

People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Mohamed Khider University - Biskra-
Faculty of Economic, Commercial and Management Sciences
Department of commercial Sciences



Theme:

**The effect of fulfilling banking services through e-channels
on customer Satisfaction
Case study: Al Salam Bank - Biskra**

Thesis submitted in partial fulfillment of the requirements to get a master degree in
commercial sciences

Specialty: Banking Marketing

Supervisor:

Izzrech Kamilia

Student:

Saouli Mahmoud

Committee Members	Rank	Status	University
Ben abid farid	Professor	Chairperson	Biskra
Izzrech Kamilia	Master assistant	supervisor	Biskra
<u>Bouriche Nacer Eddine</u>	Segnor Lecturer	Examiner	Biskra

Scholar year: 2022/2023

People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Mohamed Khider University - Biskra-
Faculty of Economic, Commercial and Management Sciences
Department of commercial Sciences



Theme:

**The effect of fulfilling banking services through e-channels
on customer Satisfaction
Case study: Al Salam Bank - Biskra**

Thesis submitted in partial fulfillment of the requirements to get a master degree in
commercial sciences

Specialty: Banking Marketing

Supervisor:
Izzrech Kamilia

Student:
Saouli Mahmoud

Committee Members	Rank	Status	University
Ben abid farid	Professor	Chairperson	Biskra
Izzrech Kamilia	Master assistant	supervisor	Biskra
<u>Bouriche Nacer Eddin</u>	Segnor Lecturer	Examiner	Biskra

Scholar year: 2022/2023

Acknowledgement

I thank God Almighty first for giving me strength to complete this thesis.
and I dedicate my success over the years to my dear mother and father, sisters and
brother.

I would like to offer my deepest gratitude to my teacher and adviser Izzrech
Kamilia, for her guidance and support, that led me to this point.

Finely I would like to offer my thanks to all my family members and friends, and to
the whole department for facilitating the proper environment, this journey wouldn't
have been possible
Without them.

Abstract:

Nowadays, there are many innovations in the banking sector, such as internet banking, mobile banking, POS, ATM, and telephone banking which allow customers to easily fulfill their operations through these electronic channels (e-channels). There are many factors that affect customers satisfaction when they use e-channels, such as the ease of use, trust, cost, speed and personalization associated to those e-channels.

This study aims to measure the impact of fulfilling banking services through electronic channels on customer satisfaction. We conducted a study on Al Salam Bank – Biskra by distributing an electronic questionnaire and a written one destined to the customers of this bank. The data was analyzed by SPSS Findings show e-channels and customer satisfaction are strongly related, there is a positive impact of ease of use, cost, trust, speed of transaction and personalization, on customer satisfaction.

Key words: e-channels, customers satisfaction, e-banking, banking services

المخلص:

في الوقت الحاضر ، هناك العديد من الابتكارات في القطاع المصرفي ، مثل الخدمات المصرفية عبر الإنترنت ، والخدمات المصرفية عبر الهاتف المحمول ، ونقاط البيع ، وأجهزة الصراف الآلي ، والخدمات المصرفية عبر الهاتف والتي تتيح للعملاء إنجاز عملياتهم بسهولة من خلال هذه القنوات الإلكترونية ، هناك العديد من العوامل التي تؤثر على رضا العملاء عند استخدامهم للقنوات الإلكترونية ، مثل سهولة الاستخدام والثقة والتكلفة والسرعة والتخصيص المرتبط بتلك القنوات الإلكترونية.

تهدف هذه الدراسة إلى قياس أثر إنجاز الخدمات المصرفية من خلال القنوات الإلكترونية على رضا العملاء حيث قمنا بإجراء دراسة على مصرف السلام بسكرة من خلال توزيع استبيان إلكتروني وآخر مكتوب موجه إلى عملاء هذا البنك. أظهرت البيانات التي تم تحليلها بواسطة SPSS أن القنوات الإلكترونية ورضا العملاء مرتبطان ارتباطًا وثيقًا ، وهناك تأثير إيجابي لسهولة الاستخدام والتكلفة والثقة وسرعة المعاملة والتخصيص على رضا العملاء.

الكلمات المفتاحية: القنوات الإلكترونية ، رضا العملاء ، الخدمات المصرفية الإلكترونية ، الخدمات المصرفية

List of tables

Gender frequency Table	34
Age frequency Table	35
academic qualification frequency table	36
work field frequency Table	37
individual income frequency Table	38
Type of bank account frequency Table	39
years of dealing with the bank frequency Table	40
Mainly used electronic channels frequency Table	41
Carrying out all morphological task's frequency Table	43
How often do you use electronic channels frequency Table	44
Do you recommend the bank frequency Table	45
Table 1: The five-point Likert scale	45
Table 2: Vocabulary stability and validity test	46
Table 3: Checking the normal distribution (twist and flatten coefficient)	47
Table 4: Table of the arithmetic mean and standard deviation of the expressions after the ease of use of the channels	47
Table 5: Table of the arithmetic mean and standard deviation of the expressions after the cost of using channels	48
Table 6: Table of the arithmetic mean and standard deviation of expressions after the speed of channel use	48
Table 7: Table of the arithmetic mean and standard deviation of the expressions of the fourth-dimension confidence in the use of channels	48
Table 8: Table of the arithmetic mean and standard deviation of fourth dimension personalization expressions in the use of channels	48
Table 9: Table of the arithmetic mean and standard deviation of the expressions of the customer satisfaction axis	50
Table 10: Correlation coefficient between the axis of organizational culture and the axis of knowledge sharing	50
Table 11: The correlation coefficient between the dimensions of the marketing information system and the axis of customer relationship management	51
Table 12: The results of the regression analysis of variance to ensure the validity of the model to test the main hypothesis	53
Table 13: The results of the analysis of variance of the regression to ensure the validity of the model to test the first sub-hypothesis	53

Table 14: The results of the regression analysis of variance to ensure the validity of the model to test the second sub-hypothesis	54
Table 15: The results of the regression analysis of variance to ensure the validity of the model to test the third sub-hypothesis	55
Table 16: The results of the regression analysis of variance to ensure the validity of the model to test the fourth sub-hypothesis	55
Table 17: The results of the regression analysis of variance to ensure the validity of the model to test the fifth sub-hypothesis	56

list of figures

Figure displaying (CSAT).....	23
Figure displaying (NPS)	24
Figure displaying (CES)	24
A model showing the variables of the study.....	33
Gender Relativistic circle.....	35
Age Relativistic circle.....	36
academic qualification Relativistic circle	37
work field Relativistic circle	38
individual income Relativistic circle	39
Type of bank account Relativistic circle	40
years of dealing with the bank Relativistic circle	41
Mainly used electronic channels Relativistic circle	42
Carry out all morphological tasks Relativistic circle	43
How often do you use electronic channels Relativistic circle	44
Do you recommend the bank Relativistic circle	45

Introduction:

In the ever-evolving landscape of the 21st century, the banking sector has experienced major transformations due to technological advances and changing customer preferences. As the advent of electronic channels has revolutionized and continues to revolutionize the way banking services are delivered, customers are offered services with more convenience, efficiency and accessibility.

This study aims to investigate the effect of fulfilling banking services through e-channels on customer satisfaction, focusing on the dynamic interplay between technology and customer experience. The 21st century, often referred to as the information era, has witnessed an unprecedented wave of innovations across many sectors and fields of science, including the banking sector, as the advent of digital technologies led to mobile devices and internet which reshaped customer expectations and paved the way for innovative banking solutions and tools. These tools such as online banking platforms have helped accelerate the adoption of banking services and e-channels leading to a rapidly changing environment. For instance, Covid-19 pandemic has further accelerated the process of adoption and use of e-channels in the banking sector due to the social distancing measures and lockdown restrictions required a shift towards digital banking services making e-channels an indispensable part of customers' financial transactions.

Banking services in Algeria have improved drastically in the last years due to covid-19, as it has offered a valuable insight to the lack of services such as online banking and mobile banking, which have improved during and after the pandemic resulting in a higher adoption of these e-channels.

In Algeria, banks are looking to expand their objective to a bigger customer base, this has made the environment more competitive. Therefore, to be successful, Algerian banks need to fulfill customers' needs in order to attract and retain them better. Consequently, banks need good measurement tools to grasp a good understanding of the level of satisfaction of their clients some of these tools are; CSAT, NPS, CES, and these mainly use the five dimensions we used in this study to measure the satisfaction toward e-channels and are as follows; ease of use, cost, trust, speed of transactions and personalization.

This study aims to shed light on the relationship between e-channels and customer satisfaction providing insight into the effectiveness and implications of these technological advancements in the banking sector. We have chosen the customers of Al Salam Bank-Biskra to conduct this study.

1- Research question:

This study addressed one major question; we believed answering this question would help us solve the problem that is the subject of the study, Therefore, we formulated the following research question:

To which extent do e-channels affect customer satisfaction in Al Salam Bank-Biskra?

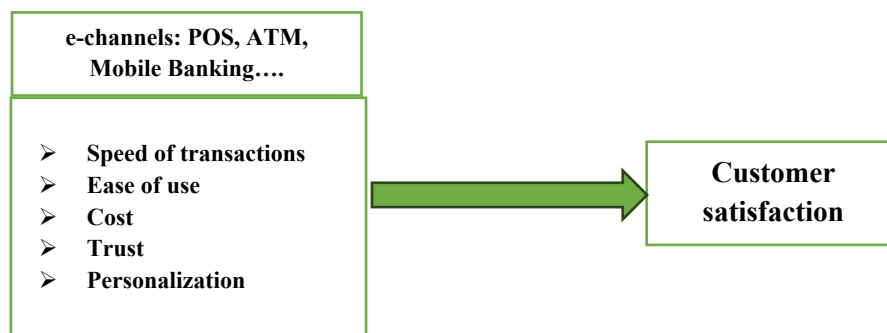
2- Previous studies:

There are many studies related to our subject of research, but we mention only a few that this study is based on and are as follows:

- I. The Impact of E-Banking on Customer Satisfaction: Evidence from Banking Sector of Pakistan by (Hussain, 2016) The study found that customers in Pakistan are fairly satisfied with e-banking services, with reliability, responsiveness, and assurance being the most significant predictors of customer satisfaction, while tangibles and empathy showed relatively less significance in the context of e-banking in Pakistan.
- II. The Impact of Cost, Customer Experience, Ease of Use, and Trust towards Adoption of Online Banking by (Bow, 2016) The study found that trust and customers' experience significantly influence the adoption of online banking in Malaysia, while cost and ease of use were not found to be significant factors, highlighting the importance of designing user-friendly internet banking services to attract adoption.
- III. Antecedents of customer satisfaction with online banking in China: The effects of experience by (Yoon, 2010) the results of the study revealed that customers' prior experience with online banking played a crucial role in determining their satisfaction levels. Positive experiences, including ease of use, convenience, and reliability, were found to be key drivers of customer satisfaction.
- IV. In another study by (Paudel, 2023) aimed at measuring the impact of e-banking on customer satisfaction in Nepalese commercial banks, the study involved 200 randomly selected respondent, the findings revealed that security and ease of use were the most influential factors on customers satisfaction while cost and personalization were insignificant.

in this study we relied mostly on the study conducted by (Paudel, 2023) as it is the most reliable one to the subject of this study, we based our model on his while also modifying it to better suit our objective.

3- Model of the study:



4- Research hypothesis:

To answer the research question, we suggested the following hypotheses:

Main hypothesis: Fulfilling banking services through e-channels has a positive impact on customer satisfaction in Al Salam Bank.

Sub hypothesis:

H01: Perceived ease of use of e- channels has a negative impact on customer satisfaction

H1: Perceived ease of use of e- channels has a positive impact on customer satisfaction

H02: speed of transaction of e-channels has a negative impact on customer satisfaction

H2: speed of transaction of e-channels has a positive impact on customer satisfaction

H03: low costs associated with E-Channels has a negative impact on customer satisfaction

H3: low costs associated with E-Channels has a positive impact on customer satisfaction

H04: Higher levels of trust in E-Channels has a negative impact on customer satisfaction

H4: Higher levels of trust in E-Channels has a positive impact on customer satisfaction

H05: personalization in E-Channels has a negative impact on customer satisfaction

H5: personalization in E-Channels has a positive impact on customer satisfaction

5- Study methodology:

In this study, we utilized the descriptive approach in order to give a comprehensive understanding about e-channels and customer satisfaction. Also, to investigate the study questions and to test the hypotheses, whether in the theoretical part or case study. In the latter, we used the analytical approach to understand the relationship between the variables and the analyze the results of the study. Data was collected via a questionnaire that was distributed to the customers of Al Salam Bank-Biskra through an electronic survey and a written copy of it, the results were processed using the statistical package for social sciences (SPSS).

6- Study objectives

1. This study aims to explore the relationship of using e-channels to make banking services and the level of customer satisfaction toward these innovative tools such as Mobile banking, ATM, POS..., as well as explore the deferent factors influencing that relationship.
2. An attempt to present the most important theoretical and cognitive foundations on which the concept of electronic channels and customer satisfaction is based, and an attempt to identify the nature of the relationship between them.
3. Identify the concept of customer satisfaction and the various obstacles that face it.
4. Identify the concept of electronic banking services.
5. Identify the concept of electronic channels in general.

7- Significance of the study:

The present study is significant because it addresses e-channels in the banking sector which are considered the most important innovations in the banking sector. In addition, it attempts to

understand how customers perceive them as to understand how much they are satisfied with these innovations.

8- Brief study plan:

The theme of this study is “the effect of fulfilling banking services through e-channels on customer satisfaction” it involves a research plan divided into Three chapters two for the theoretical side and one for the case study:

- I. in the first chapter we discussed banking services in general by touching down on the evolution and definition as well as the types and challenges that banking services face.
- II. The second chapter explored electronic channels and customer satisfaction and the relationship between them while also highlighting some of the barriers and types of e-channels and measurement methods used by banks.
- III. In the case study of al-slam bank we presented an overview of the bank followed by a descriptive framework of the study variables and then testing the hypothesis.
- IV. And lastly the conclusion of the study where we discussed the results and some suggestions as well as limitations.

Chapter one: banking services

Introduction:

The banking sector and its services are essential for the functioning of the economy. They provide a wide range of financial services that facilitate transactions and economic activities. Over time, banking services have evolved in response to technological advancements and changing customer expectations, leading to the introduction of various types of services to cater to diverse financial needs.

However, the banking sector also faces its own set of challenges and opportunities. Technological innovations and regulatory requirements pose challenges that must be addressed to ensure a stable and resilient financial system. These challenges, if not properly managed, can have far-reaching consequences. On the other hand, these challenges also present opportunities for banks to innovate and enhance their services, improving efficiency and meeting the growing demands of customers.

Despite the challenges, banking services continue to play a crucial role as the foundation of the financial system. They enable individuals and businesses to manage their finances, access credit, and conduct transactions securely and efficiently. The ongoing evolution of banking services ensures they remain relevant in an ever-changing landscape, adapting to technological advancements and regulations. By seizing the opportunities for innovation, banks can contribute to the growth and development of the economy while navigating the challenges they face.

1.1 Definition and Characteristics of services:

1.1 Definition of services:

- ❖ **Definition 1:** A service is any act or performance one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product. (Kotler, 2016, p. 422)
- ❖ **Definition 2:** Services are deeds, processes; and performances provided, coproduced, or cocreated by the one entity or person for and/or with another entity or person. (D.Gremler, 2017, p. 4)
- ❖ **Definition 3:** Un service est une activité économique qui crée de la Valeur et fournit des avantages aux consommateurs a un moment et en un lieu donné pour apporter le changement désiré, en faveur du bénéficiaire du service. (Munos, 2014, p. 18) in this definition the author describes service as an economic activity that generate value and provides benefits to the customer

These definitions highlight the unique characteristics of services and we can summarize them in a short definition: services are an act performed by a person to benefit another and is produced by both parties without any transfer of ownership and are intangible by nature.

1.2. Characteristics of services:

Services have many characteristics among them are four that are the most important and are the ones the most distinguishable from the characteristics of goods, that is why it is important to discuss these in the following paragraphs:

- **Intangibility:** *The most basic distinguishing characteristic of services is intangibility. "Because services are performances or actions rather than objects, they cannot be seen, felt, tasted, or touched in the same manner that you can sense tangible goods."* (D.Gremler, 2017, p. 20) this indicate that service are very much different from goods rather than having a physical presence, they are acts that are done to provide for a beneficiary, because of this character marketers face many problems one of them is that they cannot be stored leading to a hard time managing service during fluctuations in demand.
- **Heterogeneity:** Because services are performances, frequently produced, consumed, and often cocreated by humans, no two services will be precisely alike. The employees delivering the service frequently are the service in the customer's eyes. (D.Gremler, 2017, p. 21)we can understand from this that services differ from provider to provider as well as consumers and even weather and all external effects surrounding both customer and provider, it is also because of these human interactions that results in heterogeneity, caused by uncertainties and misunderstanding between both end of the service, one of the problems that face services because of this unique characteristic is the inability to ensure consistent service quality .

- **Simultaneous Production and Consumption:** Whereas most goods are produced first, then sold and consumed, many services are sold first and then produced and consumed simultaneously. From what the author mentioned we can understand that services are always produced and consumed instantly and simultaneously requiring both ends to be present and this can change the experience and quality of service by just doing or understanding something the wrong way and in many cases simultaneous production and consumption causes the service provider to be an essential part of the service itself.
- **Perishability:** Perishability refers to the fact that services cannot be saved, stored, resold or returned. A seat on an airplane or in a restaurant, an hour of a lawyer's time, or space in a shipping container not used or purchased cannot be reclaimed and used or resold at a later time. (D.Gremler, 2017, p. 22).this one is strongly related to the previous characteristic because service are produced and consumed instantly they cannot be stored in contrast to goods that can be stored and resold if needed .

1.3 Evolution of banking:

- **Banking in ancient civilizations:**

Banking trace's back to an age where transactions were made by barter system were goods are exchanged for other goods and overtime the system evolved to using coins of various sizes but these coins needed to be kept safe but most houses in ancient times did not have that commodity, some historical records from Greece and Rome as well as Egypt and Babylon suggested that temple acted more like banks they loaned money and also kept it safe ,from this it is safe to assume that banks trace way back to the first civilizations in history . (Jasperson, 2023)

- **Free-market banking:**

According to the author the free-market banking emerged on the hand of Adam Smith, even Tho banking was well established he encouraged the free market through he's book the invisible hand in 1776 that led to bankers limiting the states involvement in the banking sector. (Jasperson, 2023)

- **Traditional banking:**

During the 1950s, retail banks started shifting their focus from producing and selling only, to a more customer-driven business model. As the competition was increasing, the need for the usage of correct marketing strategies was recognized; therefore, banks started offering various products to target new customer groups (Anna, 2018).

- **Banking in the modern age:**

In today's economy digital banking is the most dominant and it started in the late 20th and early 21st century with the rise of the internet, "In the past, retail banks were the only institutions able to offer financial services to consumers, however nowadays, with the elimination of the entry barriers along with the introduction of new regulations, non-financial bodies such as Fintech and Bigtech

can now offer financial services as well. The services provided are depended from the type of the institution and the country it operates”. (Kalaitzakis, 2020, p. 28) it is true that mobile banking led to the rapid development of banking services due to its easy and widening accessibility throughout the world offering a wide range of services along the way.

2. Banking services:

2.1 Definition of banking services:

- Banking Service means each and every product and service offered by banks that customer apply for, use, administer or access using the Internet, a website, email, messaging services (including text messaging) and/or software applications (including applications for mobile or hand-held devices), either now or in the future. (law insider, n.d.)
- Banking as a service is a model that allows companies to offer financial products and services to their customers by partnering with a licensed bank. Utilizing this strategy gives non-bank businesses the ability to incorporate digital banking services directly into their own products. (Woodard, 2022)

From these two definitions we can conclude that banking services are a number of financial services that banks provide to customers in a range of different forms of loans.

2.2 Evolution of banking services:

banking service have gone through a lot of phases over time and overcome many hurdles in its way to reach where it stands now with an impactful and with such a presence in the market, in the past specifically in the 20th century retail banks were the only financial bodies able to offer services to customers, but by the ending of the 20th century a revolution made it easier to offer these services, that revolutionary innovation was none other than the internet, it eliminated the entry barriers and the new regulations paved the way for some non-financial bodies to emerge such as Fintech and Bigtech allowing them to also provide similar services as financial institutions.

As we explored previously, we know that banking started from ancient civilizations, but we will focus only from the customer driven era as it gives a clear and comprehensive view as well as it's the real start of the shift in services, in the 1950s, that's when retail banks starting t shift from producing and selling to focusing more on customers, due to increasing competitions banks started to adopt new strategies and new technologies as banks were the first to adopt computers in 1954.

In the 1960s banks focused more in quality and adopted new regulations and technologies that allowed for a broader reach for services and product, it also led to the improvement of the delivery channels used at the time to make them more efficient. These banks will go on offering new

services in another dimension, they started cooperating with insurance companies in the 1980s to provide new financial services.

By the 1990s things have started to change with the development of the world wide web which effectively changed and paved the way for new electronic channels to take over the booming market that the internet created, nowadays innovation is at an all-time high and keeps changing the industry in a fast pace making the future unclear for banks. (Kalaitzakis, 2020, p. 14)

2.3 Types of banking services:

In this part we will only mention the traditional service offered by banks before the digitalization of the industry, and are as follow:

- **Account management:** Account management is a continuous strategic process of managing & nurturing key customer relationships, through the business journey. It is a mechanism to uncover the true potential of your customer accounts. (Katti, n.d.).
- **Overdraft:** An overdraft occurs when there isn't enough money in an account to cover a transaction or withdrawal, but the bank allows the transaction anyway. Essentially, it's an extension of credit from the financial institution that is granted when an account reaches zero. The overdraft allows the account holder to continue withdrawing money even when the account has no funds in it or has insufficient funds to cover the amount of the withdrawal. (Kagan, 2023)
Basically, it's a form of loan that banks allow it but of course with a fee each time the customer uses this feature.
- **Cheques:** A cheque is a bill of exchange in which one party orders the bank to transfer the money to the bank account of another party. (Vishnava, 2023) cheques usually consist of three parties and they are the drawer is the person that write the cheque and the drawee which is the bank and payee is the last end and is the one that receives the cheque.
- **Personal Loan:** A personal loan is an amount of money you can borrow to use for a variety of purposes. For instance, you may use a personal loan to consolidate debt, pay for home renovations, or plan a dream wedding. Personal loans can be offered by banks, credit unions, or online lenders. The money you borrow must be repaid over time, typically with interest. Some lenders may also charge fees for personal loans. (Lake, 2023)
- **Mortgage Loan:** A mortgage is a written agreement that gives a lender the right to take your home if you don't repay the money, they lend you at the terms you agreed on. Your mortgage payment is paid over a set number of years based on how much you borrow and the interest rate you're approved for. (Ceizyk, 2023),the Consumer Financial Protection Bureau in an official website of the United States government defined it as follows: "A mortgage is an agreement between you and a lender that gives the lender the right to take your property if you fail to repay the money you've borrowed plus interest." (Bureau, 2022), we can understand that this is a form of protection to the banks or insurance companies to guarantee returns if the person in question cannot fulfill his obligations toward the bank or insurance company.

- **Insurance:** Insurance is a contract, represented by a policy, in which a policyholder receives financial protection or reimbursement against losses from an insurance company. The company pools clients' risks to make payments more affordable for the insured. Most people have some insurance: for their car, their house, their healthcare, or their life. (Kagan, Ivestopedia, 2023)so insurance is basically a form of protection from financial loses whether it concerns human life or housing and property, insurance has now expanded to cover a large number of assets from marine life to anything you can think of. Insurance is also defined according to Merriam-webster dictionary as follows: "a contract by which someone guarantees for a fee to pay someone else for the value of property if it is lost or damaged (as through theft or fire) or to pay usually a specified amount for injury or death" (Merriam-Webster, 2023)

In conclusion, before the digitalization of the banking industry, traditional banking services offered a range of essential features to cater to customers financial needs, and these traditional banking services formed the backbone of the industry, providing essential financial solutions to customers, however with the rapid technological advancements this landscape has undergone significant transformation that led to the emergence of new and innovative banking services that cater to the changing needs and preferences of customers in the digital age.

2.4 Challenges in Banking sector:

the banking sector in this age faces a lot of challenges that hinder their progress in future markets but these challenges may actually provide some opportunities for these banks to expand and to consolidate its presence in these future markets:

Challenges in the banking sector:

The banking sector have many challenges facing it but it differs from country to country most of the developing countries face the same challenges when it comes to banking due to the fact that these countries are newly adopter of banking services and other digitalized service so it is understandable and inevitable to face these walls manifesting in the way to a better banking sector in the following part, we will unveil these challenges starting by:

- **Management of Risks:**

Banks face various risks, including credit risk, market risk, liquidity risk, and operational risk. Effectively managing these risks and ensuring financial stability is crucial for the banking industry. Developing robust risk management frameworks and staying ahead of emerging risks is a continuous challenge.

In a study by (Wolgast, 2001)he studied the merger and acquisition activity among financial firms, he focused on banks risk management and financial system stability and market liquidity, in that study he concluded that large institutions are able to maintain a superior level of risk management, but small to medium firms had a harder time maintaining a descent level of risk management.

In another study conducted by (Chen, 2023), she analyzed the literature of eight articles on the different risk management of commercial banks, she conclude that risk management has an important and empirical role to play in the banking industry and pointed at the importance of expanding the research and studies in this topic due to its impact on the banks, as well as insisted on exploring more risk management methods in commercial banks especially under different conditions in future research, such as against the backdrop of the COVID-19 pandemic, in the context of the financial crisis and so on.

We can understand from these two researches that risk management is an important challenge and underestimated one at that, and is also in need of more in-depth studies to put forward new methods for risk management, that will help banks in the long term, banks and universities must conduct more studies on the topic.

- **Customer retention:**

Customer retention is indeed a significant challenge for the banking sector. While acquiring new customers is important, retaining existing customers is equally crucial for sustainable growth and profitability.

According to (McDougall, 1996) & Levesque, when they investigated the major customer satisfaction and customer future intentions by identifying the determinants which include service quality and service features, and service recovery as well as many more determinants they found that banks service recovery ability had a major impact on customer satisfaction and consequently on customer retention

In another study conducted by (Clark, 1997), he focused on the customer-employee relationship on customer retention rates in the major UK banks, he found that the perception of service quality on both customer and employee are related to customer retention rates, and are both related to each other.

These two studies show the relationship between customer satisfaction and customers perception of quality are related to customer retentions, because humans are difficult to predict this makes the job harder for banks to retain customer as mentioned before retentions can lost just because customers have a different opinion on service quality and so on, it is very important for banks to improve and train employees for a better customer service experience in order to achieve a good customer retentions in the long run.

- **Employees' Retention:**

The banking industry has rapidly transformed over the past decade, prioritizing revenue generation and intensifying competition. However, this shift has resulted in decreased employee morale, leading to lower revenue and the potential loss of valuable customer

relationships. Retaining employees has become a crucial concern across all levels, in the recent times there is a growing competition to retain key employees and keep them from leaving, as it happens top-level executives are spending more and more money, time and effort to find a solution to this dilemma, because of the decreased employee morale there is a greater risk that affects the relationship between customers and service providers and causes problems in customer retentions leading to a domino effect that leads the bank to a bad path,

In a study by (Mitchell, 2001) they asserted that people often leave for reasons unrelated to their job and in many cases it's because of shocks and unexpected events, but they also found that employees often stayed because of attachments and the sense of fitting in, so it's crucial to provide a good and healthy work environment for them.

Another study by (Sekaran, 1989) they studied a sample of 267 bank employees, in that study they focused on job satisfaction of employees and quality of life factors, and they concluded that these factors influenced the job involvement in their jobs which in turn influenced the reward sense of competence which then directly affected their job satisfaction.

- **Financial Inclusion:**

In developing countries access to banking service is still and remains a challenge to many of society's segments, thus banks face the task of expanding their reach and inclusion of more of society's underserved population, it is a role that banks take to promote more financial inclusion to ensure that everyone has access to basic financial services.

In a study conducted by (Dev, 2006), he points out the importance of financial inclusion to developing countries and defines it as the delivery of banking service at an affordable cost to vast sections of disadvantaged and low-income groups, he also emphasizes that inclusion helps the economy grow as well as the population's prosperity lifting poor people from poverty, the study suggested that this requires new regulatory procedures and de-politicization of the financial system.

It is notable to mention that financial inclusion although good for many sections of society it is extremely hard for some banks to handle mainly small to medium size banks, as it could lead the bank to bankruptcy with just some mistakes in risk management.

- **regulatory compliance:**

regulatory compliance is a big challenge for banks especially in developing countries due to the multitude of changes that happen so fast and suddenly, these sudden changes make it even harder to follow, as regulatory compliance is an organization's adherence to the laws and regulations put forward by the government of the country, and there are a multitude of factors that affect it such as the complexity and volume of regulations as well as compliance cost as some regulations require for example a lot of safety plans to be put forward in banks.

In an article written by (Ben Cole, n.d.) he puts an emphases on the challenges banks face when it comes to regulatory compliance, he explains that following compliance rules is costly from both infrastructure and personnel standpoints , as they are required to spend large sums of capitals to meet these regulations while also appealing to stakeholders which is hard on itself ,all these factors makes it almost non profitable for banks to comply to such regulations.

In conclusion, the banking sector in developing countries faces several common challenges that hinder its progress towards a better banking system. Risk management emerges as a crucial area that requires attention, with larger institutions demonstrating superior risk management compared to smaller to medium-sized firms. There is a need for further research and studies to explore new risk management methods, especially in the context of evolving conditions such as the COVID-19 pandemic and financial crises.

Also, addressing these challenges in the banking sector of developing countries requires a multi-faceted approach involving research, investment in risk management capabilities, employee training and development, innovation in financial inclusion strategies, and a proactive stance towards regulatory compliance. By tackling these challenges effectively, banks can work towards building a stronger and more inclusive banking sector that supports sustainable growth and financial well-being for all segments of society.

summary:

in this topic we got to know many definitions of services and banking services as well as the characteristics of services and the evolution of both banking and banking services, then we explored the many services that banking have to offer that are the most used, we topped it off with the challenges that the banking sector faces in the current and future landscape that banking occuppies.

Chapter Two: E- channels in the banking sector and customers' satisfaction

Introduction:

The banking industry has witnessed a significant transformation due to the rise of technology and digital platforms. Electronic channels, or e-channels, have emerged as crucial tools for delivering banking services efficiently and conveniently. In this chapter, we aim to provide a comprehensive understanding of e-channels in the banking sector.

We begin by defining e-channels, encompassing the various electronic platforms and technologies through which banks provide their services. This lays the foundation for discussing the introduction, types, and challenges of electronic channels in banking.

Next, we explore the factors influencing the adoption of e-channels. Understanding these drivers is essential for banks aiming to effectively implement and leverage these technologies. We examine how these factors shape banks' decision-making processes regarding e-channel implementation.

Lastly, we delve into the types of electronic distribution channels employed in the banking sector and identify the obstacles they face. This exploration provides valuable insights into the dynamics and challenges of digital banking, empowering banks to improve their e-channel strategy, enhance customer experiences, and stay competitive in the ever-evolving digital landscape.

Overall, electronic distribution channels are vital for modern business strategies, allowing organizations to reach customers through digital platforms and channels. However, successful implementation requires careful planning, execution, and ongoing management, considering factors such as channel selection, platform design, content creation, customer segmentation, and performance monitoring.

1. E-channels:

1.1 Definition of E-channels:

- Electronic Channels: means the electronic technologies by which the Company voluntarily offers its services, including but not limited to: Internet websites, programs run on computers or other electronic devices, telephone and fax, IVR, communication devices, or any other electronic technique by which the Company can offer its services (law insider)
- Electronic Channels: means the Bank's internet banking system (IBS), Bank's mobile app (BMA), E-Platform and other electronic channels for providing Bank services, which allow the Client to conclude transactions, make payment orders, exchange information with the Bank and use other services provided by the Bank by means of distance communication.
- Electronic Channels: means the internet (specifically CIMB Clicks and any other website specified by CIMB Bank), the network of automated teller machines operated by CIMB Bank and Partner Banks, point-of-sale terminals and other means of access to the Banking Services using the Card or any other electronic or telecommunications medium or access device designated by CIMB Bank through which the Banking Services offered by CIMB Bank may be accessed by you. (law insider, n.d.)
- E-channels are the various electronic means that a business can use to communicate with its customers, such as email, chat, social media, or mobile applications. (Sorger, 2015)
- E-channels are the digital platforms and tools that organizations use to engage with their customers, including websites, social media, email, chatbots, and mobile apps. (Chaffey, 2019, p. 137)
- E-channels refer to the various electronic means by which businesses interact with customers, such as email, social media, chatbots, or web-based self-service portals. (Kumar, p. 93)

1.2 Factor's influencing the adoption of e-channels in the banking industry:

The adoption of electronic channels, such as online and mobile banking, has impacted and revolutionized the banking industry leading to the emergence of e-banking, however the successful implementation and widespread adoption of E-channels in banks are influenced by various factors, by understanding these factors, banks will be able to develop effective strategies and enhance the adoption of e-channels among their customer base. in the following we will get to know and understand these factors:

- **Relative Advantage:** Relative advantage does not mean that the value of an innovation only includes profit, but it extends to cover other factors such as the ease of use and storage (Igbinedion, 2009) the adoption of e-channels in the banking industry is influenced by the relative advantage they provide compared to traditional banking methods, this also includes factors such as ease of use, time-saving, cost reduction, convenience and improved financial management, studies have shown that perceived benefits and advantages play a significant role in customers retention and customer adoption of E-channels, that significant advantage paved the way for more adoptions.

According to a study conducted by (Kolodinsky J.M & Hogarth J.M & Hilgert, 2004) they examined the factors affecting the adoption or the intention to adopt the three e-banking technologies, they found that the relative advantage is associated with adoption.

- **Complexity:** according to (Alwi, 2008) Complexity is the degree to which an innovation is difficult to learn and use or the degree to which an innovation is perceived as difficult to understand and use. Complexity plays a major role in adopting electronic channels in e-banking, customers are more hesitant to adopt innovations that they perceive complex or hard, as studies have shown that perceived ease of use has a positive impact on the acceptance and adoption of these electronic channels in e-banking, as the study conducted by Alhassany & Faisal (2008) showed that clear and easy-to-use website as the most important factor. Overall, the perceived complexity or ease of use is a significant factor that influences customers decision to adopt e-channels in the banking industry.
- **Compatibility:** Compatibility is the degree to which an innovation fits in with the customer's existing purchases and lifestyle. It demonstrates the situation at which an innovation fits with an individual's working and lifestyle, values and needs (Alwi, 2008).lack of compatibility is a major barrier to the adoption of E-banking ,the smoother the innovation aligns with the culture and values of customers the higher the adoption rate, past experiences and values play a role in their willingness to adopt these innovations in e-banking.
- **Trialability:** Trialability is the degree to which the innovation can be tried before purchase (Lichtenstein, 2006) trialability allows customers to experience and evaluate the service, which helps remove any perception of complexity or difficulty, trialability also reflect the consumers desire to test the innovation before fully committing to its use, and a successful trial leads to an increased adoption rate.
- **Perceived security:** Internet banking provides alternatives for a faster delivery of banking services to a wider range of customers (Oghenerukevbe, 2008) these fast banking service may be more accessible to a wider range of people, but it also attracts the attention of legitimate and illegitimate online practices , as security concerns play a significant role in hindering the adoption of these e-channels, because the theft of personal identity information and internet fraud all can compromise customers trust of these e-channels, and older customers are generally less likely to adopt these innovations while the younger generation tend to adopt them even with these risks in place

1.3 Types of electronic distribution channels in the banking sector:

In recent years the banking sector has experienced a significant improvement and transformation, driven mostly by technological advancements, the adoption of these advancements manifested in the adoption of electronic distribution channels , or E-channels which refers to the digital platforms or means used by banks to deliver their service to their customer through digital channels, These channels contributed in the improvement of accessibility and customer satisfaction as well as the speed of delivery, and enhanced customer experience in this part we will enlist all the important e-channels used by modern banks to reach their customers:

Internet banking:

Internet banking refers to the provision of banking services over the internet. It offers a wide range of benefits owing to the easy-to-use and accessible technology.” *Internet banking is defined as the acquisition of banking services via the internet. It provides a vast range of potential advantages because of the attainable and user-friendly application of technology* “ (Yiu CS, 2007), Internet banking involves the processing of banking transactions through bank websites, allowing customers to directly access the bank's information system from any location with internet connectivity. It provides numerous online services, such as checking balances, ordering checks, initiating transactions (like balance transfers, opening accounts, and viewing account balances), making payments, settling bills, transferring funds, saving, and investing, obtaining account statements, and obtaining other account-related information.

internet banking offers various advantages, such as faster marketing due to easier access to customers, simpler launching of new services, wider dissemination of information, competitive advantages, client attraction and retention, increased revenue, reduced costs, greater potential to save time, high innovation capacity, enhanced communication, and improved customer satisfaction and loyalty. This channel allows customers to fulfill most of their banking needs with minimal human intervention. Overall, internet banking helps banks establish a healthy customer base as well as maintain a close relationship with them which in turn improve customer retention and loyalty.

Telephone banking (TB):

Telephone banking is a service provided by banks as a form of electronic platforms in which customers can conduct banking transactions over the phone with a bank. Customers can use their phones to access a variety of banking services such as balance inquiries, fund transfers, and bill payments among others.

“Telephone banking is a service which allows customers to perform some banking transactions such as checking the balance in hand or fund transfer over the telephone” (Mohammadi, 2012)

Most of these services make use of an automated phone answering system with phone keypad response or interactive voice response (**IVR Interactive Voice Response**) systems. *“However, many studies consistently suggested that automated phone answering systems can be difficult to use and often trigger consumer irritation”* (M.Curran, 2005)

Mobile banking (MB):

“Mobile banking is a system that facilitates customers to access and operate transactions through mobile phone (Parvin,2013). Bangladesh bank defined mobile banking as an approach for offering financial services to the customers by the combined effort of bank and mobile operators (BB,2012).” (Meah, 2023, p. 230)

Mobile banking is a form of service that utilizes mobile devices that allows completion of any financial transaction required from the customer and provide access to their accounts at any given place and time thus eliminating the need for physical branches which in return reduces the cost of services and greatly improving the quality of service and helps clients avoid waiting time, mobile banking is accessible through short messages service (SMS) or using wireless application protocol

(WAP), all these innovation in technology provided mobile banking with a high potential for additional banking service as well as pave the way for creating new services, all thanks to the ease of use that allowed banks to promote their services more efficiently and reliably.

Mobile banking works in a similar way to internet banking, but I mainly use portable devices such as smartphones and tablets , this innovation allowed for the banking sector to experience a boom in financial and the non-financial entrants that expanded the field even more leading to new services such as mobile payment that uses the near-field-technology (NFC) sensor and m-wallets. (Kalaitzakis, 2020, p. 18)

Automated teller machines (ATMs):

one of the more prominent electronic channel is the (ATM) or automated teller machine are self-service banking machines that allow customers to withdraw cash, check their account balance, transfer funds, and make deposits, with the added benefit of a 24-7 access, due to the very nature of this service they can be found in every location making it easier for customers to have that access all the time thus reducing the load & number of bank branches consequently reducing cost allowing for more profitable services for the banks and customer satisfaction thus this channel help boost the fulfillment of banking services. ” *The other channel of e-banking is the ATM. An ATM is defined as an automated telecommunication device that enables consumers to access banking services without any need for a bank operator*” (Hastiani, 2010)

Point-of-sales (POS) terminals:

POS (Point of Sale) terminals are electronic devices that allow merchants to accept debit or credit card payments for goods and services rendered. These terminals have become an essential part of modern banking, providing numerous benefits to banks and customers alike.” *A Point of Sale (POS) terminal is an electronic machine used to process card transactions at retail locations. A POS provides a means through which a customer performs banking through the merchants and other bank agent by use of their debit or credit cards even when the physical bank branches are closed*” (KAJUJU, 2016, p. 14).

POS are generally connected to the banks system via phone line or wireless connection among other methods used this helped customer use the service 24-7 which improved customer loyalty and consequently reduced the amount of cash carried by clients reducing the chances of theft.

Electronic fund transfer (EFT):

It is a system whereby data representing money are moved electronically between accounts or organizations, EFT enables customers to transfer money between bank accounts or make payments electronically, without the need for physical cash or checks. ” *The transfer of funds, as from one account to another or from buyer to seller, by telephone or computer, The use of EFT results in instantaneous movement of money, The additional time that the funds are available to earn income can more than offset the fees charged by institutions for this service. – Also called wire transfer*” (Scott, 2003, p. 124)

1.4 Barriers in distributing services through electronic channels:

There are many barriers related to distribution through E-channels and these are just some examples, the barriers range from human related issues to technological barriers, in this section we will try to understand these barriers:

- I. **Lack of Consistency:** Because of customer involvement while, electronic channels are very effective in minimizing the inconsistency from employees or providers of service, customer variability still presents a problem. Many times, the customer produces the service himself using the technology, leading to errors or frustration unless the technology is highly user-friendly. Maneuvering on-line can sometimes be overwhelming, and not all websites are easy to use. Furthermore, a large percentage of customers do not have computers and, even if they do, may be reluctant to try or continue using the medium. (Electronic Channels in Service Marketing)
- II. **Competition from Widening Geographies:** *“Many services were somewhat protected from competition because customers had limited choice among the providers they could physically drive to. Banks, for example, supply all local customers with checking accounts, savings accounts, and mortgages.”* (Electronic Channels in Service Marketing) It can be especially hard for small banks and local service providers to deal with competition when they only operated in their own territory, in order for these small banks to overcome this barrier they must be able to differentiate themselves from new commers and competition, but this barrier can be an opportunity for these banks if they can overcome it changing it from negative to positive outcome.
- III. **Change in Consumer Behavior:** A consumer procuring a service through electronic channels engages in very different behavior from a consumer entering a retail store and talking to a salesperson. Considerable changes — in the willingness to search for information, in the willingness to perform some aspects of the services themselves, in the acceptance of different levels of service — are necessary when customers use electronic channels. Behavior change is difficult, even for a consumer wanting to make a change; therefore, marketers wishing to motivate consumers to alter long-established patterns will be challenged. (Electronic Channels in Service Marketing)
- IV. **Security Concerns:** *“the lack of security of information, particularly health and financial information. Many customers are still hesitant about giving credit-card numbers on the web and internet. These problems can undermine consumers’ trust in the internet as a safe place to do business. Companies have devised ways to keep hackers out and thereby protect the systems, but many of these are temporary solutions.”* (Electronic Channels in Service Marketing) one of the most problematic concerns in all industries is security of personnel information, so naturally that threat is more apparent in the banking industry where there’s money, people will try to find holes in security, among the specific problems are penetration and vandalism and impersonation, these have a some dire consequences as hackers force bank servers to crash putting all customer information and personnel data at risk and ready for taking, one solution is most often used to help in this situation is encryption technology so banks could hire capable software engineers to develop new methods of encryption, solving this particular problem would help with customer satisfaction and facilitate distribution of services without the sense of danger just like banks in Switzerland are

famous with their policies, any bank capable of securing customer data has a major advantage over other banks.

Lack of trust: *“One of the primary barriers to electronic service distribution is the lack of trust among consumers. Many people are still hesitant to use electronic channels for service delivery due to concerns about security, privacy, and the reliability of the technology.”* (Electronic Channels in Service Marketing) This particular barrier is a result of the other barriers or rather the accumulated consequences of the previously mentioned barriers, if they are not solved, if these barriers persist, they add up and result in the lack of customer trust and loyalty.

In another research paper published by T.Chitura and Jetol Bolongkikit & Thulani Dube & Mupemhi Shepherd in the Journal of Internet Banking and Commerce (January 2008) they included a number of barriers in the adoption of E-commerce and because E-commerce is one of the main applications of electronic channels for service delivery it is safe to say these barriers also apply to E-channels, using different studies they summarized them in the following table:

Lack of suitable EC solutions for SMEs	Khan (2004), Kapurubandara and Lawson (2006)
Problems in solving compatibility issues with existing IT system	Khan (2004)
Difficulty in changing the existing working procedures or practices to match with EC adoption	Khan (2004)
Inadequate transportation and delivery	Dedrick and Kraemer (2001)
Limited diffusion of computers	Dedrick and Kraemer (2001)
Lack of online payment process	Dedrick and Kraemer (2001)
Limited availability of banking services	Dedrick and Kraemer (2001)
Uncertain taxation rules	Dedrick and Kraemer (2001)
Limited knowledge of e-commerce models and methodologies	Cloete, et al (2001), Cloete (2002)
Lack of access to computers	Cloete, et al (2001), Cloete (2002)
Lack of access to hardware and software	Cloete, et al (2001), Cloete (2002)
Lack of time to investigate options	Cloete, et al (2001), Cloete (2002)
Lack of information options	Cloete, et al (2001), Cloete (2002)

Difficulty finding and retaining qualified personnel with required skills and knowledge	Kaynak et al (2005)
Risk of dissipation of company specific knowledge	Kaynak et al (2005)
EC is a distraction from core business	Brown (2002), Scupola (2003)
Lack of strategic vision	Brown (2002)
Company markets need high degree of human interaction	Bolongkikit et al (2006)
Too many junk e-mails	Scupola (2003)
Technology change and evolution	Scupola (2003)
Lack of external pressure from suppliers and customers	Looi (2003)
Not sure how many people are using the internet	Lawson et al (2003)
Customers have not asked for it	Pracy and Cooper (2000)
Belief that all customers are local	Pracy and Cooper (2000)
SMEs not prepared to adopt EC as a business concept	Lane et al (2004)
Limited use of internet banking and web portals by SMEs	Lane et al (2004)
Web based selling of goods/services is not yet practical	Lane et al (2004)
No resources for experimentation	Taylor and Murphy (2004)
Some SMEs occupy small niche markets that do not need global connectivity through the internet	Taylor and Murphy (2004) Dixon et al (2002)
No simple procedures and guidelines	Kapurubandara and Lawson (2006)
No one stop shop facility	Kapurubandara and Lawson (2006)
Unstable e-commerce climate in the country	Kapurubandara and Lawson (2006)
Change in the regulations with each government	Kapurubandara and Lawson (2006)

(Shepherd, 2008, pp. 5-7)

summary:

In this topic we defined e-channels based on different definitions from renowned researchers in the field, which led to the summarizing of our own definition. we then got to know the factors that influence the adoption of e-channels, and moved to exploring the different types of electronic distribution channels, and lastly, we finished by stating the barriers that hinder the distribution of services through e-channels.

2. Customer satisfaction about e-channels:

2.1 Customer Satisfaction Definition:

- what is satisfaction, it may be a simple question but it's a question most people cannot answer once its asked, to understand what it means we must build from the definition of a renowned researcher and for that we take the definition of Richard Oliver:" *Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption related fulfillment*" (Oliver, 1997, p. 13)
- From this definition we can understand that satisfaction is the evaluation of customers toward products or services in regard of whether they meet the expectations of customer needs or not in other words satisfaction is strongly related to customer expectations and is also subject to change because different customers have different expectations or prediction in regards to quality of service or products.
- Philip Kotler and Kevin Keller also defined customer satisfaction as follows:" *satisfaction is a person's feelings of pleasure or disappointment that result from comparing a product or service's perceived performance (or outcome) to expectations.*" (Keller, 2016, p. 153) in here Kotler and Keller explain that expectations are shaped by many factors, including past experiences and word to mouth communication and many marketing tactics effect the image of the service or good that the customer have in his mind consequently when the perceived performance of the product meets the expectations they are more likely to be satisfied, and if the perceived performance falls short of their expectations, they are likely to be dissatisfied.
- Using these definitions, we conclude that customer satisfaction is the evaluation and perspective of customers toward a specific service or goods and its ability to meet the expectations put forward by customer.
- Or it is a subjective judgment made by customers based on their evaluation of a service performance and outcome in relation to their initial expectations,
- It can be said that satisfaction is not a fixed state but rather dynamic and changing, it is influenced by the customers evolving expectations, banks are required to meet customers' expectations as exceeding those expectations is hard to achieve and its crucial for achieving satisfactions, because customer satisfaction can impact customer loyalty, and word-of-mouth recommendations, and lastly the reputation of the bank
- Understanding and managing customer expectations is essential for banks in order to improve the quality of service and insure the survival of the banks in the long term.

2.2 Factors Influencing Customer Satisfaction in E-Channels: (dimensions of 2.1 customer satisfaction toward e-channels):

in a study conducted by (Paudel, 2023) to find the effect that the five variables have on customer satisfaction they found a close relation between customer satisfaction and these four independent variables which are as follows:

- **Personalization:** According to (Kuo, 2016) the ability of online banking systems to provide customized services and experiences by utilizing customer information and advanced technologies to deliver relevant content, products, and services that match the individual preferences and needs of customers.
- **Ease of use:** The factors influencing the adoption and satisfaction of online banking include ease of use, convenience, and user-friendly website design, (Supramaniam, 2016) “According to Malarvizhi (2011), ease of use is another influential factor for the practice of online banking. There is a positive relationship between ease of use and service delivery via online banking, where various services needed by the customers can be set up online by the bank.”, in that study the author highlighted the importance of ease of use in determining customers' satisfaction and adoption of online banking and also emphasized the importance of a user-friendly website design, including appropriate graphical user interface and navigational tools, in enhancing customers' ease of use and satisfaction with online banking.
- **Cost:** Cost is also one of the factors that will influence customers adoption of online banking service. Aliyu and Tasmin (2012) reported that customers would accept new technologies only if the price is reasonable. According to Campbell and Frei (2010), implementation of new technologies may lower cost of service which in turn lower the service fees. (Supramaniam, 2016) the study emphasizes in the association between the cost factor, including internet usage charges and service fees, and the adoption of online banking. They concluded that customers who adopt online banking are aware of the associated fees and find them acceptable. Overall, people's perception of cost plays a significant role in their decision to support or reject online banking systems.
- **Security:** A study performed by (Belas, 2016) confirmed that security has an impact on customer satisfaction, it also showed the importance of this variable to banks as some banks that relies on their trustworthiness are forced to constantly improve their security technologies in order to maintain customer satisfaction more than other traditional banks.
- **Trust:** Trust is a fundamental factor in buyer and seller interactions, without it no business can be conducted it is especially important in the context of online banking services, as it create a sense of security, building trust is essential for banks as it increases customers confidence and willingness to engage in online transactions, in the end improving customer satisfaction and loyalty in the digital banking realm and e-channels, as (Selvanathan, 2015) describes trust as follows: “*trust is defined as the relative feeling of secure in an unknown or risk situation.*” But in an economic perspective trust is seen as a way that can potentially reduce the transaction cost, all that by decreasing customers perception of risk and

enhancing their likelihood to engage in more transactions in the future thus reducing the cost of attracting and retaining these customers.

We can summarize that these five variables are the most important factors that affect customer satisfaction when it comes to electronic channels and e-banking in general, understanding these can help banks improve their relative level of customer satisfaction, but it also worth mentioning that further research in the topic is needed as e-banking is still relatively new compared to traditional banking that had a good share of research done for it.

2.3 Measuring customer satisfaction:

there are three commonly used techniques for measuring customer satisfaction as well as several more we will delve in to:

Banks tend to use the following techniques:

- I. **Customer Satisfaction Score (CSAT):** *“CSAT is a straightforward way of measuring customer satisfaction. It measures how customers feel about a business, purchase, service, or interaction. It can be as simple as a survey that asks customers how satisfied they were with the experience by rating it on a scale from 1-5 or 1-10.”*



Figure displaying (CSAT) taken from (Cleave, 2019)

We can conclude that this service is a simple and effective way for companies to find more information’s about the state of their customer satisfaction levels, it’s the most common technique used in this age, companies that utilize this technique are able to adapt to new challenges in this ever-changing market. (Cleave, 2019)

- II. **Net Promoter Score (NPS):** *“Net Promoter Scores go beyond satisfaction and probe for advocacy. For example, an NPS survey might ask how likely you are to recommend this company/product/service to a friend. This provides a measure of customer satisfaction as well as assessing customer loyalty.”* This technique is effective in finding loyal and passionate customer, it can be helpful in also studying customer behavior and finding the reason some customers are loyal and some aren’t that way bank can determine a good plan to attract those customer’s and keep them, and by determining loyal customer the company can involve them in further programs like customer loyalty programs that we will discuss later on.

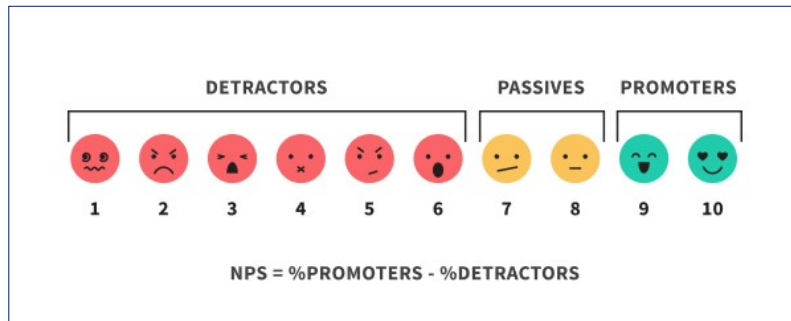


Figure displaying (NPS) taken from (Cleave, 2019)

NPS is calculated by subtracting the percentage of people giving you bad scores – ‘detractors’ – from the percentage of positive scores – ‘promoters.’ (Cleave, 2019)

- III. Customer Effort Score (CES):** *“Customer Effort Score focuses on a very specific assessment. You’re trying to determine how easy it was for customers to do business with you or complete an interaction. Obviously, the easier the process, the happier the customer.”* Through this method banks can find new and easy ways to improve their services by eliminating inconveniences that might deter new customer or news business partners. (Cleave, 2019)



Figure displaying (CES) taken from (Cleave, 2019)

- IV. Customer loyalty program:** By definition, a customer loyalty program is a marketing approach that recognizes and rewards customers who purchase or engage with a brand on a recurring basis. A company may dole out points or perks, and graduate customers to higher levels of loyalty the more they buy. These incentives and specific benefits often result in the customer becoming a more regular consumer or the ideally a brand promoter. Benefits may involve free merchandise, rewards, coupons, or insider perks like early access to new products. (Leder, 2019)
- V. Customer Lifetime Value (CLV or LTV):** Customer lifetime value is the average amount of money you expect to receive from a customer over the life of their relationship with you. LTV (Life Time Value There’s no material difference between the terms “CLV” and “LTV”) tells you exactly what you need to know about how well your product resonates with your customers, what you’re doing well, and which areas need improvement. It’s a

critical metric for calculating the return on acquisition costs and understanding the long-term outlook of your business model (mosaic, n.d.)

In conclusion, measuring customer satisfaction is a critical aspect of any business that wants to build long-term relationships with its customers. NPS, CSAT, CES, and are some of the commonly used techniques to measure customer satisfaction. Each technique has its own strengths and weaknesses, and businesses must carefully select the appropriate technique(s) based on their needs and goals. Ultimately, businesses that prioritize measuring customer satisfaction and take action to address customer concerns and feedback are likely to build stronger customer relationships and achieve greater success in the long run.

2.4 The relationship of E-channels on customers satisfaction:

Electronic channels have quite the relation to customer satisfaction as it is a major player in the modern age of services, where every customer values his time and effort, in the age of speed customer satisfaction is ever growing leading to more technologies facilitating the job and effort on customers and that's where e-channels shine as banks managed to make a lot of their services faster, thus increasing customer satisfaction with e-channels, we can find the relation by finding the benefits that these channels brought to customers:

- **Consistent Delivery for Standardized Services:** Electronic channels minimize the inconsistency of quality such as the internet these do not alter the service but rather keep it as it is for every customer for example booking a hotel room or a flight through the company's website is the same for everyone thus providing a good service quality to customers and helping fulfill services in a way that does not change the service itself. (accountlearning, n.d.)
- **Low Cost:** this one applies to all kinds of electronic channels by using them banks can cut cost greatly by reducing the need for physical branches and also the need for staff to manage those branches while also reducing the error margin generated by human misunderstanding, through these banks can provide great prices for their services. (accountlearning, n.d.)
-
- **Wide Distribution:** electronic channels allow service provider freedoms that were locked by the old technologies of the time but now they facilitates interaction with a large number of geographically dispersed consumers expanding the reach of banks and other industries they can also allow service providers to interact with a large number of intermediaries often times simultaneously, consequently reducing cost and effort and time to inform and promote and motivate as well as act like a reminder for their services, E-channels opened the path for banks to access a much varied and larger pool of customers to expand on in the future (Gremmler, 2017, p. 297)
- **Customer Choice:** Electronic channels offer a wide variety of services to customers. If a customer wants to renovate his kitchen, he may go to internet sites, specify his requirements and place an order. Electronic channels enjoy the ability to customize the services by offering a wide variety of choices to the customer. (accountlearning, n.d.)
- **Quick Customer Feedback:** feedback is a major advantage that electronic channels present to service providers the ability to constantly acquire feedback is beneficial to the bank as it allows them to find the issues their client face on an everyday bases, and point out potential improvements as there are many companies that use the ideas of their customer

to develop or improve an existing service or product, but most importantly allow for a quick response for any problem that may arise in the future and deal with it sometime without the majority of customer noticing (accountlearning, n.d.)

In conclusion, the relationship between e-channels and customer satisfaction in the banking landscape is undeniable, the advent of electronic channels has remodeled the way banking services are delivered, by leveraging the capabilities of e-channels, banks can meet the evolving needs and expectations of their customers in the digital era, Understanding and optimizing the relationship between E-Channels and customer satisfaction is crucial for banks to remain competitive and deliver exceptional service in an increasingly technology-driven world.

summary:

In the last topic we delved into customer satisfaction by defining it and then we stated Factors Influencing Customer Satisfaction in E-Channels, this requirement is a critical part in the research as it can lead to better understanding of customers experiences with e-channels, we further explored the different ways banks measure their customers satisfactions and then mentioned the general measurement methods, in the end we got to understand The relationship of E-channels on customers satisfaction.

Theoretical Chapters conclusion:

In this theoretical chapter we have dealt with generalities about service and then e-channels and thirdly customer satisfaction toward e-channels, in which we delved to definitions and factors of influence as well as some barriers, and lastly, we looked into some previous studies Which dealt with this issue from other angles, where we concluded the following:

- The importance of e-channels in the banking sector
- The role that e-channels play in the new landscape
- The importance of customer satisfaction to banks
- The relationship between e-channels and customer satisfaction
- The barriers facing the adoption and use of e-channels

Chapter Three: Field study of Al-Salam Bank branch in the state of Biskra

1. the study sample, the method of data collection, and the statistical tools used, overview of the bank:

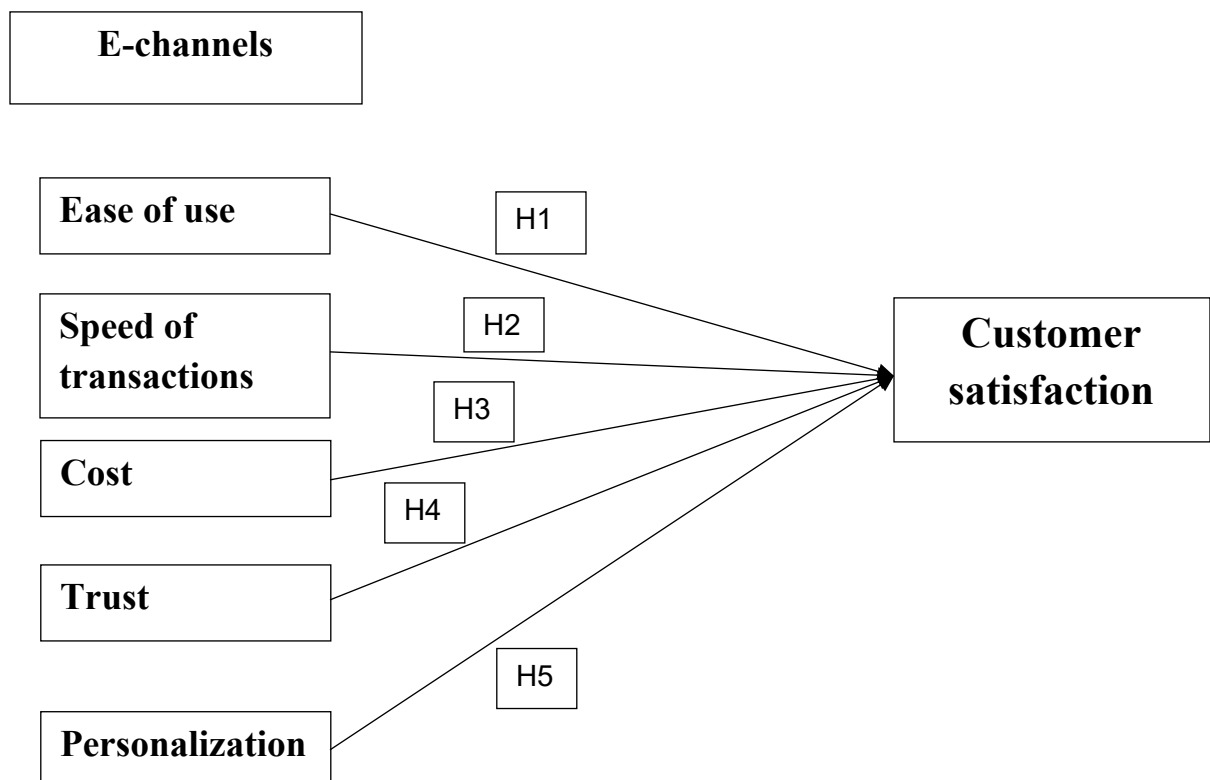
Before addressing these elements, we take an overview of the Algerian institution Al-Salam bank:

1.1 Overview of Al-Salam Bank:

Al Salam Bank Algeria is a bank with multiple tasks and services that operates in accordance with Algerian laws, and in accordance with the provisions of Islamic Sharia in all its dealings. The bank was accredited by the Bank of Algeria in September 2008, to start its activities, aiming to provide innovative banking services.

Al Salam Bank Algeria operates according to a clear strategy that is in line with the requirements of economic development in all vital facilities in Algeria, by providing modern banking services stemming from the original principles and values established by the Algerian people, in order to meet the needs of the market, dealers, and investors, and its transactions are regulated by a legitimate body. It consists of senior scholars in Sharia and economics.

A model showing the variables of the study:



1.2 Study variables:

the independent variable: electronic channels

dependent variable: customer satisfaction

1.3 the study population and sample:

the study population: And by it we mean the group of individuals who were studied, as this study was conducted on customers of al salam banks branch of the state of biskra

The study sample: The study sample consisted of customers of the bank, The questionnaire was distributed to them through a field visit and in an electronic form, and 31 of them were retrieved, and after examining them, they were all used because they met the conditions needed to proceed

1.4 Data collection method (data collection sources):

This is done through a form to collect the necessary data for the applied study, by designing a questionnaire form addressed to the clients of the agency, which is a form with a set of questions directed to the sample members in order to obtain information about a topic, problem or situation, and it was arbitrated by the supervising professor.

1.5 the statistical tools used:

In order to study and analyze the results of the questionnaire, we relied on the SPSS statistical program, and we used various statistical methods.

- The SPSS statistical analysis program is one of the statistical programs that have been widely used by researchers to do statistical analyses, the program is used in many scientific fields which include, for example, science administrative, social, engineering and agricultural. And the word SPSS is an abbreviation for the full name of the program, which is “Statistical Package for Social Sciences”

2. the descriptive framework of the study:

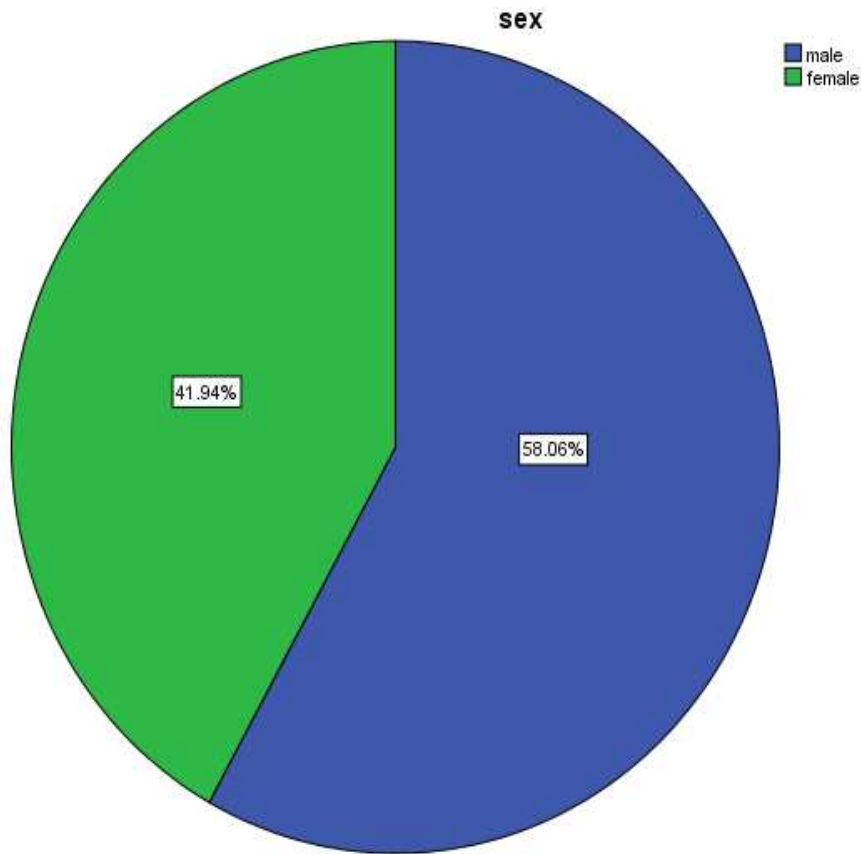
The questionnaire in this study was divided into two axes. The first axle dealt with personal information (age, gender, educational level, Industry, individual income, type of bank account, years of dealing with the bank & mainly used electronic channel). which can be summarized in the following tables:

Frequency tables, percentages, and relative circles for the first axis variables. Personal information:

- Gender frequency Table:

Type	Iterations	The ratio %
Male	18	58,1
Female	13	41,9

The study showed us that this sample was divided into two parts, where the number of females was less than the number of males, so the percentage of females was 41.9% with a frequency of 13, while the percentage of males was 58.1% with a frequency of 18

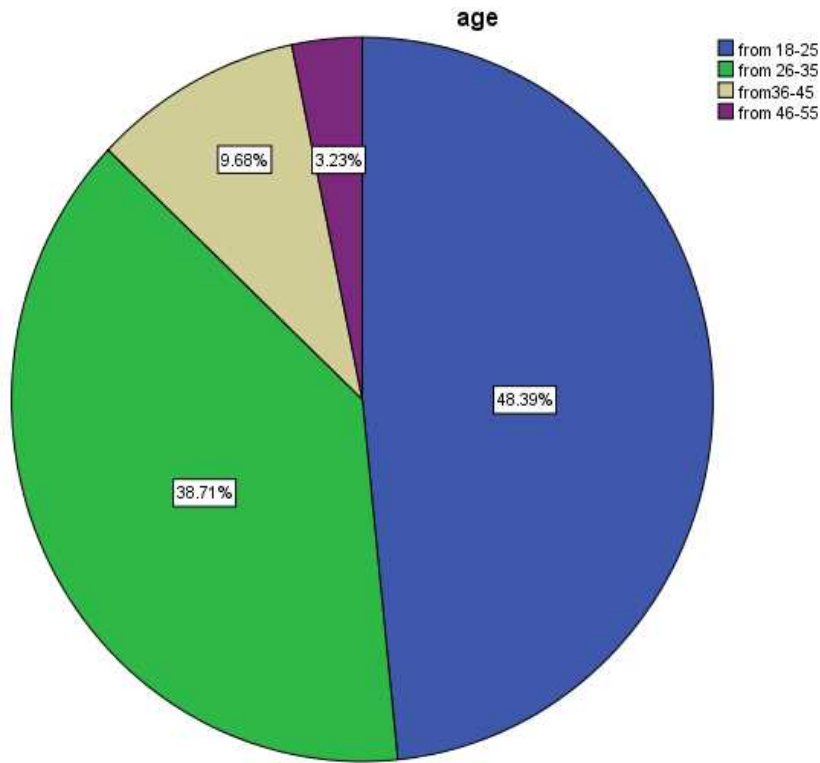


Age frequency Table:

Age	Iterations	The ratio %
From 18 to less than 25 years old	15	48.4
From 26 to less than 35 years old	12	39.7
From 36 to less than 45 years old	3	9.7
From 46 to less than 55 years old	1	3.2
56 years and over	0	0

Through the table, we notice the variation in the ages of the study sample, and that the most frequent age group was from 18 to less than 25 years with a percentage of 48.4%, followed by the age group from 26 to less than 35 years with a rate of 39.7%, then the age group from 36 to Less than 45 years old with a rate of 9.7%, and finally the age group comes from 46 to less than 55 years old with a percentage of 3.2%. Therefore, the most age group in the study sample tends

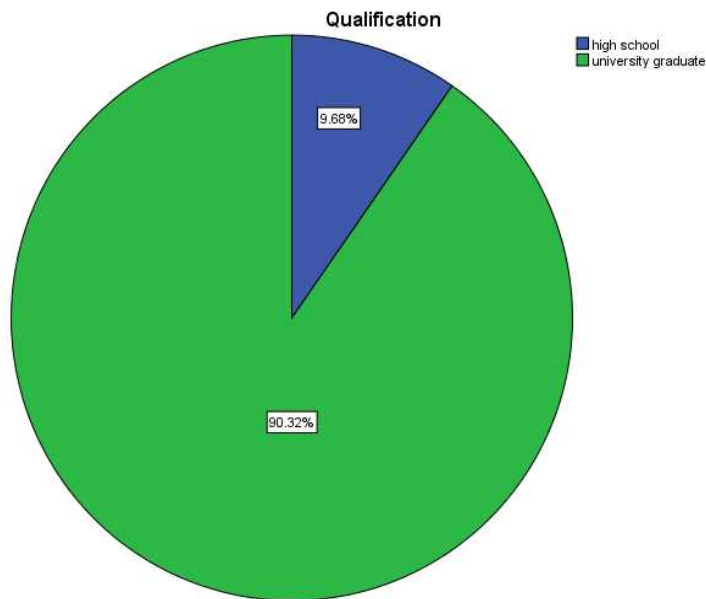
to be more youthful ages, and this can positively reflect on the results of the study Any mixture of experience and scientific competence sufficient to make the right decision.



- academic qualification frequency table:

academic qualification	Iterations	The ratio %
Primary education	0	0
Intermediate education	0	0
high school	3	9.7
University graduate	28	90.3
Graduated from the Institute / Training	0	0

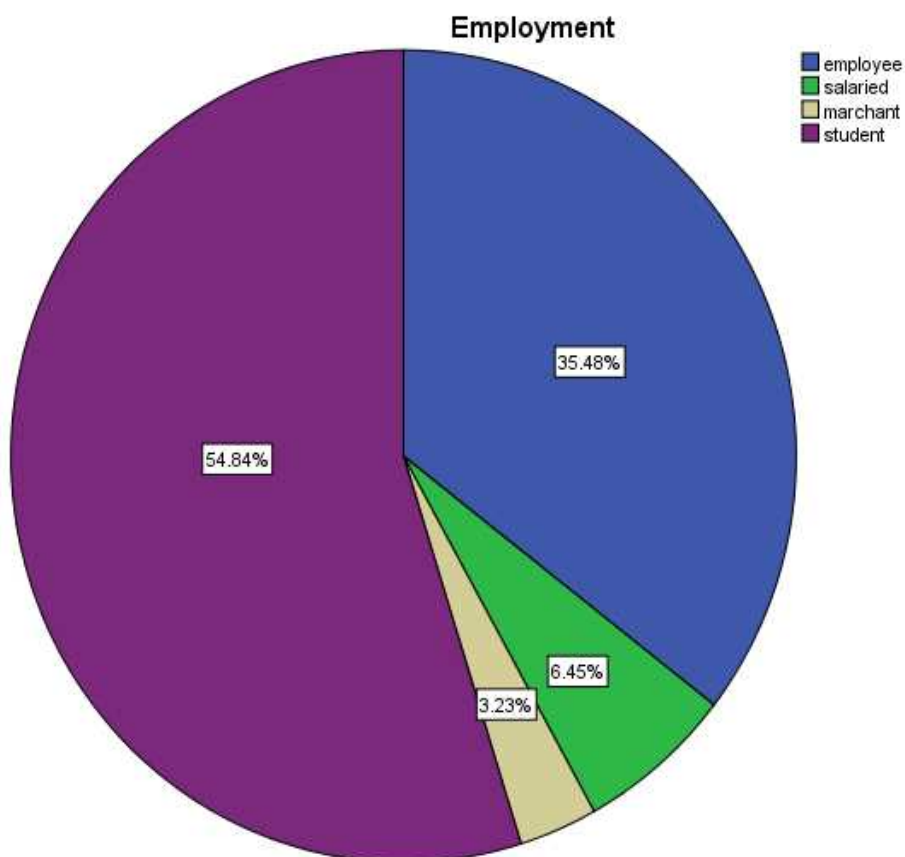
We note from the table on the distribution of the study sample members according to the educational qualification variable that the university level accounted for the studied sample, which amounted to 90.3%, while the percentage of the rest of the degree was estimated at 9.7%, meaning that most of the study sample have a university level, and these increases in the importance of the study and the results reached.



- work field frequency Table:

	Iterations	The ratio %
employee	11	35,5
salaried	2	6,5
merchant	1	3,2
student	17	54,8
Other	0	0

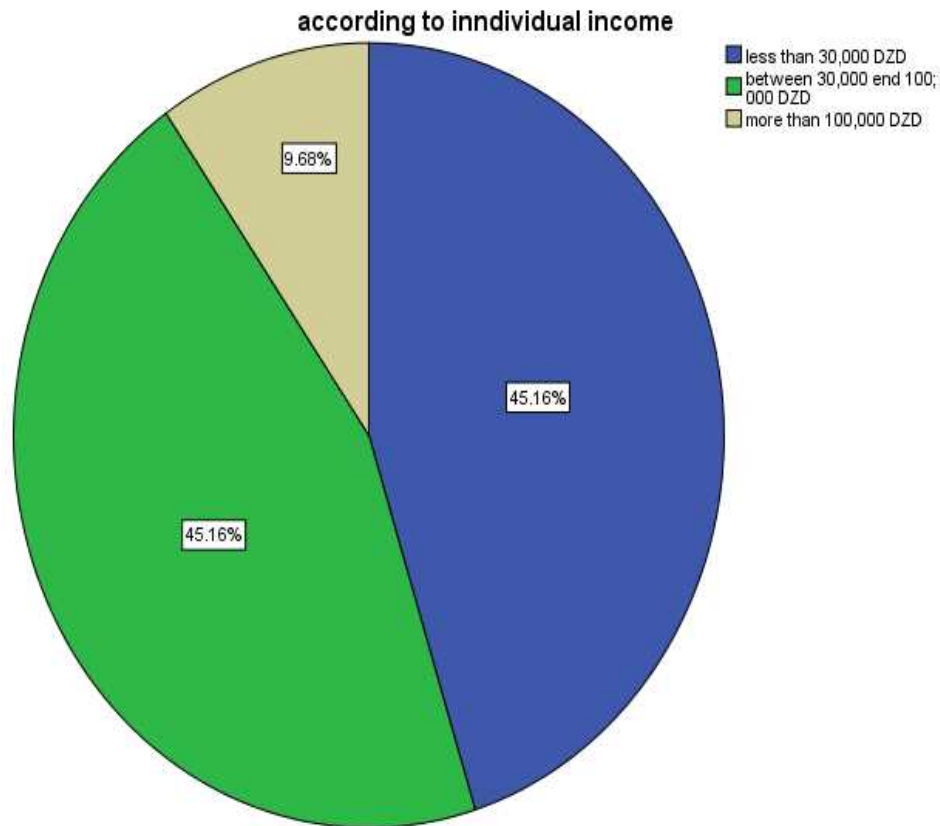
We notice through the table on the distribution of study samples according to the field of work variable, where the percentage of students was 54.8% is the largest, then an employee with a rate of 35.5%, then a wage-earner with a rate of 6.5%, and finally a trader with a rate of 3.2%.



- individual income frequency Table:

	Iterations	The ratio %
Less than 30,000 DZD	14	45,2
Between 30,000 and 100,000 DZD	14	45,2
More than 100,000 DZD	3	9,7

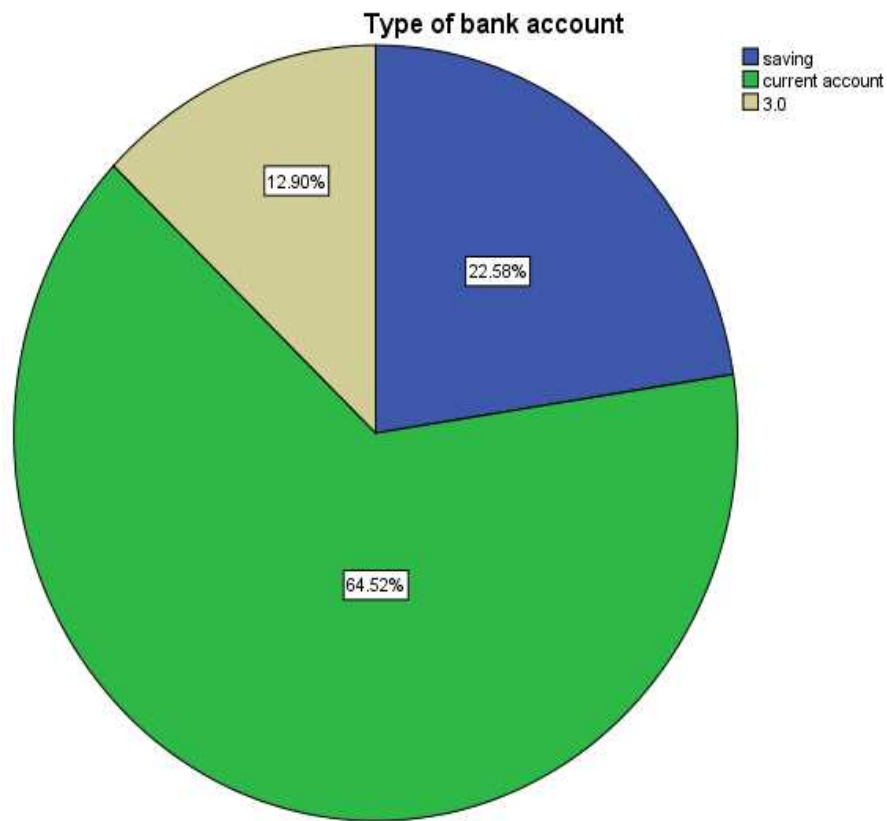
We note from the table on the distribution of study sample individuals according to the individual income variable that the two categories are less than 30,000 DZD and between 30,000 and 100,000 DZD.



- Type of bank account frequency Table:

	Iterations	The ratio %
saving	7	22,6
current account	20	64,5
Other	4	12,9

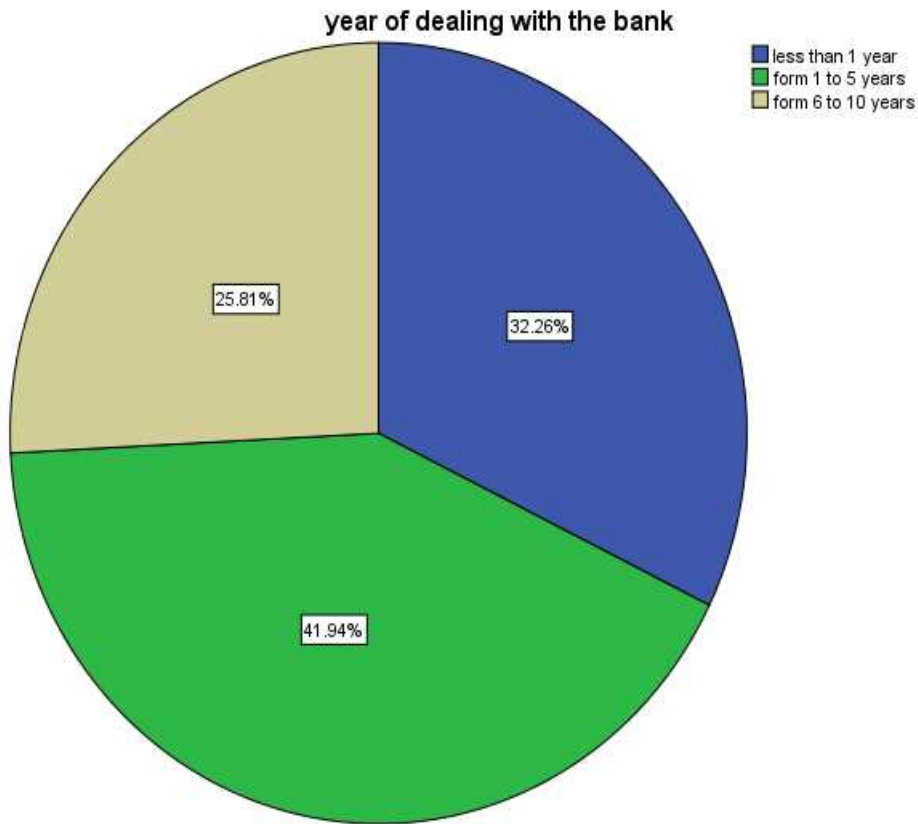
We notice through the table on the distribution of study sample individuals according to the variable of the type of bank accounts, so the current account was 64.5%, then the savings account was 22.6%, and in the last it was 12.9%.



- years of dealing with the bank frequency Table:

	Iterations	The ratio %
less than 1 year	10	32,3
From 1 to 5 years	13	41,9
From 6 to 10 years	8	25,8

We notice through the table on the distribution of study sample individuals according to the variable of years of dealing with the bank, where the years of dealing from one to 5 years were the largest by 41.9%, then less than 1 year by 32.3%, and in the last from 6 to 10 years by 25,8%

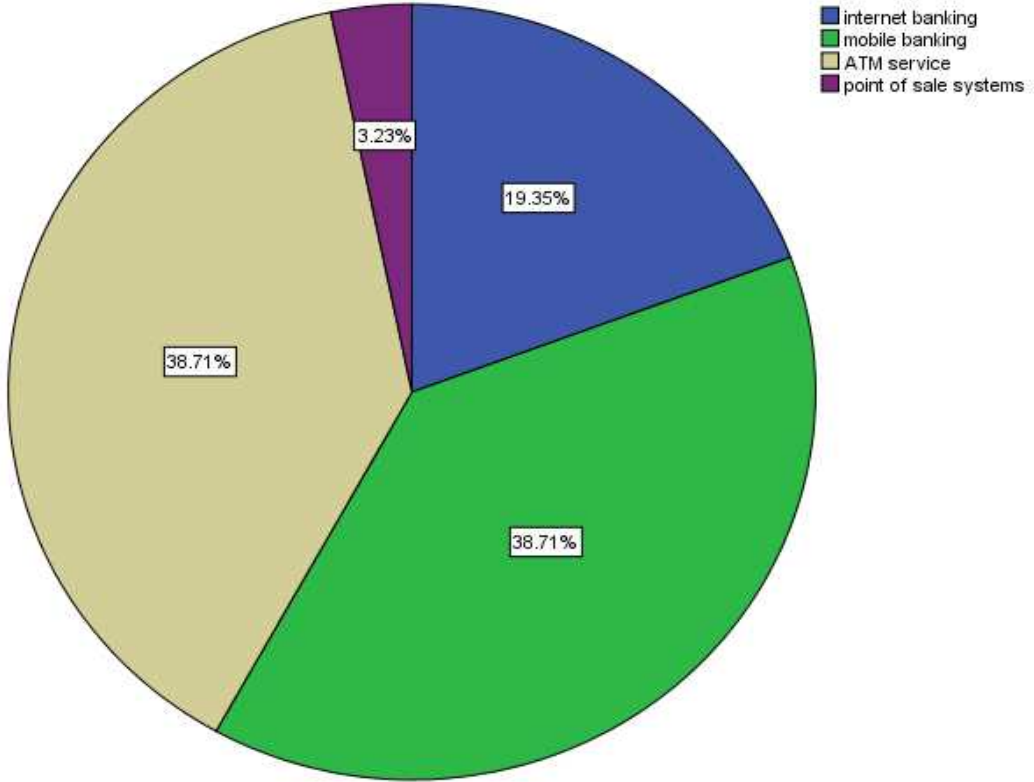


- Mainly used electronic channels frequency Table:

	Iterations	The ratio %
Internet banking	6	19,4
Mobile banking	12	38,7
ATM service	12	38,7
Point of sale systems	1	3,2
Other	0	0

We notice from the table on the distribution of study sample individuals according to the electronic familiarity variable used mainly, so mobile banking services and automated teller machine services were the same percentage of 38.7%, then Internet banking services by 19.4%, and in the news, POS systems 3,2%.

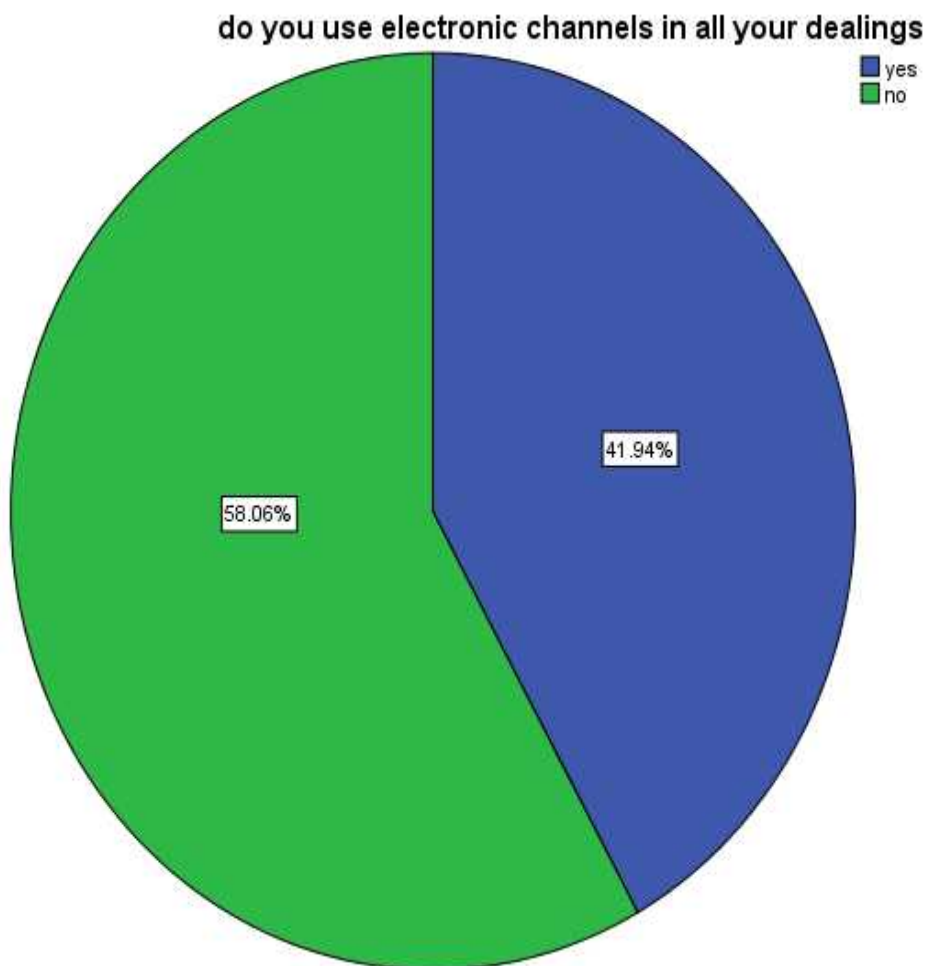
mainly used electronic channel



• Carrying out all morphological task's frequency Table:

	Iterations	The ratio %
Yes	13	41,9
No	18	58,1

We notice through the table on the distribution of study sample individuals according to the variable that they do all morphological tasks, where the answer was no by 58.1% and yes by 41.9%.

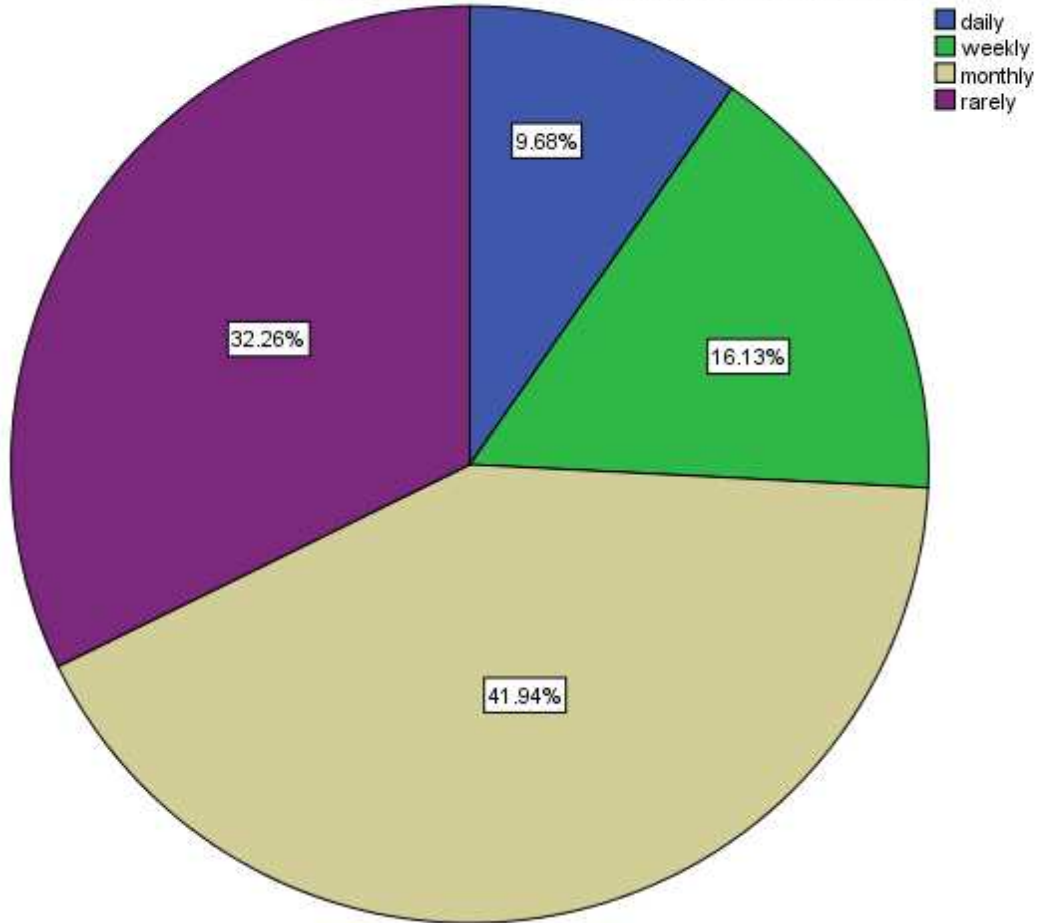


- How often do you use electronic channels frequency Table:

	Iterations	The ratio %
Daily	3	9,7
Weekly	5	16,1
Monthly	13	41,9
Rarely	10	32,3

We notice through the table on the distribution of study sample individuals according to the variable of the number of women who used electronic channels. The answer was monthly by 41.9%, rarely by 32.3%, weekly by 16.1%, and finally daily by 9.7%.

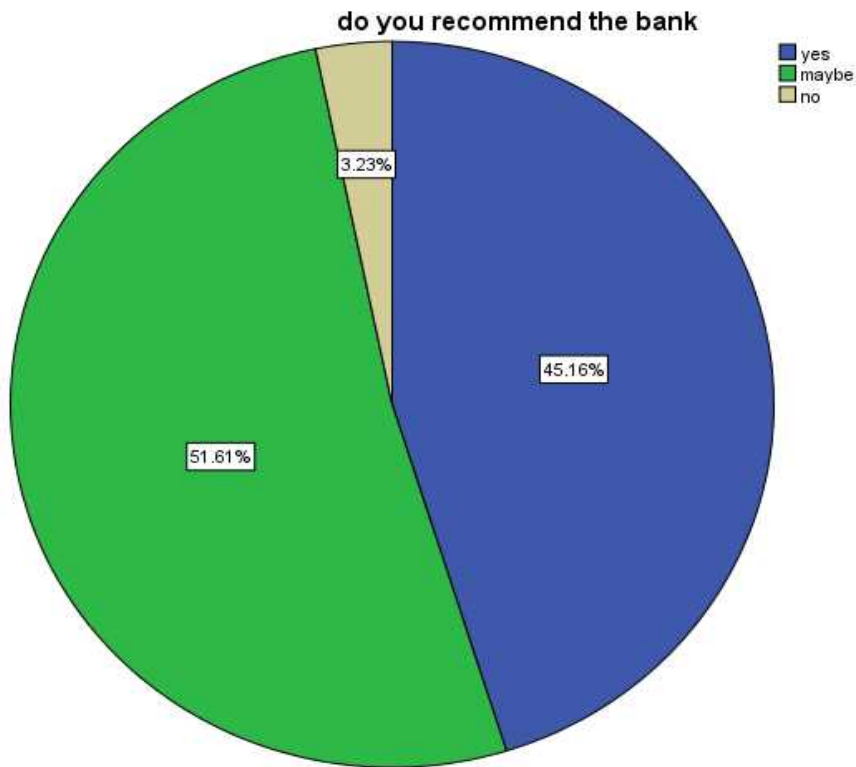
how often do you use electronic channels



• Do you recommend the bank frequency Table:

	Iterations	The ratio %
Yes	14	45,2
Maybe	16	51,6
No	1	3,2

We notice from the table on the distribution of study sample individuals according to the bank's recommendation variable, a possible percentage of 51.6%, yes, a percentage of 45.2%, and a no percentage of 3.2%.



2.1 The five-point Likert scale:

If the responses are one of five choices (strongly agree – agree neutral – disagree – strongly disagree) then the arithmetic mean is calculated and then the trend is determined according to the arithmetic mean values as in the following table:

	1	2	3	4	5
response	Strongly Agree	I agree	Neutral	disagree	Strongly Disagree
Arithmetic average	From 4.20 to 5.00	From 3.40 to 4.19	From 2.60 to 3.39	From 1.80 to 2.59	From 1.00 to 1.79

- **Vocabulary stability and validity test:**

Conducting a reliability test for the used questionnaire from all data using Cronbach's Alpha reliability coefficient.

The stability coefficient takes values ranging from zero to one. If there is no stability in the data, then the value of the coefficient is equal to zero, and on the contrary, if there is complete stability in the data, then the value of the coefficient is equal to one. In other words, increasing the value of Cronbach's alpha coefficient means increasing the credibility of the data by reflecting the results of the sample on the study population.

The validity coefficient (validiy) can also be calculated by calculating the root of the stability coefficient, which is known as the validity of the criterion.

Stability means that the measure is stable and does not contradict itself, that is, the measure gives the same results with a probability equal to the value of the coefficient if it is re-applied to the same sample. As for honesty, it means that the criterion is what is set for its measurement

The following table also shows that the value of Cronbach's alpha coefficient for the total questionnaire is equal to 0.922, which is a high value, and that the number of items is 24, as well as the percentage of the axes of banking services through channels and customer satisfaction. In general, we have obtained Cronbach's alpha correlation coefficient, the lowest value of which is 0.498, which is high, and the highest value is 0.808. The following table shows that:

Table 2: Vocabulary stability and validity test

interlocutor	Dimensions	Cronbach's alpha coefficient	number of items	Cronbach's alpha coefficient	number of items
Banking services through e-channels	Ease of use of the channels	4	0,742	0,899	19
	The cost of using channels	4	0,774		
	channel usage speed	4	0,856		
	Confidence in using channels	4	0,807		
	personalization	3	0,678		
customers satisfaction				0,787	5
The total questionnaire				0.922	24

So, the questionnaire is honest and consistent, and it is applicable to the study sample.

2.2 Testing the normal distribution of the study variables:

In order to verify the normal distribution, the value of the torsion coefficient and the flattening coefficient were calculated for the study variables. The results can be explained in the following table:

Table 3: Checking the normal distribution (twist and flatten coefficient)

Variables	Torsion coefficient	Flattening coefficient
Easy to use channels	0.111	0.649
The cost of using channels	-0.215	-0.669
channel usage speed	0.453	0.417
Confidence in using channels	0.374	0.334
personalization	0.126	-0.073
customers satisfaction	0.396	-0.472

Through the table, we find that the value of the torsion coefficient for all variables was between

(-0.215 and 0.453), as well as the flattening coefficients confined between (-0.073 and 0.649) which are within the acceptable range, which indicates that the study data follow a normal distribution and this is what allows us to continue testing the hypotheses of the study.

3. Hypothesis testing and analysis:

After the statistical study and with the help of the five-pointed Likert table, we get the tables of directions, dimensions of two axes

Table 4: Table of the arithmetic mean and standard deviation of the expressions after the ease of use of the channels:

First dimension phrases ease of use of channels	average	Standard deviation	Direction	Relative importance
Q1	4.161	0.7788	Agree	4
Q2	4.065	0.5122	Agree	1
Q3	4.097	0.5975	Agree	3
Q4	4.032	0.5467	Agree	2
Average ease of use of channels	4.08875	0.6088	Agree	1

Table 5: Table of the arithmetic mean and standard deviation of the expressions after the cost of using channels:

The second-dimension statements cost system using channels	average	Standard deviation	Direction	Relative importance
Q5	3.87	0.991	Agree	4
Q6	4.10	0.870	Agree	3
Q7	4.03	0.752	Agree	1
Q8	4.03	0.836	Agree	2
Average cost of using channels	4.0075	0.86225	Agree	4

Table 6: Table of the arithmetic mean and standard deviation of expressions after the speed of channel use:

Third dimension phrases the speed of using the channels	average	Standard deviation	Direction	Relative importance
Q9	3.81	0.749	Agree	1
Q10	3.87	0.846	Agree	3

Q11	3.61	0.919	Agree	4
Q12	4	0.775	Agree	2
Average channel usage speed	3.8225	0.82225	Agree	3

Table 7: Table of the arithmetic mean and standard deviation of the expressions of the fourth-dimension confidence in the use of channels:

Fourth Dimension Statements Confidence system using channels	average	Standard deviation	Direction	Relative importance
Q13	4.06	0.814	Agree	3
Q14	4.03	0.875	Agree	4
Q15	4.06	0.727	Agree	1
Q16	3.71	0.783	Agree	2
Average for confidence in channel usage	3.965	0.79975	Agree	2

Table 8: Table of the arithmetic mean and standard deviation of fourth dimension personalization expressions in the use of channels:

Fourth dimension phrases personalize the use of channels	average	Standard deviation	Direction	Relative importance
Q17	3.48	0.851	Agree	2
Q18	3.65	0.839	Agree	1
Q19	3.74	0.930	Agree	3
Average personalization in the use of channels	3.623	0.8733	Agree	5

It is clear from the table that there is strong agreement and agreement in the opinions on the statements after the marketing research system:

- **Ease of use of channels:** (statements from 1_4): The phrases related to the ease of use of channels ranked first, with an acceptable degree, which indicates the importance and role of ease of using channels in customer satisfaction, such as facilitating the process of learning and simplifying the use of channels, and this is evident in the customer's answers.
- **The cost of using the channels:** (expressions from 5_8): the phrases related to the cost of using the channels were ranked in the right order and with an acceptable degree, which indicates the importance and role of the cost of using

the channels in the customer's satisfaction by informing him of the costs and clarifying them so that he can make the decision to use the channels.

- **The speed of using channels:** (statements from 9_12): The phrases related to the speed of using channels ranked third, with an acceptable degree, which indicates the importance and role of the speed of using channels in customer satisfaction.
- **Confidence in the use of channels:** (phrases from 13_16): The expressions related to confidence in the use of channels ranked second, with an acceptable degree, which indicates the importance and role of confidence in the use of channels in customer satisfaction, as trust is one of the most important characteristics that must be taken into account to gain and satisfy the customer.
- **Privatization in channels:** (Phrases from 17_19): Phrases related to privatization in channels ranked fifth, with an acceptable degree, which indicates the importance and role of privatization in channels in customer satisfaction.

Table 9: Table of the arithmetic mean and standard deviation of the expressions of the customer satisfaction axis:

Customer satisfaction	average	Standard deviation	Direction	Relative importance
Q20	3.77	0.762	agree	1
Q21	3.81	0.833	agree	3
Q22	3.87	0.763	agree	2
Q23	3.87	0.846	agree	4
Q24	3.97	0.875	agree	5
Average customer satisfaction in using channels	3.858	0.8158	agree	

- **Customer Satisfaction:** (Phrases from 20_24): The direction of the phrases that relate to customer satisfaction with an acceptable degree, which indicates the importance and role of the Customer Satisfaction Foundation in strengthening the relationship, developing trust and satisfying the customer through managing the relationship with customers that achieves sustainability, continuity and actual profits for the bank.

3.1 Study hypotheses:

general hypothesis:

- Providing banking services through electronic channels has a positive impact on customer satisfaction

Correlation test (Pearson):

In this section, we will test the correlation between the axes of the study, using the Pearson correlation coefficient.

The null hypothesis: Providing banking services through electronic channels does not have a positive effect on customer satisfaction.

Alternative hypothesis: Providing banking services through electronic channels has a positive effect on customer satisfaction

Table 10: Correlation coefficient between the axis of organizational culture and the axis of knowledge sharing:

	Pearson correlation coefficient	significance level
Banking services through electronic channels And Customer satisfaction	0.782	0,000

We note from the above table:

That there is a strong and significant positive direct relationship (at a significance level less than or equal to 0.05) between the marketing information system in managing the relationship with the customer, where:

There is a direct correlation of banking services through electronic channels in the management of customer satisfaction, and this is evidence of the rejection of the main null hypothesis, and therefore the acceptance of the alternative hypothesis that provides for the provision of banking services through electronic channels has a positive effect on customer satisfaction, as the correlation coefficient reached 0.572 at a level of significance equal to 0.000 which is less than the significance level $\alpha = 0.05$.

Partial Hypotheses:

- Ease of use of electronic channels has a positive impact on customer satisfaction

- The cost of using channels through electronic channels has a positive impact on customer satisfaction
- The speed of using channels through electronic channels has a positive impact on customer satisfaction
- Confidence in using channels through electronic channels has a positive impact on customer satisfaction
- Personalization in electronic channels has a positive impact on customer satisfaction.

Table 11: The correlation coefficient between the dimensions of the marketing information system and the axis of customer relationship management:

Variable and its dimensions	Pearson correlation coefficient	significance level
Ease of use of the channels	0.574	0.001
The cost of using channels	0.650	0.000
channel usage speed	0.871	0.000
Confidence in using channels	0.877	0.000
Channel customization	0.807	0.000

We note from the above table:

1. There is a direct correlation between the ease of use of electronic channels on customer satisfaction. This is evidence of rejecting the first sub-zero hypothesis and thus accepting the alternative hypothesis which states that ease of use of electronic channels has a positive effect on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of $\alpha = 0.05$.
2. There is a direct correlation between the cost of using electronic channels on customer satisfaction. This is evidence of rejecting the first sub-zero hypothesis and thus accepting the alternative hypothesis which states that the cost of using electronic channels has a positive effect on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of significance $\alpha = 0.05$.
3. There is a direct correlation between the speed of using channels on customer satisfaction. This is evidence of rejecting the first sub-zero hypothesis and thus accepting the alternative hypothesis which states that the

speed of using electronic channels has a positive effect on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of significance $\alpha = 0.05$.

4. There is a direct correlation between confidence in the use of electronic channels on customer satisfaction. This is evidence for the rejection of the first sub-zero hypothesis and therefore the acceptance of the alternative hypothesis which states that confidence in the use of electronic channels has a positive effect on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of significance $\alpha = 0.05$.
5. There is a direct correlation between the personalization of electronic channels on customer satisfaction. This is evidence for the rejection of the first sub-zero hypothesis, and therefore the acceptance of the alternative hypothesis, which states that the personalization of electronic channels has a positive effect on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of significance $\alpha = 0.05$.

Main hypothesis test:

Based on the validity of the model, we test the main hypothesis using the simple regression method in order to determine the positive role of banking services through electronic channels on customer satisfaction, as shown in the table below:

Table 12: The results of the regression analysis of variance to ensure the validity of the model to test the main hypothesis

Source of contrast	sum of squares	degrees of freedom	mean of squares	calculated F value	significance level
Regression	6.620	6.620	6.620	45.757	0.000
The error	4.196	4.196	0.145		
Total summation	10.815	10.815			

Significance level 0.05

Determination coefficient $R^2 = 0.612$

Correlation coefficient $R = 0.782$

- Through the results presented in the table above, it is clear that the model is valid for testing the main hypothesis, as the calculated value of (F) was (20,868) with a probability value of (0.000), which is less than the level of significance ($\alpha = 0.05$). It is clear from the same table that the independent variable in its total form is services. Banking accounts for 57.2% of the variance in the dependent variable represented in customer satisfaction, which indicates that there is a positive role for banking services through electronic channels on customer satisfaction. Hence, we reject the null hypothesis, which says that providing banking services through electronic channels has no effect. Positive on customer satisfaction at a significance level of 0.05 and we accept the alternative hypothesis that the provision of banking services through electronic channels has a positive effect on customer satisfaction.

Sub-hypothesis test:

Table 13: The results of the analysis of variance of the regression to ensure the validity of the model to test the first sub-hypothesis

Source of contrast	sum of squares	degrees of freedom	mean of squares	calculated F value	significance level
Regression	3.561	1	3.561	14.237	0,003
The error	7.254	29	0.250		
Total summation	10.815	30			

Significance level 0.05

Determination coefficient $R^2 = 0.329$

Correlation coefficient $R = 0.574$

- Through the results presented in the table above, it is evident that the model is valid for testing the first sub-hypothesis, as the calculated (F) value was (9,821) with a probability value (0.000), which is less than the level of significance ($\alpha = 0.05$). It is clear from the same table that the independent variable in its total form Ease of using channels explains 43.1% of the variance in the dependent variable represented in customer satisfaction, which indicates that there is a statistically significant positive effect of ease of using channels on customer satisfaction.

- Hence, we reject the null hypothesis, which says that there is no positive role for the ease of using channels in customer satisfaction at the level of significance 0.05, and we accept the alternative hypothesis that there is a positive role for ease of using channels in customer satisfaction.

Table 14: The results of the regression analysis of variance to ensure the validity of the model to test the second sub-hypothesis

Source of contrast	sum of squares	degrees of freedom	mean of squares	calculated F value	significance level
Regression	4.570	1	4.570	21.217	0,000
The error	6.246	29	0.215		
Total summation	10.815	30			

Significance level 0.05

Determination coefficient $R^2 = 0.423$

Correlation coefficient $R = 0.650$

- Through the results presented in the table above, it is clear that the model is valid for testing the second sub-hypothesis, as the calculated value of (F) was (9,821) with a probability value of (0.000), which is less than the level of significance ($\alpha = 0.05$), and it is clear from the same table that the independent variable in its total form Ease of using channels explains 43.1% of the variance in the dependent variable represented in customer satisfaction, which indicates that there is a statistically significant positive effect of ease of using channels on customer satisfaction.
- Hence, we reject the null hypothesis, which says that there is no positive role for the ease of using channels in customer satisfaction at the level of significance 0.05, and we accept the alternative hypothesis that there is a positive role for ease of using channels in customer satisfaction.

Table 15: The results of the regression analysis of variance to ensure the validity of the model to test the third sub-hypothesis

Source of contrast	sum of squares	degrees of freedom	mean of squares	calculated F value	significance level
Regression	8.200	1	8.200	90.917	0,003
The error	2.616	29	0.900		

Total summation	10.815	30			
-----------------	--------	----	--	--	--

Significance level 0.05

Determination coefficient $R^2 = 0.758$

Correlation coefficient $R = 0.871$

- Through the results presented in the table above, it is clear that the model is valid for testing the third sub-hypothesis, as the calculated value of (F) was (9,821) with a probability value of (0.000), which is less than the level of significance ($\alpha = 0.05$), and it is clear from the same table that the independent variable in its total form Ease of using channels explains 43.1% of the variance in the dependent variable represented in customer satisfaction, which indicates that there is a statistically significant positive effect of ease of using channels on customer satisfaction.
- Hence, we reject the null hypothesis, which says that there is no positive role for the ease of using channels in customer satisfaction at the level of significance 0.05, and we accept the alternative hypothesis that there is a positive role for ease of using channels in customer satisfaction.

The results of the regression analysis of variance to ensure the validity of the model to test the fourth sub-hypothesis

Source of contrast	sum of squares	degrees of freedom	mean of squares	calculated F value	significance level
Regression	8.322	1	8.322	96.782	0,003
The error	2.494	29	0.086		
Total summation	10.815	30			

Significance level 0.05

Determination coefficient $R^2 = 0.769$

Correlation coefficient $R = 0.877$

- Through the results presented in the table above, it is evident that the model is valid for testing the fourth sub-hypothesis, as the calculated value of (F) was (9,821) with a probability value of (0.000), which is less than the level of significance ($\alpha = 0.05$), and it is clear from the same table that the independent variable in its total form Ease of using channels explains 43.1% of the variance

in the dependent variable represented in customer satisfaction, which indicates that there is a statistically significant positive effect of ease of using channels on customer satisfaction.

- Hence, we reject the null hypothesis, which says that there is no positive role for the ease of using channels in customer satisfaction at the level of significance 0.05, and we accept the alternative hypothesis that there is a positive role for ease of using channels in customer satisfaction.

The results of the regression analysis of variance to ensure the validity of the model to test the fifth sub-hypothesis

Source of contrast	sum of squares	degrees of freedom	mean of squares	calculated F value	significance level
Regression	7.037	1	7.037	54.005	0,003
The error	3.779	29	0.130		
Total summation	10.815	30			

Significance level 0.05

Determination coefficient $R^2 = 0.651$

Correlation coefficient $R = 0.807$

- Through the results presented in the table above, it is clear that the model is valid for testing the fifth sub-hypothesis, as the calculated (F) value was (9,821) with a probability value (0.000), which is less than the level of significance ($\alpha = 0.05$). It is clear from the same table that the independent variable in its total form Ease of using channels explains 43.1% of the variance in the dependent variable represented in customer satisfaction, which indicates that there is a statistically significant positive effect of ease of using channels on customer satisfaction.
- Hence, we reject the null hypothesis, which says that there is no positive role for the ease of using channels in customer satisfaction at the level of significance 0.05, and we accept the alternative hypothesis that there is a positive role for ease of using channels in customer satisfaction.

Chapter Conclusion:

Through this applied side that we conducted in the al-salam bank in the state of biskra, we first provided a brief history of the bank, and we also used a

questionnaire as a mean of collecting data for our statistical analysis, afterward we collected the results, to proceed to the final step which is answering the thesis's and clarifying the results in the end.

Conclusion

Conclusion:

In this study we discussed services in general and followed by electronic channels and lastly the relationship between e-channels and customer satisfaction in the theoretical side of the study, in the first chapter we explored the definition of services and the evolution of both banking and banking services, and then the types of services offered by banks, in the second chapter we delved into e-channels by defining it and elaborating Factor's influencing the adoption of e-channels ,followed by the types of e-channels and the barriers they face, and lastly we defined customer satisfaction and elaborated on Factors Influencing Customer Satisfaction in E-Channels, followed by the different methods used by banks to measure customer satisfaction we finished by explaining the relationship between e-channels and customer satisfaction. We also discussed some previous studies that allowed us to grasp a good idea of the subject, in applied side, using the data collected and based on the theoretical side we managed to reach a conclusion and answer the research question.

Results of the study:

Theoretical: background

- Customer satisfaction is considerate an important aspect in the banking industry
- E-channels are vital for customers satisfaction
- E-channels face a growing range of barriers slowing their adoption in the banking industry
- Customers satisfaction affect the usage of e-channels

field work:

- There is a direct correlation between the ease of use of electronic channels on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of $\alpha = 0.05$.
- There is a direct correlation between the cost of using electronic channels on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of significance $\alpha = 0.05$.
- There is a direct correlation between the speed of using channels on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of significance $\alpha = 0.05$.
- There is a direct correlation between confidence in the use of electronic channels on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of significance $\alpha = 0.05$.
- There is a direct correlation between the personalization of electronic channels on customer satisfaction. Where the correlation coefficient was 0.431 at a level of significance equal to 0.003, which is greater than the level of significance $\alpha = 0.05$.
- In the end we conclude that Fulfilling banking services through e-channels has a positive impact on customer satisfaction based on the results processed by (spss).

Limitations:

- Lack of customer cooperation
- Difficulty acquiring a decent sample for the study
- Lack of free sources in this field of study

References

- accountlearning*. (n.d.). Retrieved from *accountlearning*: <https://accountlearning.com/benefits-of-electronic-channels-of-distribution-of-services/>
- Alwi, A. Z. (2008, January). Prospective and challenges of internet banking in Yemen: an analysis of bank websites. *International Journal of Business Excellence*, 353-374. doi:10.1504/IJBEX.2008.017887
- Anna, O. (2018). *Retail Banking: Business Transformation and Competitive Strategies for the Future*. (1. edition, Ed.) Retrieved may 17, 2023, from https://www.researchgate.net/publication/275019112_Retail_Banking_Business_Transformation_and_Competitive_Strategies_for_the_Future_Palgrave_MacMillan_Macmillan_Publishers_2015_pp297
- Belas, M. K. (2016, March). Electronic banking security and customer satisfaction in commercial banks. *Journal of Security and Sustainability Issues*, 411-422. doi:10.9770/jssi.2016.5.3(9)
- Ben Cole. (n.d.). *TechTarget*. Retrieved from TechTarget: <https://www.techtarget.com/searchcio/definition/regulatory-compliance>
- Bow, M. S. (2016, october). The Impact of Cost, Customer Experience, Ease of Use, and Trust towards Adoption of Online Banking. *International Business Research*, 235. doi:10.5539/ibr.v9n11p235
- Bureau, C. F.-C. (2022, February 22). *CFPB*. Retrieved May 05, 2023, from CFPB: <https://www.consumerfinance.gov/ask-cfpb/what-is-a-mortgage-en-99/>
- Ceizyk, D. (2023, April 04). *Lendingtree*. Retrieved from Lendingtree: <https://www.lendingtree.com/home/mortgage/>
- Chaffey, D. &-C. (2019). *Digital Marketing: Strategy, Implementation and Practice*. Pearson Education Limited.
- Chen, S. (2023, february). *Research Gate*. doi:10.54691/bcpbm.v39i.4040
- Clark, M. (1997). Modelling the Impact of Customer-Employee Relationships on Customer Retention Rates in a Major UK Retail Bank. *Management Decision*, 293-301.
- Cleave, P. (2019, October 8). *How to Measure Customer Satisfaction Across Communication Channels*. Retrieved from Smart Survey: <https://www.smartsurvey.co.uk/blog/how-to-measure-customer-satisfaction-across-communication-channels>
- D.Gremler, V. A. (2017). *Services marketing integrating customer focus across the firm* (seventh edition ed.).
- Dev, M. (2006, October 14). Financial Inclusion: Issues and Challenges. *Economic & Political Weekly*. Retrieved from <https://www.epw.in/journal/2006/41/h-t-parekh-finance-column-columns/financial-inclusion-issues-and-challenges.html>
- Electronic Channels in Service Marketing. (n.d.). *business management ideas*. Retrieved from business management ideas: <https://www.businessmanagementideas.com/service-marketing/electronic-channels/electronic-channels-in-service-marketing/17692>
- Gremler, A. W. (2017). *Services Marketing: Integrating Customer Focus Across the Firm*. (7. edition, Ed.) McGraw Hill.
- Hastiani, M. A. (2010). *E-banking and emerging multidisciplinary processes: social, economical and organizational models: social, Economical and Organizational Models*. Hershey, Pa. [u.a.] : Business Science Reference.

- Hussain, A. T. (2016). The Impact of E-Banking on Customer Satisfaction: Evidence from Banking Sector of Pakistan. *Journal of Business Administration Research*, 5(2). doi:10.5430/jbar.v5n2p27
- Igbinedion, W. M. (2009). The adoption of automatic teller machines in Nigeria: An application of the theory of diffusion of innovation. 372-392.
- Jasperson, A. B. (2023, Marsh 24). Retrieved from Investopedia: <https://www.investopedia.com/articles/07/banking.asp>
- Kagan, J. (2023, March 13). *investopedia*. Retrieved from investopedia: <https://www.investopedia.com/terms/o/overdraft.asp>
- Kagan, J. (2023, April 20). *Ivestopedia*. Retrieved from Ivestopedia: <https://www.investopedia.com/terms/i/insurance.asp>
- KAJUJU, N. K. (2016, NOVEMBER). THE EFFECT OF ELECTRONIC BANKING ON LIQUIDITY OF COMMERCIAL BANKS IN KENYA. 1-50. Retrieved from https://financedocbox.com/Credit_and_Debt_and_Loans/68494826-The-effect-of-electronic-banking-on-liquidity-of-commercial-banks-in-kenya-njilu-karen-kajuju.html
- Kalaitzakis, A. (2020, June). The Evolution of Banking: From Retail to Mobile Banks and Fintech. 1-58. doi:10.13140/RG.2.2.18435.73762
- Kalaitzakis, A. (2020, June). The Evolution of Banking: From Retail to Mobile Banks and Fintech. 1-58. doi:10.13140/RG.2.2.18435.73762
- Kalaitzakis, A. (2020, june). The Evolution of Banking: From Retail to Mobile Banks and Fintech. 1-58. doi:10.13140/RG.2.2.18435.73762
- Katti, M. (n.d.). *DemandFarm*. Retrieved May 17, 2023, from DemandFarm: <https://www.demandfarm.com/blog/account-management/>
- Keller, P. K. (2016). *Marketing Management* (15th edition ed.).
- Kolodinsky J.M & Hogarth J.M & Hilgert, M. (2004). The adoption of electronic banking technologies by US. *International Journal of Bank Marketing*, 238-259.
- Kotler, P. a. (2016). *Marketing Mangament 15th edition* (15 ed.). KendalVille, United States of Zmerica: Pearson.
- Kumar, V. &. (n.d.). Customer Relationship Management: Concept, Strategy, and Tools. *springer*, 93.
- Kuo, Y. &. (2016). Understanding the adoption of mobile banking: An empirical analysis of factors influencing mobile banking usage. *Journal of Electronic Commerce Research*.
- Lake, R. (2023, April 26). *investopedia*. Retrieved from investopedia: <https://www.investopedia.com/personal-loan-5076027>
- law insider. (n.d.). *law insider*. Retrieved from <https://www.lawinsider.com/dictionary/electronic-channels>
- law insider*. (n.d.). Retrieved from law insider: <https://www.lawinsider.com/dictionary/banking-service>
- Leder, R. O. (2019, Jun 04). *Customer Loyalty Programs: What Are They? (With Examples)*. Retrieved from salesforce: <https://www.salesforce.com/blog/customer-loyalty-program-examples-tips/>
- Lichtenstein, S. &. (2006). Understanding consumer adoption of e-banking: an interpretive study in. *Journal of Electronic Commerce Research*, 50-66.
- M.Curran, M. L. (2005). Self-Service Technology Adoption: Comparing Three Technologies. *Journal of Services Marketing*, 19(2), 103-113. doi:10.1108/08876040510591411

- McDougall, T. L. (1996). Determinants of Customer Satisfaction in Retail Banking. *International Journal of Bank Marketing*, 12-20.
- Meah, D. B. (2023, February). Customers' Perception on Mobile Banking Operation in Bangladesh: Challenges and Strategies. *research gate*, 230-244. Retrieved from https://www.researchgate.net/publication/368839612_Customers%27_Perception_on_Mobile_Banking_Operation_in_Bangladesh_Challenges_and_Strategies
- Merriam-Webster. (2023, May 08). *Merriam-Webster*. Retrieved from Merriam-Webster: <https://www.merriam-webster.com/dictionary/insurance>
- Mitchell, T. R. (2001). How to Keep Your Best Employees: Developing an Effective Retention Policy. *The Academy of Management Executive*, 15(4), 96-109.
- Mohammadi, S. S. (2012, September). Review banking on biometric in the world's banks and introducing a biometric model for Iran's banking system. *researchgate*, 9152-9160. Retrieved from https://www.researchgate.net/publication/237862006_Review_banking_on_biometric_in_the_world's_banks_and_introducing_a_biometric_model_for_Iran's_banking_system
- mosaic*. (n.d.). Retrieved from mosaic: <https://www.mosaic.tech/financial-metrics/ltv-lifetime-value>
- Munos, C. L. (2014). *Marketing des services*. (s. edition, Ed.) Pearson Education Inc.
- Oghenerukeve, E. (2008). Customers Perception of Security Indicators in Online Banking. *Journal of Internet Banking and Commerce*.
- Oliver, R. L. (1997). Satisfaction: A Behavioral Perspective on the Consumer. *New York: McGraw-Hill*, 13.
- Paudel, N. B. (2023). Impact of E-banking on customer satisfaction. *International Journal of Management and Commerce*, 25-31. Retrieved from https://www.researchgate.net/publication/368837994_International_Journal_of_Management_and_Commerce_wwwmanagementjournalin_Online_Impact_of_E-banking_on_customer_satisfaction
- Scott, D. L. (2003). Wall Street Words: An A to Z Guide to Investment Terms for Today's Investor. (T. Edition, Ed.) p. 124.
- Sekaran, U. (1989). Paths to the job satisfaction of bank employees. *Journal of Organizational Behavior*, 10(4), 347-359.
- Selvanathan, M. (2015). The effects of employees' attitude on excellent work quality among Malaysian government employees towards customers' satisfaction. *Global Management Journal*, 1(7), 14-26.
- Shepherd, T. &. (2008, January). Barriers to electronic commerce adoption in small and medium enterprises: A critical literature review. *Journal of Internet Banking and Commerce*, 13(2), 5-7. Retrieved 5 10, 2023, from https://www.researchgate.net/publication/291006359_Barriers_to_electronic_commerce_adoption_in_small_and_medium_enterprises_A_critical_literature_review
- Sorger, S. (2015). *Marketing Analytics: Strategic Models and Metrics*. Apress.
- Supramaniam, P. J. (2016, October). The Impact of Cost, Customer Experience, Ease of Use, and Trust towards Adoption of Online Banking. *International Business Research*, 235-241. doi:10.5539/ibr.v9n11p235
- Vishnava. (2023, May 11). *cleartax*. Retrieved from cleartax: <https://cleartax.in/g/terms/cheque>
- Wolgast, M. (2001). M&As in the financial industry: A matter of concern for bank supervisors? *Journal of Financial Regulation and Compliance*, 225-236.

- Woodard, D. (2022, April 26). Retrieved from The Balance:
<https://www.thebalancemoney.com/what-is-banking-as-a-service-5248823>
- Yiu CS, G. K. (2007, 03 02). Factors affecting the adoption of Internet Banking in Hong Kong - implications for the banking sector. *International Journal of Information Management*, 27(5), 336-351. Retrieved from <https://dspace.stir.ac.uk/handle/1893/28924>
- Yoon, C. (2010, April 24). Antecedents of customer satisfaction with online banking in China: The effects of experience.

CONTENTS

Chapter one: banking services.....	1
Introduction:.....	2
1.1 Definition and Characteristics of services:.....	3
1.1 Definition of services:.....	3
1.2. Characteristics of services:	3
1.3 Evolution of banking:.....	4
2. Banking services:	5
2.1 Definition of banking services:	5
2.2 Evolution of banking services:	5
2.3 Types of banking services:	6
2.4 Challenges in Banking sector:	7
summary:	10
Chapter Two: E-channels in the banking sector and customers' satisfaction	12
Introduction:.....	13
1. E-channels:.....	14
1.1 Definition of E-channels:.....	14
1.2 Factor's influencing the adoption of e-channels in the banking industry:.....	14
1.3 Types of electronic distribution channels in the banking sector:.....	15
1.4 Barriers in distributing services through electronic channels:	18
summary:	21
2. Customer satisfaction about e-channels:	21
2.1 Customer Satisfaction Definition:.....	21
2.2 Factors Influencing Customer Satisfaction in E-Channels: (dimensions of 2.1 customer satisfaction toward e-channels):	22
2.3 Measuring customer satisfaction:	22
2.4 The relationship of E-channels on customers satisfaction:.....	24
summary:	25
Theoretical Chapters conclusion:.....	26
Chapter Three: Field study of Al-Salam Bank branch in the state of Biskra	32
1. the study sample, the method of data collection, and the statistical tools used, overview of the bank:.....	33

1.1 Overview of Al-Salam Bank:	33
1.2 Study variables:	34
1.3 the study population and sample:	34
1.4 Data collection method (data collection sources):	34
1.5 the statistical tools used:	34
2. the descriptive framework of the study:	34
2.1 The five-point Likert scale:	45
2.2 Testing the normal distribution of the study variables:	46
3. Hypothesis testing and analysis:	47
3.1 Study hypotheses:	50
Chapter Conclusion:	57
Conclusion	58
Results of the study:	58
Limitations:	58
Suggestions:	59
References	60
Appendices	65

Appendices

Appendix 01

ملحق بالقرار رقم 10826... المؤرخ في 27-06-2020
الذي يحدد القواعد المتعلقة بالوقاية من السرقة العلمية ومكافحتها



الجمهورية الجزائرية الديمقراطية الشعبية
وزارة التعليم العالي والبحث العلمي

مؤسسة التعليم العالي والبحث العلمي:

نموذج التصريح الشرفي
الخاص بالالتزام بقواعد النزاهة العلمية لإنجاز بحث

أنا الممضي أسفله .

السيد(ة): عبدالمجيد مسعود الصفة: طالب، أستاذ، باحث طالب
الحامل(ة) لبطاقة التعريف الوطنية رقم: 2020063499 والصادرة بتاريخ 2022.06.27
المسجل(ة) بكلية / معهد العلوم الاقتصادية والتسيير قسم تجارة
والمكلف(ة) بإنجاز أعمال بحث (مذكرة التخرج، مذكرة ماستر، مذكرة ماجستير، أطروحة دكتوراه).
عنوانها: The effect of fulfilling banking services through e-channels on customer satisfaction, case study: al-salam Bank
أصرح بتسريفي أنني ألتزم بمراعاة المعايير العلمية والمنهجية ومعايير الأخلاقيات المهنية والنزاهة الأكاديمية
المطلوبة في إنجاز البحث المذكور أعلاه .

التاريخ: 2023/06/04

توقيع المعني (ة)

Appendix 02

الجمهورية الجزائرية الديمقراطية الشعبية

وزارة التعليم العالي و البحث العلمي

جامعة محمد خيضر - بسكرة

كلية العلوم الاقتصادية و التجارية و علوم التسيير

قسم : العلوم التجارية السنة الثانية ماستر: تسويق مصرفي

استمارة الاستبيان الموجهة لزيائن بنك السلام الجزائري بسكرة

أسعد الله أوقاتكم بكل خير ..

أنا طالب ماستر تخصص تسويق مصرفي بجامعة محمد خيضر , وقد قمت بتصميم نموذج استبيان قياس مدى الرضا حول القنوات الالكترونية المصرفية لبنك السلام فرع بسكرة , سيستغرق بضع دقائق من وقتك , أرجو منك الإجابة عنه .

ضع علامة X علي الخانة المناسبة :

الجنس: ذكر: انثى:

العمر: المستوى التعليمي:

- | | | |
|--------------------------|------------------------|--------------|
| <input type="checkbox"/> | تعليم ابتدائي | • 18-25 |
| <input type="checkbox"/> | التعليم المتوسط | • 26-35 |
| <input type="checkbox"/> | التعليم الثانوي | • 36-45 |
| <input type="checkbox"/> | متخرج جامعي | • 46-55 |
| <input type="checkbox"/> | متخرج من المعهد /تكوين | • اكبر من 56 |

مجال العمل:

- | | |
|--------------------------|-----------------------|
| <input type="checkbox"/> | • موظف |
| <input type="checkbox"/> | • أجير |
| <input type="checkbox"/> | • تاجر |
| <input type="checkbox"/> | • طالب |
| <input type="checkbox"/> | • غيرها , اذكر: |

الدخل الفردي(الشهر):

- | | |
|--------------------------|-------------------------|
| <input type="checkbox"/> | • أقل من 30000 دج |
| <input type="checkbox"/> | • بين 30000 و 100000 دج |
| <input type="checkbox"/> | • أكثر من 100000 دج |

نوع الحسابات البنكية:

- | | |
|--------------------------|-------|
| <input type="checkbox"/> | إدخار |
| <input type="checkbox"/> | جاري |

غيرها , اذكر

سنوات التعامل مع البنك:

- أقل من 1 سنة من 1-5 سنوات
- من 6-10 سنوات أكثر من 10 سنوات

ما هي القنوات الإلكترونية التي تستخدمها بشكل أساسي في المعاملات المصرفية؟ (يمكن الاختيار أكثر من واحدة):

- الخدمات المصرفية عبر الإنترنت (الموقع)
- الخدمات المصرفية عبر الهاتف المحمول (تطبيق جوال)
- خدمات أجهزة الصراف الآلي (GAB)
- أنظمة نقاط البيع (TPE)

غيرها اذكر

ما هي القناة (القنوات) الإلكترونية المحددة التي تستخدمها بشكل متكرر؟

.....

هل تقوم بجميع المهام المصرفية التي تحتاجها باستخدام قنواتنا الإلكترونية؟

- نعم لا

كم مرة تستخدم القنوات الإلكترونية للمعاملات المصرفية؟ (مثل الخدمات المصرفية عبر الإنترنت):

- يوميا أسبوعيا شهريا نادرا

سهولة استخدام القنوات الإلكترونية: (تطبيق جوال , الصراف الآلي)

العبارة	موافق تماما	موافق	محايد	غير موافق	غير موافق تماما
القيام بالعمليات البنكية الإلكترونية لا يأخذ الكثير من الوقت					
تحديد الميزات أو الأقسام المرغوبة داخل القنوات الإلكترونية سهل					
تعلم استخدام هذه القنوات سهل بالنسبة لك					
واجهة القنوات الإلكترونية بديهية وسهلة الاستخدام					

تكلفة استخدام القنوات الإلكترونية: (تطبيق جوال، الصراف الآلي)

غير موافق تماماً	غير موافق	محايد	موافق	موافق تماماً	العبارات
					لدي علم بالتكاليف المرتبطة بالعمليات المصرفية عبر القنوات الإلكترونية
					أجد أن معلومات التكاليف المقدمة عن القنوات الإلكترونية واضحة وسهلة الفهم؟
					أعتقد أن التكاليف المرتبطة بالقنوات الإلكترونية عادلة ومعقولة؟
					بالنظر إلى التكاليف المفروضة هل تشعر أن القنوات الإلكترونية توفر قيمة مقابل ما تدفعه؟

سرعة استخدام القنوات الإلكترونية: (تطبيق جوال، الصراف الآلي)

غير موافق تماماً	غير موافق	محايد	موافق	موافق تماماً	العبارات
					تتم معالجة المعاملات من خلال القنوات الإلكترونية بسرعة وكفاءة.
					استجابات وتفاعلات النظام داخل القنوات الإلكترونية سريعة الاستجابة
					يتم تحديث معلومات الحساب وتفاصيل المعاملات في الوقت الفعلي داخل القنوات الإلكترونية.
					أجد أن سرعة استخدام القنوات الإلكترونية مرضية.

الثقة في استخدام القنوات الإلكترونية: (تطبيق جوال، الصراف الآلي)

غير موافق تماماً	غير موافق	محايد	موافق	موافق تماماً	العبارات
					أنا على ثقة من أن معلوماتي الشخصية والمالية آمنة عند استخدام القنوات الإلكترونية لبنك السلام.
					أشعر بالثقة في ميزات وبروتوكولات الأمان المطبقة في القنوات الإلكترونية لبنك السلام.
					أنا على ثقة من أن المعاملات التي تتم من خلال القنوات الإلكترونية تتم معالجتها بدقة وموثوقية.

					لدي إيمان بضمانات الخصوصية التي تحتفظ بها القنوات الإلكترونية لبنك السلام .
					إضفاء الطابع الشخصي في استخدام القنوات الإلكترونية :

العبارات					
غير موافق تماما	غير موافق	محايد	موافق	موافق تماما	
					توفر القنوات الإلكترونية توصيات وعروضا مخصصة بناء على تفضيلاتي
					أجد أن القنوات الإلكترونية تقدم خيارات لتخصيص الواجهة وفقا لاحتياجاتي.
					المحتوى والخدمات المعروضة في القنوات الإلكترونية مخصصة لتناسب أهدافي واهتماماتي المالية .

العبارات					
غير راض تماما	غير راض	محايد	راض	راض جدا	
					هل انت راضى عن الخدمات الالكترونية المقدمة من طرف البنك؟
					هل انت راضى عن دعم العملاء والمساعدة المقدمة لخدماتنا المصرفية الإلكترونية؟
					هل انت راضى عن خدمة العملاء والدعم الذي يقدمه مصرفنا؟
					هل انت راضى عن الخدمات الالكترونية المقدمة من طرف البنك؟
					هل انت راضى عن القيمة مقابل المال الذي تتلقاه من بنكنا؟

ما هي التحسينات أو الميزات الإضافية التي ترغب في رؤيتها لتعزيز رضاك ؟

.....

هل توصي بالبنك لغيرك بناء على تجربتك مع البنك؟

نعم ممكن لا

شكرا لمشاركاتكم في هذا الاستطلاع! تعتبر تعليقاتك ذات قيمة بالنسبة لنا في فهم القنوات الأكثر استخداما ، وتقييم سهولة الاستخدام ، وتقييم رضا العملاء بشكل عام .

الجمهورية الجزائرية الديمقراطية الشعبية
وزارة التعليم العالي والبحث العلمي

بسكرة في: 15 - 05 - 2023
إلى السيد: مدير بنك السلام
وكالة بسكرة



جامعة محمد خيضر - بسكرة
كلية العلوم الاقتصادية والتجارية
وعلوم التسيير
عمادة الكلية
الرقم: 737 / ك.ق.ت.ت / 2023

طلب مساعدة لاستكمال مذكرة التخرج

دعما منكم للبحث العلمي، نرجو من سيادتكم تقديم التسهيلات اللازمة للطالب:

1 - صولي محمود

المسجل بالسنة: ثانية ماستر تخصص: تسويق مصرفي

وذلك لاستكمال الجانب الميداني لمذكرة الماستر المعنونة ب:

" The effect of fulfilling banking services through e-channels on customer satisfaction "

تحت إشراف: أ/ يزغش كميليا

في الأخير تقبلوا منا أسى عبارات التقدير والاحترام

عميد الكلية



نائب العميد للدراسات والبحوث

د. غربي وهيب

تأشيرة المؤسسة المستقبلية



رضوان صولي
نائب مدير فرع

جامعة بسكرة
ص.ب 145 ق.ر- بسكرة

Appendix 04

Q1

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide موافق غير	1	3.2	3.2	3.2
محايد	4	12.9	12.9	16.1
موافق	15	48.4	48.4	64.5
بشدة موافق	11	35.5	35.5	100.0
Total	31	100.0	100.0	

Q2

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide محايد	3	9.7	9.7	9.7
موافق	23	74.2	74.2	83.9
بشدة موافق	5	16.1	16.1	100.0
Total	31	100.0	100.0	

Q3

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide موافق غير	1	3.2	3.2	3.2
محايد	1	3.2	3.2	6.5
موافق	23	74.2	74.2	80.6
بشدة موافق	6	19.4	19.4	100.0
Total	31	100.0	100.0	

Q4

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide محايد	4	12.9	12.9	12.9
موافق	22	71.0	71.0	83.9
بشدة موافق	5	16.1	16.1	100.0
Total	31	100.0	100.0	

Q5

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	4	12.9	12.9	12.9
	محايد	5	16.1	16.1	29.0
	موافق	13	41.9	41.9	71.0
	بشدة موافق	9	29.0	29.0	100.0
	Total	31	100.0	100.0	

Q6

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	1	3.2	3.2	3.2
	محايد	7	22.6	22.6	25.8
	موافق	11	35.5	35.5	61.3
	بشدة موافق	12	38.7	38.7	100.0
	Total	31	100.0	100.0	

Q7

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	1	3.2	3.2	3.2
	محايد	5	16.1	16.1	19.4
	موافق	17	54.8	54.8	74.2
	بشدة موافق	8	25.8	25.8	100.0
	Total	31	100.0	100.0	

Q8

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	2	6.5	6.5	6.5
	محايد	4	12.9	12.9	19.4

موافق	16	51.6	51.6	71.0
بشدة موافق	9	29.0	29.0	100.0
Total	31	100.0	100.0	

Q9

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide موافق غير	1	3.2	3.2	3.2
محايد	9	29.0	29.0	32.3
موافق	16	51.6	51.6	83.9
بشدة موافق	5	16.1	16.1	100.0
Total	31	100.0	100.0	

Q10

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide موافق غير	2	6.5	6.5	6.5
محايد	7	22.6	22.6	29.0
موافق	15	48.4	48.4	77.4
بشدة موافق	7	22.6	22.6	100.0
Total	31	100.0	100.0	

Q11

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide موافق غير	4	12.9	12.9	12.9
محايد	9	29.0	29.0	41.9
موافق	13	41.9	41.9	83.9
بشدة موافق	5	16.1	16.1	100.0
Total	31	100.0	100.0	

Q12

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	2	6.5	6.5	6.5
	محايد	3	9.7	9.7	16.1
	موافق	19	61.3	61.3	77.4
	بشدة موافق	7	22.6	22.6	100.0
	Total	31	100.0	100.0	

Q13

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	1	3.2	3.2	3.2
	محايد	6	19.4	19.4	22.6
	موافق	14	45.2	45.2	67.7
	بشدة موافق	10	32.3	32.3	100.0
	Total	31	100.0	100.0	

Q14

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	2	6.5	6.5	6.5
	محايد	5	16.1	16.1	22.6
	موافق	14	45.2	45.2	67.7
	بشدة موافق	10	32.3	32.3	100.0
	Total	31	100.0	100.0	

Q15

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	محايد	7	22.6	22.6	22.6
	موافق	15	48.4	48.4	71.0
	بشدة موافق	9	29.0	29.0	100.0
	Total	31	100.0	100.0	

Q16

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	3	9.7	9.7	9.7
	محايد	6	19.4	19.4	29.0
	موافق	19	61.3	61.3	90.3
	بشدة موافق	3	9.7	9.7	100.0
	Total	31	100.0	100.0	

Q17

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	4	12.9	12.9	12.9
	محايد	11	35.5	35.5	48.4
	موافق	13	41.9	41.9	90.3
	بشدة موافق	3	9.7	9.7	100.0
	Total	31	100.0	100.0	

Q18

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	2	6.5	6.5	6.5
	محايد	12	38.7	38.7	45.2
	موافق	12	38.7	38.7	83.9
	بشدة موافق	5	16.1	16.1	100.0
	Total	31	100.0	100.0	

Q19

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	4	12.9	12.9	12.9
	محايد	6	19.4	19.4	32.3
	موافق	15	48.4	48.4	80.6

بشدة موافق	6	19.4	19.4	100.0
Total	31	100.0	100.0	

Q20

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide موافق غير	2	6.5	6.5	6.5
محايد	7	22.6	22.6	29.0
موافق	18	58.1	58.1	87.1
بشدة موافق	4	12.9	12.9	100.0
Total	31	100.0	100.0	

Q21

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide موافق غير	1	3.2	3.2	3.2
محايد	11	35.5	35.5	38.7
موافق	12	38.7	38.7	77.4
بشدة موافق	7	22.6	22.6	100.0
Total	31	100.0	100.0	

Q22

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide موافق غير	1	3.2	3.2	3.2
محايد	8	25.8	25.8	29.0
موافق	16	51.6	51.6	80.6
بشدة موافق	6	19.4	19.4	100.0
Total	31	100.0	100.0	

Q23

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé

Valide	موافق غير	2	6.5	6.5	6.5
	محايد	7	22.6	22.6	29.0
	موافق	15	48.4	48.4	77.4
	بشدة موافق	7	22.6	22.6	100.0
	Total	31	100.0	100.0	

Q24

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موافق غير	2	6.5	6.5	6.5
	محايد	6	19.4	19.4	25.8
	موافق	14	45.2	45.2	71.0
	بشدة موافق	9	29.0	29.0	100.0
	Total	31	100.0	100.0	

sex

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	male	18	58.1	58.1	58.1
	female	13	41.9	41.9	100.0
	Total	31	100.0	100.0	

age

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	from 18-25	15	48.4	48.4	48.4
	from 26-35	12	38.7	38.7	87.1
	from 36-45	3	9.7	9.7	96.8
	from 46-55	1	3.2	3.2	100.0
	Total	31	100.0	100.0	

Qualification

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	الثانوي التعليم	3	9.7	9.7	9.7
	جامعي متخرج	28	90.3	90.3	100.0
	Total	31	100.0	100.0	

Employment

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	موظف	11	35.5	35.5	35.5
	أجير	2	6.5	6.5	41.9
	تاجر	1	3.2	3.2	45.2
	طالب	17	54.8	54.8	100.0
	Total	31	100.0	100.0	

according to inndividual income

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	دج 30000 من أقل	14	45.2	45.2	45.2
	دج 30000 و 100000 بين	14	45.2	45.2	90.3
	دج 100000 من اكثر	3	9.7	9.7	100.0
	Total	31	100.0	100.0	

Type of bank account

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	إدخار	7	22.6	22.6	22.6
	جاري	20	64.5	64.5	87.1
	3.0	4	12.9	12.9	100.0
	Total	31	100.0	100.0	

year of dealing with the bank

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	سنة 1 من أقل	10	32.3	32.3	32.3
	سنوات 5 إلى 1 من	13	41.9	41.9	74.2
	سنوات 10 إلى 6 من	8	25.8	25.8	100.0
	Total	31	100.0	100.0	

mainly used electronic channel

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	الانترنات غير المصرفية الخدمات	6	19.4	19.4	19.4
	المحمول الهاتف غير المصرفية الخدمات	12	38.7	38.7	58.1
	الآلي الصراف أجهزة خدمات	12	38.7	38.7	96.8
	البيع نقط انظمة	1	3.2	3.2	100.0
	Total	31	100.0	100.0	

do you use electronic channels in all your dealings

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	نعم	13	41.9	41.9	41.9
	لا	18	58.1	58.1	100.0
	Total	31	100.0	100.0	

how often do you use electronic channels

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	يومية	3	9.7	9.7	9.7
	أسبوعيا	5	16.1	16.1	25.8
	شهريا	13	41.9	41.9	67.7
	نادرا	10	32.3	32.3	100.0
	Total	31	100.0	100.0	

do you recommend the bank

	Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide نعم	14	45.2	45.2	45.2
ممکن	16	51.6	51.6	96.8
لا	1	3.2	3.2	100.0
Total	31	100.0	100.0	

Récapitulatif des modèles

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	.782 ^a	.612	.599	.3804

a. Prédicteurs : (Constante), محور1

ANOVA^a

Modèle	Somme des carrés	ddl	Carré moyen	F	Sig.
1 Régression	6.620	1	6.620	45.757	.000 ^b
Résidus	4.196	29	.145		
Total	10.815	30			

a. Variable dépendante : محور2

b. Prédicteurs : (Constante), محور1

Récapitulatif des modèles

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	.574 ^a	.329	.306	.5001

a. Prédicteurs : (Constante), بعد1

ANOVA^a

Modèle	Somme des carrés	ddl	Carré moyen	F	Sig.
1 Régression	3.561	1	3.561	14.237	.001 ^b
Résidus	7.254	29	.250		
Total	10.815	30			

- a. Variable dépendante : محور2
 b. Prédicteurs : (Constante), بعد1

Récapitulatif des modèles

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	.650 ^a	.423	.403	.4641

- a. Prédicteurs : (Constante), بعد2

ANOVA^a

Modèle		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	4.570	1	4.570	21.217	.000 ^b
	Résidus	6.246	29	.215		
	Total	10.815	30			

- a. Variable dépendante : محور2
 b. Prédicteurs : (Constante), بعد2

Récapitulatif des modèles

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	.871 ^a	.758	.750	.3003

- a. Prédicteurs : (Constante), بعد3

ANOVA^a

Modèle		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	8.200	1	8.200	90.917	.000 ^b
	Résidus	2.616	29	.090		
	Total	10.815	30			

- a. Variable dépendante : محور2
 b. Prédicteurs : (Constante), بعد3

Récapitulatif des modèles

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	.877 ^a	.769	.761	.2932

a. Prédicteurs : (Constante), بعد4

ANOVA^a

Modèle		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	8.322	1	8.322	96.782	.000 ^b
	Résidus	2.494	29	.086		
	Total	10.815	30			

a. Variable dépendante : محور2

b. Prédicteurs : (Constante), بعد4

Récapitulatif des modèles

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	.807 ^a	.651	.639	.3610

a. Prédicteurs : (Constante), بعد5

ANOVA^a

Modèle		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	7.037	1	7.037	54.005	.000 ^b
	Résidus	3.779	29	.130		
	Total	10.815	30			

a. Variable dépendante : محور2

b. Prédicteurs : (Constante), بعد5

Statistiques

		محور1	محور2	بعد1	بعد2	بعد3	بعد4	بعد5
N	Valide	31	31	31	31	31	31	31
	Manquant	0	0	0	0	0	0	0
Asymétrie		.484	.396	.111	-.215	.453	.374	.126
Erreur standard d'asymétrie		.421	.421	.421	.421	.421	.421	.421
Kurtosis		.552	-.472	.649	-.669	.417	.334	-.073
Erreur standard de Kurtosis		.821	.821	.821	.821	.821	.821	.821