking services to their customers. Therefore, the entering of the internet to Saudi Arabia coincide with the Saudi banks decision to co-exist on the internet and offer their banking services remotely. Hence, they are progressively considering the banks internet website as second deliver channel for their services. In view of that the banking sector went to invest in the latest technology to deliver an innovation banking service. Thus, the Saudi banks come at the top of the developed banks as they use the technology to serve their customer virtually instead of the need to their physical preset at branches (Mahdi, 2011).

## 2.1 Advantages of digitization in Banking sector

Digitization in managing an accounting industry intends settling on banking smooth birch and consistent for those clients. The technology used need that possibility to the table security reductions to its clients also make it helpful for clients who in with consolidating different capacities onto you quit offering on that one handheld gadget. Making transactions cashless brings about controlling bootleg cash and thus makes everyone transaction responsible.

In the late years there may be an outstanding drop in utilization of extensions and enormous expansion over advanced saving money utilization. Most of the private banks also general population segment banks are centered looking into putting forth new technology-based benefits in its clients like portable banking applications and e-wallets. The greatest focal point from claiming advanced channeling on saving money will be its capacity of providing new propositions an client's particular business models by dissecting this saving money example which investigates the client worth of the greatest.

Nowadays, creating a digitization environment is now the priority of all banks and they need to devote a considerable budget for a full transformation to a completely digitized circle of consumers. Today banks have the capacity should identify test those putting forth will an expensive degree. They could make an advertising the lifestyle a client needs should see it on the gadget that he needs should see it and at once that's, most advantages to him. In addition, it should be conceivable best in view mobile analytics and advanced interface would meet.

This permit banks in enhancing the correspondence with the client to such a degree that they have the table a secondary level of customization. Thereabouts advanced will barely confined of the front-end interface.

Advanced innovation might have been the primary carriable to expanding unemployment in the state funded private parts for southern European nations, for example previously Greece the development of he advanced television systems together for those mastery from claiming advanced innovations. On the whole saving money services is a prone on prompt a expand of unemployment not main in the conventional public-service TV organizations as well as in the banking sector. A considerable measure for people will make losing their employments because of that digitization from claiming banking television and telecommunication association in global free market economics.

Much appreciated to digitization organizations over commercial enterprises would race with move keeping “analog” methodologies with customers products services and working models should an always-om real time and data rich commercial center. Some authority is redesigning their abilities and operating models with make full point of advanced innovations will keep step for those connected purchasers and draw inability. Other are making qualitatively new benefits of the business models and enormous worth around disruptive advanced chances. Over finishing so these organizations secure not just begun and Johnson had preceded relevance as well as unrivaled returns (Baglieri&Karmarkar , 2014)

## 2.2 Digitization Philosophy

The digitization can be described as the innovation through utilization technology information (Nambisan & Lyytinen & Majchrzak & Son, 2017). The digitization revolution has opened the door for new level of products and services which are totally different from the old ones in nature and structure (Miranda & Young & yetgin, 2016) the past 20 years shows that the digitization become a fundamental in all life style and work environment and had big impact on the banking industry. Accordingly, the companies and baks utilized the digitization development in the interaction methods with customers (Cunningham& Young & Gerlanch, 2008).

In general all the banking organizations new and old are maintaining their place in market by adopting new technologies changes and experiences ( Kashmiri& Semenov &Ostrovskaya& Kokuytseva,2016).

Digitization has influenced almost each industry during as far back as a decade. The phenomenal pace in which technologies spread and infiltrate society , distinctive life, and organization particularly puts experienced organization at risk inside the car industry, digitization acquires new players to the table ( Cortada,2006) Thus , this shifts the mechanical transformation keep tabs starting with physical should IT empowers clients should get their involving seeing for mobility and makes them at any point all the more profitable hotspot for data. Moreover, digitization influences the worth production methodology and emphasizes the vitality of multilateral cross company cooperation's

Digitization is a process of converting anything into digits (one and xeros) make it digital. The thing here could be analog data, logs, description about some things. Let's say, equipment, its location, attributes etc. so anything description of any information available in papers hard copies etc. Concerting them into digital format is called digitization. Converting hard copies, at the end of this process we build a huge collection of digital resources. These resources could be built by converting existing analog resources in the enterprise into digital format and as much as possible encouraging thereafter creation of new data by the enterprise in the digital format itself (Jens Froslev Christensen, 2003).

So, we have built huge collection of digital resources. How are we going to manage this huge amount of data and more importantly what we are going to do with this? the answer is "Adopt Digitalization".

With recent advancements in IT technologies, there are tools and techniques now available to manage and process huge amount of data , the digital resources that we built through digitalization process. With the right techniques and vision in place it is possible to extract useful information from those digital resources. This has opened new opportunities to expand the existing applications/ process to make use of the huge amount of digital resources and thereby improve their efficiency.

There are proofs that business were able to use such technologies to mine the digital information they have, could change the way existing processes work and finally could improve the business. In a sense they evolved their business model by using recent advancements in IT, it became a general strategy now for any industry. This is what we can call digitization. More formally, digitization is the strategy of adopting recent technologies in IT to make the most of the digital resources available in the enterprise (Weiss & Schade & Riedl & Matt. 2016)

Policies need to aim for overcoming the dormancy from claiming obliged regulates re-organization by encouraging that improvement of the foundation. Also, nonexclusive administration layer and to reinforce and will aid the digitization for data streams and interchanges forms within the parts or most of the data social order. Such advancement methodologies will incorporate the greater part stakeholders about the data culture like public sector private segment and general society and a pleasant dream needs on aide the specific social order looking into its exceptional way under the umbrella of the digitization (Anshuman Khare, 2016).

### 2.3 Effects

How a single technological innovation, the introduction of the image transforming for cheques prompted uniquely separate transforms into the structure from claiming occupations to two divisions of a substantial bank. In the store transforming department image transforming prompted the substitution for PCs to high roller instructed labor I am accomplishing center errands and over more excellent specialization in the occupations that remained raising the plausibility of outsourcing and progressions in the area about certain parts of the operation. For an additional section which are the exceptions processing image transforming prompted the coordination from claiming tacks for a cohort increments in the request for specific skills and with an in general 28 percent decrease on work information.

Accordingly, managing an accounting industry recommended that digitization and the internet are evolving the locus and association of bank services. They also propose that those fundamental beneficiaries are less adverse will make the customers not those banks (Koo &Wati& Chung, 2013)

By 2000-2002 , it required turned into very clear should banking executions, industry watchers legislature regulators and economists that the electronic conveyance for services by banks might have been much less exorbitant over were prior techniques and they also knew that extra electronic benefits were both expense successful and magnetic will clients ( Ivan, 2012) issues concerning those internet cashless checks thus focused on the key issue for how best with aggravate electronic installments. Clients now caught on the points of interest of the digitization also. For example, concerning illustration bank fees rose to taking care of payroll checks, organizations started reestablishing their emphasis that workers accept immediate store from claiming payroll checks.

The banking industry served as the vital financial foundations of the country for almost around half of the twentieth century (Ivan, 2012). The same time that pre-eminent position is no doubt tested by different budgetary commercial enterprises in the new millennium the managing an accounting industry need to stay one of most essential inside the economy.

It is also the one business that the majority dramatically illustrates the thing that is a developing set of hones and example in the benefit parts of a profoundly digitized economy of the future (Kliedere&Jurgelane, 2016). The experience for this industry shows us in any event three lessons. In a great part of claiming its worth of effort lends itself will computerization. Since its inventory will be ure information or just coins and all its paper ephemera lend itself to digitization. To different commercial enterprises for comparative characteristics, computerization turns into am overpowering energy with make figured with a direct result registering is quick cheap and can handle expansive volumes for transactions.

Second, once putting forth will be digitized and might pick separated a rival's offerings to recombine with the individuals generally for one's portfolio should make new products, new focused advantages, considerably new organization and commercial enterprises.

Those managing an account industry might have one of the principals in the American economy should knowledge this. That wonder alone displays inquiries regarding how those economy of the united states could develop in the following century(Cortada, 2006)

Third, the case for digitizing demonstrated thus forcing that this industry might have been capable will move from a pre-computer style for operation to particular case that we can currently bring those advanced style essentially inside vocations from claiming one era from claiming financiers( Ginsburg,2016) new budgetary results would not patent there will be no copyright in the bank benefits of the business. As a rule, therefore, an aggressive preference of the organization against the new results in that budgetary table that formed them in a short occasion.

The user of such a capable infrastructure which is incomprehensible only five years ago must make profoundly machine proficiently, by quit offering on that one can't excessively often anxiety the necessity for computer literacy over treasury operations.

Such utilization of propelled innovation will be a long way starting with secret word approaches which basically tendered to themselves of the once more offices, regardless of they needed little victory previously, mechanizing them (Chiou& Shen, 2012). it additionally includes new configuration ideas exemplified by image transforming systems optical disks outline automation and different propelled usage. The introduce will be as takes after it might detect locate and underwrite once business sectors trends afterward, we will addition an aggressive edge. Moreover, the globalization and increasingly demanding clients have influenced the edge from claiming saving money institutions, requiring greater amount productive operations with easier costs (Aswan,2016). Forcing consolidation off-shoring or other scoring likewise practically banks now work in different continents and outsourcing in a request to decrease expenses and with expanding revenues.



## 2.4 Customer satisfaction

Service is a process that fulfills the client desire the administration supplier should elucidate the thing that the client desire may be in front of beginning those methodology ( Akinyosoye&Gbadeyan, 2011) Furthermore at the same time should affirm the client imperative et cetera start finding the ideal outline result procedure to the client , clinched alongside true service. However, the transform begins in the recent client imperatives would elucidate and by the end the administration suppliers adjusts the outline answer for each the best fulfillment of the client the result frequently turns out to be a tradeoff between those client and the administration supplier.

What's needed is the pervasive selection about digital, real time and networked technologies products and administration through interconnectedness frameworks and gadgets ( Kliederer& Jurgelane,2016). In the securities sector digitization concentrates on delivering ways abilities for example self-service ongoing information and analytics enormous data enabled learning and streamlined special case administration crosswise over those magic ranges from claiming input processing output also framework. The aggregate and planned configuration of advanced techniques over endeavor will define that organization's innovative standpoint.

Valid digitization is significantly more than negligible automation as its must incorporate better approaches of acquiring processing and acting on incomprehensible measures for information (Kashirin& Semenov &Ostrovskaya&Kokuytseva, 2016). Securities services showcase vendors furthermore utilities require entry should bigger information sets on assistance uncover new advertise opportunities client's trends and item possibilities. Administration bodies on the other side oblige transparency and have information that is receptive and streamlined crosswise over the endeavor. This previously turns makes a requirement for solid analytics to territories about example matching and relationship and information mining should uncover market and client needs.

The organization need to have a guarantee in place about digitization organization must have an advanced interface include input outputs that could associate with outside stakeholders that counting clients administrative bodies, vendors, outer administration suppliers and the Markey with negligible humanity's backing (Ivan, 2012). Customers could power this organization towards oneself stage will get different digitized items and administration offerings and the sum of these competencies must be constructed once a resilient, scalable and dependable advanced base. Making such an environment obliges ventures over foundational innovation such as cloud building design also single source information repositories will backing these advanced offerings. Thus adoption of electronic banking functions and representative access and comfort and security, privacy and content and design spped fees charged for services has a significant positive impact on the customer satisfaction loyalty and reputation (Saleem & Rashid, 2011).

## 2.5 Competitive Advantages

The emergence of these development and global changes led to the creation of great competition challenges between banks. The electronic application increased in a large and consistent manner with the competition between banks and the speed of development of electronic software and communication networks. This development of banking services and keeping pace with the successive electronic development in the banking industry. And attention to the quality of services and customer satisfaction is one of the main approaches to increase and improve the competitiveness of banks which contributes to increase the bank's competitive ability to face the threats posed by developments economic and electronic (Omari, 2012). In addition, e-banking services contribute to the competitive advantage by increasing the efficiency and effectiveness of the service offered.



Many researchers have tried to shed light on the impact of these different electronic banking services on achieving competitive advantage. The study conducted by Sohail and AL-Jabri (2014) on the role of marketing innovation and technology in achieving the competitive advantage of banks from the point of view of clients suggests that banks that follow the technological and marketing innovation in a good way achieve a competitive advantage in general and the study indicates that there is satisfaction by customers when banks seek to spread ATMs and thus reduce waiting time for the customer. In addition, the electronic banking services play vital role in enhancing the competitive advantage in the banking sector as it was found that using the latest electronic means of practicing banking and increasing the customer's link to the bank through electronic business enhances the competitive position of the bank. Therefore, banks can win the game of competition and monopoly of the land through the digitization.

## 2.6 Services

Imaging software and hardware tolerance photography for checks and other vouchers evolving the pictures under an advanced stream will be put away in and retrieved starting with optical plates (iris imaging software may improve accuracy of centration with toriciols, 2009). These advanced pictures might be transmitted down fiber-optic cables for transforming and switched around the clearing framework through those robotized clearinghouses worked by the central bank board.

The volume will guarantee that the measure from claiming reserve funds may be colossal. Security Pacific a standout amongst the top banana live check cleaners over America procedures a normal for 6 million checks a night. It estimates that it might save between \$25 million also \$50 billion a quite a while through such arrangement. Or more that that measure by procuring fees through transforming benefit of the business starting with more modest banks that must include the table their customers a state of the craft administration however doesn't have the volume for benefits of the business should defend that investment.

In a confrontation with the risk of overstating the body of evidence considering a great part of the thing that banks do and notwithstanding do will be the same they settle on loans hold deposit and cash books. The distinction may be that they use workstations thus extensively that on the run a bank without them will be presently impossible what are we reason starting such a statement? concerning illustration may be happening in the manufacturing and retail industries the managing an accounting industry may be still on the right on time phases from claiming changes should a far obscure standard ( walker, 2017). We view glimpses for it however that is everyone in minute.

The main robust certainty will be that this business depends on vigorously notwithstanding once machines and telecommunications and that we might sensibly hope its practice culture and offering on proceeding with evolving about whether. In light of the present to a letting phase the best any history specialist will comment that bankers bring not been modest over utilizing engineering organization. They were begun and Johnson had proceeded to stress extensively around completing along these lines and encountered new manifestations of rival and transforms unanswered a half century sooner (Ballieri&Karmarkar, 2014).

Informatization is the spine technique through which saving money organization has innovated their putting forth and have moved starting with customary saving money should nontraditional channels (Yan & Shan & Yan &Gao Tian. 2013). In digitization need permitted saving money benefits with being separated starting with conventional physical extension areas. Next an ever-increasing pattern towards those concentrate on information and most of the data empowers banks utilize measurable programming analyses to tailor their offerings to distinctive segments enhancing administration execution and lessening expenses.

## 2.7 Putting rapid process digitization into action

Fast procedure digitization starts with imagining an unrivaled voyage from the client perspective about perspective (Dame, 2016). With those cooperation housed together done a committed physical space the objective may be should throw aside convectional notions about attempting and use client information and brainpower with reimagining the richest the vast majority productive and captivating method for fulfilling client necessities and desires. Essential prototypes are at that point ushered under ongoing client testing the place ideas would validate refined and released clinched alongside consistent cycles until they help agreed upon execution thresholds.

Digitization groups quickly and continually figures out and test their new learning all around the improvements cycle (Lampert & Vaughan, 2009). Preceding they nail down the last design they audit and minimize business investment risk and ensure that advanced activities convey most extreme client quality.

## 2.8 Scaling up

New abilities should be scaled fast to v=covert at magic client journeys. A few organization do this methodology by the transform. the offering can be quit on that one bank to the instance organics its rapid digitization groups by theme one meets expectations looking into at journeys and items identified with credit in turn meets expectations around investment products. Thus, different organization take a journey methodology. In any case of the approach organization searching should bring advanced activities with scale must establish clear norms and execution measurement. In this way the thing that may be scholarly is assembled and communicated reliably so as with ceaselessly enhance system. Scaling also obliges the human resources capacity should make actively involved since most associations will face holes. On basic advanced ability sets a significant number of which are of high interest.

The entire idea of hyper personalization will be the main setting off with getting conveyed through advanced. For example, based on the provide information about customer it bring situated for client majority of the data from as much transaction self-destructive considerations and conduct the classifications will be known to which group income profile and so forth utilizing analytics could aid the pertinent offerings in the manifestation of a preapproved credit. Moreover, the client profile and depend on the activities through online networking. By having the ability with figure out that the client will be arranging with a try on get away. Thereabouts in a client is sharp once a universal get-away and he is asking for travel suggestions ahead online networking and going by going sites the doors is open to connect with him in offer him the pre-endorsed credit the table.

### 3. METHODOLOGY AND DATA

#### 3.1 Population of the Study:

The population of the study represented in people live in Saudi Arabia, but due to the large community in the light of the restrictions of time and effort, the study will be limited on the residences of "Riyadh" city, because it is the capital and the most population in the country.

#### 3.2 Sample of the study:

The study population consisted of clients of the commercial bank in the kingdom of Saudi Arabia. A random sample of 100 persons was chosen as a study population. Table (1) shows the characteristics of table 1

Distribution of clients of bank under study by the personal variables

Variable	Categories of variables	Percentage
	Male	58%
	Female	42%
	18-24 years	28%
	25-29 years	17%
	30-39 years	35%
	More than 40 years	20%

#### 3.3 Research Design:

This study is based on the descriptive approach, through a review of the administrative literature of total quality management, and marketing of banking services , and by returning to previous related to the subject of the study , in addition to the use of filed approach to try test hypotheses of the study , and accessing to their results .

**3.4 The data and information** gathered by the questionnaire analysis will be presented in this chapter .Moreover the finding will be discussed through this chapter. The questionnaire data and information suppose to answer the Following:

1. Is there a positive relationship between achieving a competitive advantage to the banks and the digitization of the banking services and product the bank officer?
2. Is there a positive relationship between customer satisfaction and digitization of the banking services and product the bank offer?

The research utilized a descriptive analysis and the percentage of customer's responses of different segments to each questionnaire statement in order to examine the customer satisfaction by the digitization of the banking services and product that Riyadh bank offer. In addition to measure the identify the relationship between achieving a competitive advantage to Riyadh Bank over the other banks through the digitization of the banking services and product its offer.

### **3.5 Testing Research Questions**

Based on the questionnaire question nature and the expected range the questions will be splatted into two parts which the first part are related to the questions with defined group of answers and the second part related to the questions with the undefined open answers.

#### **i. First part of testing Questions**

The study questions can be divided into the following categories, Participant data, participant satisfaction and the new products or services or problems. First part covers the two categories of participant data and participants satisfaction. The participant customer answers to each question in the questionnaire are computed and converted into percentage. The frequency of each answer for all the first question are as following.

The first question in the survey is related to the participant gender. The first graph shows the percentage of participant gender in Riyadh online which is 67% female and 50 % male. The second graph show the percentage of participant gender in the mobile application which are 67% female and 26% male. The third graph shows the percentage of participant gender in ATM which is 10% female and 26 % male.

The Second question in the survey is related to the participant age. The first graph show the percentage of participant age in Riyadh Online which are 55% of the age from 30 to 39, 52% for over 40 while the age 18 to 24 and from 25 to 29 are very low sample size. The second graph show the percentage of participant age in mobile application which are 19% for age from 30 to 39. 48% for the over 40 29% for age 25 to 29 while the age from 18 to 24 is very low sample size. the third show the percentage of participant age in ATM which are -16% for the age from 30 to 39 , 15% for the over 40 while the age from 18 to 24 and from 25 to 29 are very low sample size.

The third question in the survey is related to the participant segment. The first graph show the percentage of participant segment in the Riyadh online which ae 57% from mas segment 49% from Silver segment and 48% from Golden segment. The second graph show the percentage of participant segment in Mobile application which are 32% from mass segment 17% from silver segment while for Golden segment the sample size is very low. The third graph shows the percentage of participant segment in ATM which are 13% from Mass segment -7% from silver segment and 11% from Goldeb segment.

The fourth question is reflected to the separate input for each channel.

The fifth question in the survey is related to the participant satisfaction. The first graph show the percentage of participant satisfaction ib Riyadh online which is 55% is very satisfied, 27% is satisfied, 12% is somewhat satisfied , 5% is unsatisfied. The Second graph show the percentage of participant satisfaction in the mobile application. Which are 46% is very satisfied, 30% is satisfied, 12% is somewhat satisfied, 7% is unsatisfied and 5% is very unsatisfied. The third graph show the percentage of participant satisfaction in ATM which are 38% is very satisfied, 29% is satisfied, 18% is somewhat satisfied, 8% is unsatisfied and 8% is very unsatisfied.

The sixth question in the survey is related to whatever the participant fined in Riyadh Bank Electronic services easy to use or not. The first graph show the percentage about if the participant see if Riyadh online is easy to use or not which are 75% think it is easy to use and 24% think it is not easy to use. the second graph show the percentage about if the participant sees if the mobile application is easy to use or not which are 67% think it is easy to use and 24% think it is not easy to use. The third graph show thw percentage about if the participant see if the ATM is easy or not which are 54% think it is easy to use and 7% think it is easy to use.

The seventh question in the survey is related to Riyadh Bank Electronic services availability. The first graph show the percentage about if the participant see if Riyadh online is available or not which are 68% available. The second graph show the percentage about if the participant see if mobile application or not which are 57% available. The third graph show the percentage about if the participant see if ATM is available or not which are 50% available.

The eighth question in the survey is related to the area need to be changed in order to develop Riyadh Bank electronic services. The first graph shows the percentage about the areas in Riyadh Online which are government payment by 16% Account are Cards by 11% and internet / Local transfer by 11%. The second graph shows the percentage about the areas in mobile application which are internet / local transfer by 13% and bill payment by 12%. The third graph shows the percentage about the areas in ATM which are Cash deposit by 27% government by 27 and internet / local transfer by 25%.



### 3.2.2 Second part of testing questions

The second part covers the last category participant input which is new products or service or problems. the answer for the remaining two questions is as follows:

The ninth question in the survey is related to the problem the participant is facing in Riyadh bank electronic services and products. The problem the participants is facing in Riyadh online is as following:

- The site opens with difficulty and sometimes the session end without notifying the customer although the internet speed is high.
- The technical support response is very slow.
- The system is generally very slow.
- The traffic records do not save the civil record number for the customer as what is happening in the payment in order to retrieve it in an easy method.
- Technical problems and the lack to some service like charitable donations.
- The delay in the query or in the opening and closing of the models.

The problem in the participant is facing in mobile application is as follows:

- Difficulty in selection due to small typing and icon.
- The application hangs and does not respond even with the constantly updating.
- The service is very limited.
- The guide for reaching service is not clear.
- The exchange rate in application is not the actual exchange rate during transfer.
- There are so many services in SADAD account that are not implemented even if all the required steps are followed.
- Lack of support to application technical issues.

The problem the participant is facing in ATM Machine is as following:

- ATM machine are slow
- The ATM machines screens are small to serve cars.
- The ATM machines are out of service most of the time.
- The ATM machines do not provide all the money categories as the other banks do.

The tenth question in the survey is related to the new services and products the participant would like to add to Riyadh bank Electronic services and products. The new services and products the participants would like to add to Riyadh bank services and product are as following:

- Link Riyadh bank channels to all government system.
- Add more securities layers.
- Enhance the personal control over the channels to be like it was designed and customized especially to each customer
- Full management platform all the bank services products and activities that eliminate the need to branch as much as possible.
- Responsiveness that enable customer to open the channel regardless or the device or the operating system
- Link Riyadh bank with other banks which enable the customer to manage their busiess and portfolio through Riyadh bank channels.
- Build a smart analysis that act like special relationship manager to each customer by studying it is behavior over the channels and offer him/ her the most suitable service and product with competitive prices and conditions or as a bundle offer.
- Add balance to the cards.
- Enable transfer the charities.

## 4. RESULTS AND DISCUSSION

### 4.1 Introduction

The last chapter in this study is supposed to provide a full overview of the study and summarizing its results. Furthermore, it will present new recommendations for Riyadh bank and for the further research in this field.

### 4.2 Overview of the study and summary of its findings

The adaptation of the digitization in banking industry and in particular in Riyadh bank had show big impact in creating huge amount of advantages and benefits for both the customers and the bank. One of the most important advantages and benefits for digitization in Riyadh bank is to create competitive advantage over their competitors and achieve the customer satisfaction. This study examines the major factors that lead to these achievements.

Participants in this study were all Riyadh bank customers. The total participants study is 1618 while the breakdown for the participants is as following: 658 for Riyadh online, 767 for the ATM and 193 for mobile application. The participants age was classified for four categories which are 18 to 24 , from 25 to 29, from 30 to 39 and for the over 40 years. The participants region was classified for three categories which are : Western region, Central region and Eastern region. The participants gender was classified for two categories which are male and female. The participants segments were classified for three categories which are normal, silver and Golden.

The study utilized the two types of research which are quantitative and qualitative methods in order to perform the test of the study. Therefore, the survey is conduct to measure the customer satisfaction with the digitization direction of Riyadh Bank and also to measure the bank ability to create a competitive advantage through this direction. The study contains 10 various questions that cover both the quantitative and the qualitative approaches and most of the required dimensions for the research study. Therefore, within 10 questions there are 3 questions answer by either yes or no

There are 5 questions answer by list of defined options to choose one of them and there are 2 questions give the customer the opportunity to give their opinion or feedback regarding any new service or product they would like to add it to current Riyadh bank Electronic services and products or any problem they are facing in the current Riyadh bank electronic services and products. The study questions can be divided into of the categories: participant data, participants satisfaction and new product or services or problems.

Basically, the study findings reflected a positive relationship between the digitation and the customer satisfaction and creating a competitive advantage in the banking industry. Moreover, the study results showed clearly that Riyadh bank achieved the customer satisfaction and create a competitive advantage through digitization approaches can be conducted by Riyadh bank in order to achieve more customer satisfaction and sustain the competitive advantage.

#### **4.3 Discussion of results**

The relationship between the competitive advantage and the different types of the electronic banking services in Riyadh Bank Has tested through Riyadh Online, ATMs , and Mobile applications. In addition to examining the impact according to demographic characteristics like age group, segment and the result cab be summarized as follows. First there is a positive relationship between the bank's offering of electronic banking services and the competitive advantage of banks from the point of view of customer. This result is consistent with several studies such as Abbad study in the Jordanian society. The reason for this relationship is the technological development of the world making it easy to conduct banking operations efficiently and easily making the customer look for the best electronic banking services and thus distinguish one bank from another.

Second, the electronic banking services provided by the bank through the websites is one of the most important services that customer prefer among other electronic banking service and this consistent with the study conducted by Chiou and Shen( 2012) , because of the importance of respondents to the effort and time provided through the use of the site in addition to the clarity and ease of execution of banking operations such as payment of government and public payments.

Third, the respondents agreed according to their demographic characteristic such as the age group and segment that the electronic banking services have an impact on achieving competitive advantage and that they distinguish one bank from another. This is in line with the study conducted by Akinyosoye and Gbadeyan( 2011) which emphasize that the acceptance of the respondents from younger age group is higher that other customers.

Finally the level of privacy and security is a major concern for the majority of respondents especially for users of electronic banking services through the website and applications of smart phones due to the awareness of respondents about the potential risks of penetration through the internet and communication networks and this is consistent with the study conducted by Abbad ( 2013)

On the other hand, the relationship between the customer satisfaction and the different types of the electronic banking services in Riyadh bank has been tested through: Riyadh online , ATMs and mobile application. In Addition to examining the impact according to demographic characteristic like age group, segment and the result can be summarized as follows: first, there is apposite relationship between the banks offering of electronic banking services and the customer satisfaction as the adoption of electronic banking function and electronic banking impact on the result of customer satisfaction, loyalty and reputation. Moreover and this is consistent with the study conducted by Ahmad and Al-Zu'bi( 2011) that showed that the electronic banking adoption of representative access and comfort and security , privacy and content and design and speed , charges levied on the services have had a positive impact on the satisfaction customers and loyalty and reputation.

Second, there is a need to consider the respondents personal with regards to social and demographic variables in order to identify the electronic banking services on their customers satisfaction in terms of speed, accuracy, ease of access and convenience and this is consistent with the study conducted by Shergill and Li (2005) that emphasize the impact of different characteristic of the respondents personal to their satisfaction towards the electronic banking service offered like the satisfaction of the respondents from younger age group is higher than other customers since they tend to use technology more than older customers.

## **5. CONCLUSION, LIMITATIONS AND RECOMMENDATIONS**

### **5.1 Conclusion**

The current study aims to measure the relationship between the adoption of digitization and creating competitive advantage along with customer satisfaction in Riyadh bank. In the light of previous discussion, the finding illustrates that there are a positive relationship between the adaptation of digitization in banking sector in specific in Riyadh Bank and creating competitive advantage along with accomplishing customer satisfaction.

The globalization of banking has led to the emergence of new forms of banking which contributed to the new development in information and communication technology. The digitization can bring a lot of advantage and benefits for both the customers and the banks in the banking industry. These advantages and benefits concentrate in achieving customer satisfaction and possess competitive advantage. Riyadh bank manages to achieve the customer satisfaction and create a competitive advantage through the digitization.

### **5.2 Limitations**

Due to the following limitation in the current study results of this must be interpreted with caution and further verification is recommended. These limitations include several dimensions which are human limits; location limits; objective limits ; time limits and hypothesis limits . the human limits are that this research is limited to Riyadh bank customers. The location limits is that this research is limited to the banking sector in Saudi Arabia. The objective limits is that this research is limited to observe the role of the digitization of the banking services in creating competitive advantage and customer satisfaction for Riyadh bank in the banking sector in Saudi Arabia. The time limits that this research is limited to investigate the positive relationship between creating competitive advantage and reach customer satisfaction through the digitization of the banking services.

### 5.3 Recommendations

In the light of the findings of the study there is a set of recommendations as follows:

First: recommendations for Riyadh Bank to achieve competitive advantage and customer satisfaction

1. Ensure security of the bank system
2. Build connection system and data between Riyadh bank channels and government system and other banks as well.
3. Avail the option to Customize the service and product upon customer request.
4. Full management Platform over all the bank services product and activities that eliminate the need to branch as much as possible.
5. Responsiveness that enable customer to open the channels regardless or the device or the operating system.
6. Build a Smart Analysis that act like special relationship manager to each customer by studying it is behavior over the channels and offer him/ her the most suitable service and products with competitive prices and conditions or as a bundle offer.
7. Conduct the most important electronic banking services at a lower price comparing to the service or product at branch.
8. Exploit the human capacities working in banks and their creativity and encourage them to initiate innovation and development in the banking and customer service.
9. Prepare studies and periodic research on the development of their capabilities and identify the view of customers and their satisfaction with the services provided to them and how to develop these services commensurate with their needs.
10. To achieve competitive advantage m Riyadh bank must continue to improve its electronic banking services and ensure that these services are at competitive price and easy to use to meet all requirements of the customers and follows the last development in the world of technology.



**Second: Recommendations for future studies:**

1. Conduct studies to cover all banks operating in the kingdom of Saudi Arabia.
2. Conduct studies to examine whether there is a difference between Islamic banks and commercial banks in the electronic banking services preferences.
3. Conduct studies to examine whether there is difference between men and women in the electronic banking services preferences.
4. Conduct studies to cover other variables not covered in this study like market share and regional orientation.

## REFERENCES

1. Abbad, M. M ( 2013) E-Banking in Jordan. Behavior & information technology, 32(7), 681-694 doi:10.1080/0144929X.2011.586725
2. Ahmad A.M.K & Al- Zu'bi H.A (2011) , E- banking functionality and outcomes of customer satisfaction : An Empirical investigation; international journal of Marketing Studies Vol. 3 no 1; February 2011 ; pp-50-65; ISSN 1918-719X E-ISSN 1918-7023
3. Akinyosoye O. And Gbadeyan, R (2011) Customers preference for e-banking services ; a case study of selected banks in Sierra leoneNE, Australian Journal of business and management research Vol 1 , No 4 , PP 108-116
4. Al-Husein , M &Sadi M.A ( 2015) Preference on the perception of mobile banking : Saudi Arabian perspective European online journal of natural and Social sciences 4(1) , 161-172 retrieved from <https://search.proquest.docview/1679270834?accountid=142908>
5. Al-Jabri, I & Sohail, M.S ( 2012) Mobile Banking adoption: Application of diffusion of innovation theory , Journal of electronic commerce Research , 13( 4) 379-391. Retrieved from <https://search.proquest.com/docview/1266226380?accountid=142908>
6. AlAjmi, K.H ( 2010) Participatory action research : An Exploration of electronic banking adoption in Saudi arabia ( order no 3446271) Available from proquest dissertation & Theses Global (856341523) Retrieved from <https://search.proquest.com/docview/856341523?accountid=142908>
7. Anshuman Khare, B.S (2016) Phantom Ex Machina: Digital disruption in business model transformation. Springer
8. Awan. M. A (2016) online banking: A Comparative study of Chinese and Saudi customers perceptions of service quality , journal of internet banking and commerce, 21, 1-30 retrieved from <https://search.proquest.com/docview/1853868995?accountid=142908>
9. Baglieri. E &Harmarkar , U (2014) Managing Consumer services : Factory ot Theater? Springer.
10. Cantrell, M.A ( 2011) Demystifying the research process : understanding a descriptive comparative research design. Pediatric Nursing, 37(4) , 188-9 Retrieved from <https://search.proquest.com/docview/884708375?accountid=142908>

11. Chiou, J & Shen, C ( 2012 ) . The Antecedents of online financial service adoption: the impact physical banking service on internet banking acceptance, behavior & information technology , 31(9) 859-871. doi:10.1080/0144929X.2010.549509
12. Connelly, L.M ( 2016). Cross-section survey research Medsurg Nursing 25(5) , 369-370
13. Connelly, L.M. (2011). Cronbach's Alpha. Medsurg Nursing , 20(1) 45-44, 44. Retrieved from <https://search.proquest.com/docview/851571291?accountid=142908>
14. Cottada , J.W ( 2006) The digital hand: Volume II : How computers changed the work of American Financial , telecommunications , media and entertainment industries. Oxford university press, USA.
15. Cunningham, L.F. young, C.E & Gerlach, J.H (2008) Consumer view of self-service technologies. Service industries Journal 28(6), 719-732 doi:10.1080/02642060801988522
16. Dame, J. (2016) Digitization in a Box: how south Carolina enabled public libraries to digitize local collections. Computers in Libraries, 36(7) 20-23.
17. Dhananjay, B & Chandra , S.B. (2015). The electronic banking revolution in India. Journal of Internet Banking and Commerce ,20(2), 1-14. Retrieved from <https://search.proquest.com/docview.1799378198?accountid=142908>
18. Dogotoation cab reduce investment banks operational cost by up to 25% (2016 ,September 16) retrieved April 17,2017 from <https://www.bisunessinsider.com/dogotization-can-reduce-investment-banks-operational-costs-up-to-25-2016-9>
19. Fitch Affirms Saudi Arabia at AA: outlook Stable(2015, February 27) retrieved March 12, 2017 from <http://www.reuters.com/article/idUSfit91528520150227>
20. Fitch: Strongest Saudi banks defy though operating environment ( 2016, October24) retrieved march 12,2017 from <https://fitchratings.com/site/pr/10103586>
21. Ginsburg, J.C ( 2016) berne- forbidden formalities and mass digitization. Boston University law review. 96(3) 745-775
22. Global Financial development Report. ( 2014) retrieved April 15,2017 from <https://openknowledge.worldbank.org/bitstream/handle/10986-16238/9780821399859.pdf>
23. Grinevicius, G (2010) Job satisfaction research. Nurshing Older people, 22(3)
24. Iris imaging software may improve accuracy of centration with toricOIOLs( 2009) Ocular Surgery New 27(9) 16

25. Ivan R (2012) . the promotion of banking services. Journal of electrical and electronics Engineering, 5(1), 101-104
26. Jens Froslev Christensen, P.M ( 2003) The industrial Dynamics of the new digital economy Edward Elgar Publishing.
27. Kaneko, T Mori , H, Iwata & Meguro S ( 1994) Growth stimulator for bifibacteria produced by Propionibacterium fresdenreichii and several intestinal bacteria. Journal of Dairy Science , 77(2), 393-404
28. Kashirin , A Semenov < A Ostrovskaya T (2016). The modern approach to Competencies management based on IT solutions. Journal of internet Banking &Commerce , 21(1) , 1-12
29. Klierdere, E &Jurgelene , I ( 2016) , the role of digitized services to improve international activities of banks. Research for Rural Development – International Scientific Confernece, 1261-268.
30. Klotz F ( 2016). Where digitization is failing to deliver. MIT Sloan management review,57(3) retrieved from <https://search.proquest.com/docview/1778453924?accountid=142908>
31. Koo, C Wati Y Chung,N (2013), A Atudy of mobile and internet Banking Service: Applying for IS Success Model Asia pacific Journal of Information System. Vol 23 , no 1
32. Lampert, C & Vaughan, J (2009). Success factors and strategic Planning: rebuilding an academic library digitization program. Information technology &Libraries , 28(3) 116-136
33. Leggett, K ( 2011). 9 Creative ways to enhance the customer experience. Baseline ( 108) 26-27
34. Ludwig & Johnston, J (2016). How to build a Quantitative research project. Radiologic technology, 87(6) , 713-715
35. Mahdi , M .O.S ( 2011). Trust and security of electronic banking services in Saudi Commercial banks: Saudi versus non Saudi Opinions. African Journal of Business management. 5(14) 5524-5535. doi:http://dx.doi.org/10.5897/AJBM11.682
36. Martin, P ,,Brown , M Espin-Garcia , O Cuffe, S Pringle, D Mahler , M & ...Liu,G ( 2016) Patient preference a comparison of electronic patient- completed questionnaires with paper among cancer patients. European Journal of Cancer Care. 25(2) 334-341: doi:10.1111/ecc.12318

37. Miranda, S.M. Young ,A&Yetgin, E (2016) . Are social media emancipatory or hegemonic ? societal effects of mass media digitization in the case of the sopa discourse. MIS Quarterly,40(2), 303-A32
38. Nambisan ,S , Lyytinene , K Majchrzak , A & Song , M ( 2017), digital innovation management : reinventing innovation management research in a digital worl. MIS Quarterly, 41(1) 223-238
39. Nicoletti, B ( 2016) . Lean and digitize : An Integrated approach to process improvement. Roulledge.
40. Nicoletti, B ( 2015) . Optimizing innovation with the lean and digitize innovation process. Technology innovation management review. 5(3) 29-38. Retrieved from <https://search.proquest.com/docview/1676101988?accountid-142908>
41. Noble , H & Smith , J ( 2015) . issues of validity and reliability in quantitative research. Evidence basednursing 18(2) 34. Doi: <http://dx.doi.org/10.1136/eb-2015-102054>
42. Omari, H (2012), The impact of e-banking on Achieving competitive advantage for banks in Jordan, Interdisciplinary journal of contemporary research in business, Vol. 7, No 7 PP 271-285
43. Pahnila,S&warsta, J . Online shopping viewed from a habit and value perspective. Behaviour& information technology 29(6) 621-632. Doi:10.1080/0144929X.2010.501115
44. Passy, J (2017). Embrace the digital mortgage as a competitive advantage. National Mortgage New, 41(6) 6-n/a Retrieved from <https://search.proquest.com/docview/1854866158?accountid=142908>
45. Riyadh Bank (n.d) retrieved march 12,2017 from <https://www.riyahdbank.com/en/personal-banking>
46. Riyadh bank (2010) : Company profile and SWOF analysis ( 2016) London : progressive media group. Retrieved from <https://search.proquest.com/docview/1861048642?accountid-142908>
47. Saleem, Z &Rashid,K (2011). Retionaship between customer satisfaction and mobile banking adaptation in Pakistan. International Journal of trade ,economic and finance, 2(6) 537 doi:<http://dx.doi.org/10.7763/IJTEF.2011.V2.162>

48. Saudi Arabian Monetary Authority (n.d) retrieved March 10,2017 from <http://www.sama.gov.sa/en-US/pages/default.aspx>
49. Shergill,G&Li,B (2005) Internet Banking – an empirical investigation of a trust and loyalty model for new Zealand banks . Journal of internet commerce 4(4) , 101-118
50. Sigalas, C &Economou , V.P (2013) Revisiting the concept of competitive advantage. Journal of strategy and management 6(1), 61-80
51. Soares ,M.M Jacobs , K ..Zhou, Y , Mu , H , Jiang , J & Zhang L (2012) investigation of the impact of main control room digitization on operators cognitive reliability in nuclear power plants . Work 41714-721
52. Sohail, M .S& Al-jabri. I.M (2014) Altitudes towards mobile banking: are there any differences between users and non-users? Behaviour& information technology. 33(4), 335-344 doi:10.1080/0144929X2013.763861
53. Walker , G ( 2017) . Financial Technology Law – A new beginning and a new future . international Lawyer.50(1) 137-215.
54. Weiss, A Schade, C ,Riedl,M& Matt , D (2016) . Present and future of digitization in south tyroleanSMes: Paper presented at the 1-14 retrived from <https://search.proquest.com/docview.1860981961?accountid=142908>
55. Wilson, T.C ( 2015) . the value management handbook: A resource for bank and insurance company finance and risk functions. John wiley& sons
56. Yan,M.F, Shah, M.H , Yan, C.H, Gao , Z, Y && Tian, W ( 2013). Comparison and inspiration of bank computer system and power dispatching automation system in China. Applied Mechanic and Materials, 411-414, 1821.  
Doi.<http://dx.doi.org/10.4028/www.scientific.net/AMM.411-414.1821>
57. Yates , J & Leggett, T ( 2016). Quantitively research : An Introduction radiologic technology 88(2) , 225-231

## APPENDIX

### Measuring the Customer satisfaction with the digitalization direction of Riyadh Bank

Your participation in this survey is available and highly appreciated. The goal of this survey is to measure the customer satisfaction with the digitization direction of Riyadh Bank.

#### 1- Gender

- Male
- Female

#### 2- Age

- 18 – 24 years
- 25 – 29 years
- 30 – 39 years
- More than 40 years

#### 3- Segment

- Normal
- Silver
- Golden

#### 4- Channel

- Riyadh Online
- Mobile application
- ATM

#### 5- On over all, how you are satisfied with the current Riyadh bank electronic services

- Very Satisfied
- Satisfied
- Somewhat satisfied
- Unsatisfied
- Very satisfied



6- Are the current Riyadh Bank electronic services easy to use?

- Yes
- No

7- Are the Current Riyadh Bank Electronic services available whenever it needed?

- Yes
- No

8- From the following list please let us know what are the areas need to be changed in order to develop Riyadh bank Electronic services?

- Navigation
- Layout
- Process
- Login0in Page
- Landing Page
- Reports
- Sadad payments
- Transfer
- Investment
- Other specify .....
- Nothing

9- Is there any problem you are facing in the current Riyadh bank Electronic services?

- Yes (please specify .....) )
- No

10- Is there any new service you would like to add it to Current Riyadh bank Electronic services?

- Specify .....