How to Cite:

Dinar, A. (2024). The impact of digital technology on customers of banking services: The case of BEA Oran. *International Journal of Economic Perspectives*, 18(10), 1733–1747. Retrieved from https://ijeponline.org/index.php/journal/article/view/673

The impact of digital technology on customers of banking services: The case of BEA Oran

Amel Dinar

NTDPA, the New Trends and Challenges of Development Policies in Algeria, Mohamed Ben-Ahmed University, Oran 2, Algeria

Abstract—The objective of our research was to apprehend the impact of the digitalization of banking services and its impact on consumer behavior. To this end, a questionnaire was administered to BEA bank customers, 102 of whom responded. The main results of our research revealed: firstly, that the majority of customers use these services mainly via ATMs; they generally use online services for the least engaging operations, such as: balance and withdrawal queries; secondly, that despite digitalization, the number of branch visits remains very regular, which explains customers' attachment to their branches and their advisors; and lastly, that customers recognize the advantages of online services in terms of time-saving, mobility, autonomy and simplicity, but the fear of complicated use of these services is a major obstacle to their use.

Keywords---Banking Digitalization, Consumer Behavior, Digital services, Marketing, BEA.

1. Introduction

The 21st century has witnessed the emergence of new means of communication. Technical and technological progresses have accelerated globalization. Information can now be transmitted almost instantaneously across the globe. This fact opens up new horizons for marketing and new platforms to exploit, such as social networks. (LEJEALLE & DELECOLLE, 2017)

The Internet and the digital revolution, in particular connected objects, have turned our daily lives upside down. Consumers are now ultra-connected, using the Internet for all their daily activities. Customer behaviors have changed, and their expectations are increasingly sophisticated. They are more opportunistic and less loyal. They are more sensitive than in the past to quality/price ratio. The customer wants to control his/her choices. He/She no longer wants to pay for products/services he/she doesn't need.

© 2024 by The Author(s). © SY ISSN: 1307-1637 International journal of economic perspectives is licensed under a Creative Commons Attribution 4.0 International License.

Corresponding author: Dinar, A., Email: dinar.amel@univ-oran2.dz

Submitted: 20 July 2024, Revised: 14 September 2024, Accepted: 16 October 2024

Recent decades have seen the emergence of many trendy neologisms linked to new technologies: The 90s with internet, browser, world wide web, e-commerce, the 2000s with web 2.0, social networks, cloud, web services, SoLoMo (social local mobile). Finally, in the 2010s, we have seen the emergence of the terms big data, internet of things, connected objects, IT, smart factory, apps, machine learning and artificial intelligence. In this digital world, marketing acts as a bridge between the company and its customers' needs and desires, enabling them to acquire the right product, in the right place, at the right time. (BARAY, 2018)

According to (LEJEALLE & DELECOLLE, 2017) marketing has never experienced so many revolutions as it has with the internet. Digital is revolutionizing the demand, the connected consumer and the immediacy enabling a rich and reenchanted experience. It is revolutionizing the offer and the environment; pure players, marketplaces. It is also revolutionizing businesses and marketing, from a transactional to a relational vision.

Digital" or 'online' communication stems from practices that have become rapidly and firmly entrenched in us in less than twenty years. Mobile devices have turned the Internet not only into a powerful medium, but also into an everyday companion. Numerous human, social, cooperative, economic, political and commercial activities are based on it. As a result, the strength of this movement is forcing the players of this mediatic ecosystem to question themselves about the effects of the adoption of digital tools on communications between individuals on one hand, and between organizations and individuals on the other. (LUCAS-BOURSIER & PELET, 2017)

Since the 1980s, banking has undergone profound upheavals, perhaps more remarkable than those in any other sector. The emergence of new information and communication technologies is opening up new possibilities for interaction between banks and customers. ADALA & DJELLAM, (2015) have determined that there is a significant effect between the utilization of e-marketing and the improvement of bank performance in terms of customers' satisfaction, costs, market share and the bank's reputation.

Faced with a more demanding clientele that is increasingly equipped and familiar with the use of new technologies for its personal and professional needs, the banking sector is facing the birth of a new mindset and a remarkable revolution in management practices. (ZOLLINGER & LAMANQUE, 2004). With the introduction of these new technologies, banks are moving from traditional distribution networks (bank branches and physical points of contact) to technological channels such as websites, cell phones, call centers and ATMs..., integrating customers into the organization through these innovations. (BENAVENT, 2000).

In Algeria, which is a developing country, we've seen strong growth in the digital sector in recent years, although it's still in its infancy. It's starting to gain ground in companies, especially service providers. BESSAI-KESSOUH (2020), asserts that much remains to be done in terms of bank management, particularly in terms of information systems and the use of ICTs in general.

Indeed, the Algerian banking sector is at the epicenter of these profound changes. In recent years, we have seen the emergence of new banking products and services, incorporating modern technologies such as account checking via the Internet, call centers, electronic payment cards and ATMs. Hence the interest in studying the behavior of the Algerian banking consumer in the face of these innovations, in order to determine whether or not he or she is receptive to the strategy implemented by the banks in Algeria.

The aim of our research is to provide some responses to the following question:

"Could the digitalization of banking services shake up consumer behavior?" The following questions arise from this problematic:

- What factors influence the customer's decision to go digital?
- What are the motivations and obstacles to digital banking?
- Are customers really using online services?

Digitalization is part of our daily lives. It's a hot topic right now, and we're obviously looking to exploit new online services.

So the main aim of our research is to find out whether customers are embracing this digitization, and what factors influence them with regard to the online services offered by banks.

The choice of the banking sector as the subject of our research is not fortuitous, as it is at the epicenter of these profound changes.

In the light of the foregoing, a first response to all these queries can be found in the following hypotheses:

H1: Age, socio-professional category and level of education are the main factors influencing customers.

H2: Simplicity, autonomy and responsiveness are the main motivations for customers, while fear of complexity is the main obstacle to using online services.

We will endeavor to push our reflection on this theme by answering these questions with the aim of providing precise answers to our problematic in the most methodical way possible. In order to answer these questions, we will submit a study survey.

It will also enable us to confirm or refute our research hypotheses, and to draw conclusions from the results of this inquiry.

2. The revolution and development of online banking:

The digital revolution of the last 15 years has had a major impact on banks and their related occupations. Since ancient times, banks have been key players in the economy. One of their main roles is to collect savings, which they then redistribute in the form of loans. They also enable monetary exchanges and payments, but the arrival of digital technology will suddenly bring everything into question.

Since 2000, with the advent of the web and the Smartphone, we have witnessed the democratization of the Internet. Banks gradually opened up to the web (essentially access to online accounts). A new competition of 100% online activities (Pure Player) has emerged, which is probably the opposite of the traditional branch agency model.

Then in 2007, another major event occurred. It was the release of the first IPhone. This was the birth of digital in the truest sense of the word, and naturally gave rise to new behaviors. Internet users are now connected ATAWAD (anytime, anywhere, any-device) (LAMIRAULT, 2017)

As a result, banks have found themselves facing new threats, notably the evolution of behavior patterns (ultra-connected), the emergence of new competition, better access to information and the loss of some monopolies.

As a result, banks have found themselves faced with a new banking model: connected, agile and social, in which the traditional branch agency and the advisor play a different role in the relationship with the customer.

According to LAMIRAULT (2017) "Banks have well realized one thing, they don't need a digital strategy... but digital in their strategies".

So they have adapted, offering services via new channels such as e-agencies or banking applications. It was here that we saw the birth of a new model: distance banking without distance.

2.1. The development of online banking:

The Internet and new information technologies and communication have made human life easier. Every day, new aspects of their use are emerging. The bank's development is keeping pace with changing customer habits and with the needs not covered by traditional banks. In particular, remote access in all its forms, anywhere and anytime, covering a need largely unfulfilled by banking networks.

The development of online banking takes two different forms: the first is through the creation and development of fully online operators, and the second is through the development of gradually offered online services to customers by traditional banks as part of a multi-channel or omni-channel approach. (ROMAN & TCHIBOZO, 2017)

2.2. E-banking:

Several terms are used to refer sometimes to the same thing, sometimes to very different aspects, or even partially similar. "e-banking", "home banking", "remote banking" or "online banking", the terms are multiplying and the definitions vary depending on the author.

COPULSKY & WOLF (1990) have defined "e-banking" as follows: "Internet banking is a term that implies the use of computers, so an automatic delivery by electronic means as "Internet Banking", and in addition takes into account other possible devices such as mobile "Mobile banking", mobile phones, digital televisions "TV Banking", ...etc.".

STAMOULIS (1999) defines e-banking as "a channel for distributing and delivering financial services via multimedia communication, in a global and less costly way".

DINIZ (1997) describes e-Banking as "a service provided by several financial institutions, enabling customers to carry out banking transactions via the Internet, using a medium such as PC, telephone, Minitel, or other devices".

According to the magazine "banque.fr", a remote bank is defined as follows: "A remote bank is a bank that offers a range of banking services electronically, essentially via the Internet. A remote bank enables its customers to manage a bank account, with possibilities for consulting accounts, making transfers, obtaining credit or investing in different financial products".

Electronic banking can also be defined as a variety of the following platforms:

- a) Internet banking (or online banking).
- b) Mobile Phone banking.
- c) Banking via my television.
- d) PC banking (outside the bank).
- e) (Automated Teller Machine) ATM terminal.

We've noticed that with the advent of e-banking, a new kind of bank has emerged. The virtual bank or internet bank is a branchless bank that offers the same financial products and services as a traditional bank, but only via the internet or other electronic channels.

E-banking makes it easier to compare banking services and products and can increase inter-bank competitivity, enabling banks to penetrate new markets and extend their operating range. Some even see it as a way of bypassing the barriers for countries with less-developed financial systems, or through wireless communication systems that are developing faster than networks.

2.3. The evolution of e-banking:

The development of e-banking follows the evolution of customer usage and the needs not covered by traditional banks. In particular, remote access anywhere, anytime in all its forms. Traditional banks offer opening hours and types of customer relations and service that generate dissatisfaction, as NPS recommendation surveys show every year, in the contrary for to the services offered by online banks.

The customer experience, the new credo of banking marketing, is significantly better in this type of relationship, due to greater autonomy and therefore greater freedom for the customer, more simplicity and clarity of service and, not to mention extremely competitive or even free rates for certain services, overturning traditional network banking practices and introducing a new type of customer relationship and service, online banks have introduced a profound change in the way banking is practiced, responding to the unsatisfied needs of customers. This has been the case until now, and is generating new expectations. This represents the main lever of transformation, driven by technical solutions and the proliferation of uses, notably the widespread use of smartphones.

Operators are developing a series of competitive advantages to acquire significant market share in account openings, and more progressively in basic banking services, and more recently in mortgages. The growth potential of online banking is very significant, as all the technical and legal possibilities are available to develop a complete range of products and services online, including advisory.

E-banking is the product of different generations of electronic transactions. E-banking is the latest of several generations of systems: automated teller machines (ATMs), phone Banking. PC Banking.

Automated teller machines (ATMs) were the first well-known machines to provide electronic access to customers, while with phone banking; users are in contact with their bank's computer via their phone. PC Banking has replaced phone banking and allows users to interact with their bank by means of a computer with a dial-up modem connection to the telephone network. Phone and PC Banking installation procedures are complex and restrictive.

2.4. The various digital services offered by the bank (BEA) 2.4.1. Phones and digital tablets:

A few years ago, the phone was just a tool for banks to prospect or make appointments with their customers, or for customers to obtain information on banking products and services, or to place stock market orders. The phone remains an indispensable channel for the distribution of banking products and services in France. For this reason, banking institutions have invested heavily over the past twenty years in developing their telephone platforms and customer relations centers (call centers). They now offer a wide range of services for which customers prefer to call rather than going to a branch (to carry out simple operations such as checking balances, making transfers, changing contact details, resolving a problem or litigation, or finding out about financial products or placements, ...etc.).

Nevertheless, over the last ten years, mobile telephony has spread throughout the world at an impressive speed, while offering models with increasingly sophisticated functions and applications. Today, the emergence of smartphones and digital tablets has completely changed the banking landscape and contributed massively to the growth of remote banking. These new technologies constitute an information, management and transaction channel for banking services.

2.4.2. E-banking service

E-Banking is a remote banking service whereby the bank provides its customers with multiple distribution channels (internet, fax, voice and MMS) for accessing account information. The system was first launched in Algeria in January 2010 by BNA, CPA and BEA banks.

The user of this service is a physical person, authorized to carry out transactions on his protected account, using his password and his identification number which is unique and issued by an electronic accessory, which is given to the user when he subscribes to the e-banking service. The bank applies the most stringent security measures to protect the online service, which are implemented at three levels:

- a) Secured connection: "https://" encryption for enhanced security.
- b) A single password: the customer can only be registered once in the e-banking system.

c) Electronic signature: By using the identification number issued when subscribing to the e-banking service. The identification number displays a code that changes every minute.

According to HASHEM SHERI (2007), the combination of these 3 elements guarantees an optimum security for e-banking transactions.

The e-banking offer comprises the following services:

- Remote consultation of the E-Banking service through the link: https://ebanking.bea.dz/fr/,
- Account details,
- The edition of the International Bank Account Number (IBAN),
- List of account movements,
- Account balance history for up to 90 days and more,
- Downloads (account statements in PDF, WORD, EXCEL, ...etc.),
- Checkbook and cheque consultation,
- Password change.

And other services to suit the needs of the bank's customers.

2.4.3. E-payment service:

The new taxation information system is currently under elaboration, and improving the relationship with the company is one of its strategic objectives. This first portal is an experiment in remote procedures designed to facilitate and simplify tax compliance. It enables tax returns to be filed via the Internet. The associated payment is based on electronic transfer via the bank's mass payment system, or by remote payment via the e-banking portal, which is a service offered by banks.

The BEA introducing the e-payment service, offering the possibility of paying bills and services on websites that accept this type of payment method. Among the Benefits:

- Secure: A secure service that guarantees the rights of "Web Buyers".
- Easy: Making payments with simplicity.
- Accessible: 24 hours a day, 7 days a week.
- Convenient: Time-saving and energy-saving by avoiding the need to travel.

2.4.4. Technologies payment system:

These are devices for automatic cash withdrawal installed at branches. These include ATMs, ACD, and EPT (Eftpos) terminals, which are described below:

2.4.4.1. Automated Teller Machine (ATM):

In other words, an ATM is a machine that enables bank cardholders to carry out a wide range of operations without the need for bank staff, 24 hours a day. They are installed inside branches and enable customers to carry out their own banking operations (account checking, checkbook ordering, balance checking, IBAN request, account-to-account transfers within the bank, cheque deposit, cash deposit, cash withdrawal, ...etc.), by using their bank card and a confidential code (PIN).

2.4.4.2. Automated Cash Dispensers (ACD):

They are automatic cash withdrawal machines allowing customers to make cash withdrawals. They are installed by credit institutions; post office cheque centers

(PCC) or major card issuers (department stores, ...etc.), enabling customers to withdraw cash from their accounts using a bank card and a confidential code.

2.4.4.3. Electronic Payment Terminal (EPT):

Also called "Electronic Funds Transfer at Point Of Sale" (Eftpos), it consist in an electronic device capable of reading credit card data, recording transactions and communicating with a remote authentication server. In this way, simultaneously it ensures fast, safe and efficient processing payment of transactions. To use an EPT, a merchant must sign a contract with his bank, setting a maximum transaction amount above which authorization is required, as well as the fees the bank will charge as commission on each payment made. This type of device offers a number of advantages: high security; easy to use; not encumbering; permits time-saving; a modern, efficient means of payment; and it accepts all bank cards.

2.4.5. Inter-Bank cards (IBC):

Bank Cards are the best-known payment means for bank withdrawals. They are accepted at merchants affiliated to the electronic banking network and at all ATMs nationwide.

The IBC card is an interbank card, identified by the interbank logo, the name and the logo of the issuing bank. The card contains a microprocessor, commonly known as a "chip", which ensures the security of transactions payment processing.

It enables cardholders to pay for purchases at various retail outlets such as hotels, restaurants, supermarkets, pharmacies, ...etc.

It enables merchants to make payments at retail outlets and ATMs, as well as payments over the Internet.

It is a domestic interbank payment and withdrawal instrument that is accepted at merchants affiliated to the interbank electronic payment network and, above all, at all ATMs throughout the national territory.

There are currently two types of CIB card:

2.4.5.1. IBC Classic card:

- The classic card, offering interbank payment and withdrawal services.
- It is offered to customers according to the criteria set by each bank.
- It is intended for the bank's customers who meet the selection criteria for the customer segment: employees with an average monthly income not exceeding 39,999 DA.

2.4.5.2. IBC Gold card:

- The gold card, also offered to customers in accordance with some established criteria, In addition to payment and cash withdrawal, this card offers additional functionalities and higher withdrawal and payment limits.
- It is intended for the bank's customers who meet the selection criteria for the customer segment: senior officials and employees with a monthly income exceeding 40,000 DA.

The confidential code and the card are given separately at the BEA branch, along with a pack containing explanatory documents on how the card works and security rules that come with it. To acquire a Classic or Gold card IBC, a physical approach to the BEA branch is required to sign the IBC card application contract, for which the codes are set confidential.

2.5. Payment cards:

Payment cards are a means of payment in the form of a plastic card. It is equipped with a magnetic strip and/or an electronic chip issued by a credit institution.

We have the following types of payment card:

2.5.1. Debit card:

This is a payment card that offers various management options at the cardholder's discretion: direct debit, delayed debit, simple ATM payment or withdrawal, for national or international use, ...etc.

2.5.2. Cash withdrawal card:

Allows cardholders to withdraw cash from ATMs only.

2.5.3. Credit card:

It offers services similar to those of the bank card: payment at in-store terminals, simple ATM withdrawals, ...etc. sometimes on a personal basis. Among the advantages of the inter-bank payment card (CIB) we mention:

- It's easy to use.
- Withdrawals and payments can be made 7 days a week, 24 hours a day.
- It guarantees enhanced security (smart card).
- It permits time savings.

2.6. Naftal cards:

Naftal card allows you to pay for fuel purchases 7 days a week, saving time, ensuring maximum security and traceability of transactions. It can be found in different types:

2.6.1. Gold card:

This is an open credit card with a monthly limit.

2.6.2. Silver card:

This is a payment card that can be topped up to a minimum value of 5,000 DA at BEA branches or Naftal Districts.

2.6.3. Prepaid card (consumer):

This card is intended for customers who have a customer account with a Naftal commercial structure and paying in cash.

2.7. MASTERCARD cards:

The "MASTERCARD" is an international chip with international track, intended for customers holding foreign currency accounts with the bank. This card enables cardholders to make cash withdrawals at ATMs displaying the MasterCard logo, to make local payments at Point-of-Sale terminals installed at merchants accepting international cards, and to make e-payments at Web merchants (remote payment).

The cardholder, account holder or authorized representative is solely responsible for the use of his or her card, and must therefore comply with all the provisions of the contract concluded with the bank. The card is strictly personal, and cannot be lent or dispossessed. Nationally, BEA is the first bank to commercialize the MasterCard, which is both simple and practical. BEA's choice of MasterCard is explained by the size of the bank's customer portfolio in foreign currency

accounts, as well as its experience in payment systems, particularly in the field of electronic banking, with an experience which dates back for more than thirty years.

The MasterCard exists in different types:

- a) Prepaid card
- b) "Classic" card
- c) Platinum card
- d) Business card
- e) World-Business card
- f) World Elite card

Determination of amounts limits: The amounts limits are determined according to the type of card and customer profile, and according to the bank's terms and conditions. The determination of amounts limits is left to the discretion of the bank, depending on the customer's relationship and creditworthiness.

2.8. The SMS Banking:

SMS-Banking enables customers to obtain banking information wherever they are. The customer receives SMS messages from the bank to obtain information on his account, its balance and the various operations carried out.

2.9. E-mails:

Electronic mail (e-mail, mail) is a service for transmitting written messages and documents sent electronically. These are used to contact the bank (an advisor) in need for information or complaints. It is one of the most commonly used Internet services, enabling messages to be sent in the form of files, text messages ...etc.

3. Research methods, tools and measures:

In this section, we will present the inquiry, which is a field survey based on a questionnaire, which is best suited to our research theme, since nothing is more natural than asking questions to obtain answers. A practical means of rapidly gathering information and an effective decision-making support, it also implies clear objectives, a rigorous methodology and organization, and precise planning. In our case, the sample population we surveyed was made up of 102 customers of the Exterior Bank of Algeria (agency 060 Emir) in the province of Oran. We structured our survey around 3 parts (Questions to identify respondents, Digital services and banking digitization, Advantages and disadvantages). At the end, we'll analyze and interpret the results, converting the various answers into numerical form: tables, percentages and charts, in order to better interpret our results and provide relevant answers to our problematic and hypotheses. We'll then conclude the chapter by confirming the hypotheses of our research problematic, which focused on establishing an overview of the consumer's behavior with regard to banking digitization.

3.1. Research hypotheses:

To answer the question of our problematic: "Could the digitalization of banking services shake up consumer behavior?" We assumed two hypotheses:

Hypothesis 1: Age, socio-professional status and level of education are the main factors influencing customers.

Hypothesis 2: Simplicity, autonomy and speed of service are the main motivations for customers, while fear of complicated use is the main obstacle to using these online services.

In our fieldwork, we have chosen to conduct a questionnaire survey, which is best suited to our research theme. However, we were able to carry out our survey with 102 customers, with whom we exchanged information and asked several questions in order to gather information quickly and efficiently before proceeding with a quantitative study. These interviews enabled us to identify the main factors influencing consumer behavior: age, socio-professional status and level of education, which have a very strong influence on behavior, particularly with regard to the concept of digital banking, mobility, simplicity and time-saving, which represent the main advantages of online services for the customer. However, there is still a long way to go before trust is fully established.

3.2. Sampling:

In our case, the primary population of interest are customers of the Exterior Bank of Algeria (060 Emir) located in the province of Oran. It would have been interesting to ask more customers about their adherence to digitization. However, those are 102 actions that remain difficult to achieve and yet we were able to retain a sample of customers.

3.3. Conducting the survey:

As mentioned earlier to obtain answers, nothing is more natural than asking questions. And that the questionnaire survey is a practical means of gathering information quickly, and an effective decision-making tool. Thus our survey lasted a month.

3.3.1. The questionnaire:

The questionnaire is an indispensable tool and an essential element in carrying out the survey. It consists of a set of questions designed to generate the information needed to complete a study. The questions in our questionnaire are of various types (single-choice closed questions, multiple-choice closed questions).

3.3.1.1. Method of implementation:

For our survey, we have chosen to distribute the questionnaire at the bank agency. Each member of the sample was given a questionnaire to complete.

3.3.1.2. Presentation of the questionnaire segments:

We have articulated our survey around the following three parts:

- **Respondent identification questions:** These answer criteria will enable us to make interpretations based on socio-demographic characteristics; and so will enable us to draw up a profile of each respondent: age, gender (sex), socio-professional class.
- **Digital services and bank digitization:** This segment identifies the digital services offered by most banks, or by several of them, such as ATMs, instant messaging ...etc. This enables us to get a better overview of the whole range, as well as the rate of use of these services by customers.
- Advantages and disadvantages: Every product or service has its advantages and disadvantages. This segment examines on what motivates banks to offer and develop e-banking, and what are the constraints they face, and by that enabling us to identify the obstacles and motivations to using the bank's digital services.

The survey is ended by a question on the degree of satisfaction, which will enable us to pinpoint areas for improvement.

4. Results and Discussion

4.1. Test of hypothesis H1:

Through the sample on which our survey was carried out we note that they are predominantly male with 68.6%, the age range is between 30 and 40 years. They are mainly salaried employees with a percentage of 64.70% and 59.80% of them having a university degree.

Table 1: Cross-assortments between age and use of online services

Usage	Yes	No	Total
Age			
21-30 years old	14,70%	3,93%	18,63%
Respondents	15	4	19
30-40 years old	29,4%	5,9%	35,30%
Respondents	30	6	36
40-55 years old	27,4%	6,9%	34,31%
Respondents	28	7	35
More than 55 years	3,92%	7,84%	11,76%
old Respondents	4	8	12
Total Respondents	75,4%	24,6%	100%
	77	25	102

Source: Elaborated by the researcher following the results of the study.

Table (1) shows us that the age category that uses digital services the most is 30-40 with 35.30% followed by the 40-55 age segments with 34.31%. We noticed the rate for age categories that use online services the most is 75.4%, mainly people between 30-40 years old with 29.4% followed by 40-55 years old with 27.4%. We noticed the rate for age categories that don't use online services is 24.6%, by people representing nearly equitably by all ages segments.

Table 2: Cross-assortments between socio-professional class and use of digital services

Usage	Yes	No	Total
S.P.C			
Retailer merchant	5,88%	3,92%	9,80%
Respondents	6	4	10
Liberal profession	10,79%	4,90%	15,7%
Respondents	11	5	16
Student	0,98%	0%	0,98%
Respondents	1	0	1
Retired	5,88%	1,96%	7,84%
Respondents	6	2	8
Unemployed	0%	0,98%	0,98%
Respondents	0	1	1

Employed	50,97%	13,72%	64,70%
Respondents	52	14	66
Total Respondents	74,76%	25,5%	100%
_	76	26	102

Source: Elaborated by the researcher following the results of the study.

The results show that we obtained the most responses from employees. And we note that 66 out of 52 employees use online services, which represents more than half of this category. We noted that the socio-professional class that uses digital channels the most is composed of salaried employees, with a rate of 64.70% out of a total of 74.76%.

Conclusion of hypothesis H1: We noticed that age, socio-professional status and level of education are the main factors influencing the customer's use of online services, which partially confirms hypothesis H1.

4.2. Test of hypothesis H1:

Table 3: Cross-assortments between online services and the advantages

Usage	Yes	No	Total
Advantages			
Mobility + Time saving + Autonomy	77,33%	15,46%	92,8%
Respondents	75	15	90
The 4 answers (Mobility + Time-	5,14%	2,05%	7,2%
saving + Autonomy + Simplified	5	2	7%
operations) Respondents			
Total Respondents	82,49%	17,51%	100%
_	80	17	97

Source: Elaborated by the researcher following the results of the study.

We noticed from table (3) that of the 82.49% who find advantages in online services and we noted that 77.33% of them responded (Mobility + Time saving + Autonomy), which confirms that they perceive advantages in digitization.

Table 4: Cross-assortments between the age and the obstacles

Age	21-30	30-40	40-55	More than	Total
Obstacles	years old	years old	years old	55 years old	
Complicated to	0%	5%	15%	30%	50%
use Respondents	0	1	3	6	10
Lack of trust	5%	5%	5%	10%	25%
Respondents	1	1	1	2	5
Safety reasons	0%	0%	15%	10%	25%
Respondents	0	0	3	2	5
Total	5%	10%	35%	50%	100%
Respondents	1	2	7	10	20

Source: Elaborated by the researcher following the results of the study.

Table (4) shows that the main obstacle for respondents over 55 years of age is the fear of complicated use, with a rate of (50%). This confirms that age can have an influence on the reason for not using digital channels.

Conclusion of hypothesis H2: We have noted that customers find many advantages in online services, with 77.33% out of 82.49% of them stating that mobility, Time-saving and autonomy are the main motivations for using these channels, but fear of complicated use remains the biggest obstacle, with 50% of people over 55, their unfamiliarity with computers constitutes a major obstacle to the use of these channels, which perfectly confirms hypothesis H2.

Finally, the results must be treated with reserve and cannot be generalized for the following reasons: - Our survey sample consists of only 102 people, which is a reduced size.

Conclusion

This study provided us with a framework for presenting the components of our various samples used in our research. And to give a detailed description of the digitization of banking services and its impact on the behavior of customers of the Exterior Bank of Algeria as a whole in the province of Oran. This survey was an opportunity for us to present all the results of our study, these results allow us to confirm that the performance of the digital solutions offered by banks is a decisive factor, which represents an opportunity for significant competitive advantage for them, as it undoubtedly influences the customer's choice of preferred banking partner.

In addition, this study has shown how customers perceive the digital transformation of the banking sector. We were able to highlight that customers are mostly positive and optimistic about the digitalization of their banks, for the products and services associated with this change. We were also able to see that customers have clearly noticed that the banking relationship has undergone some changes, particularly with their advisor, but the majority of them say they are satisfied with this new relationship of proximity integrating digital services.

Here are the results we can affirm, through this research to our hypotheses confronted with our scientific study:

For the **Hypothesis H1**: "Age, socio-professional status and level of education are the main factors influencing customers".

And that the performance of digital solutions offered by banking establishments constitutes a factor that influences customers in their choice of their preferred bank. We found that BEA bank customers have a fairly positive image of the digitalization of banking services, and see that it offers many advantages (time savings, autonomy, ...etc.). However, they are still reluctant to use it, due to fears linked to the complexity of its use, which means that the usage rate remains low. We were also able to confirm our **hypothesis H2**: simplicity, autonomy and speed of service constitute the main motivations for customers, while fear of complicated use is the main obstacle to using these online services.

Our research has given us a more practical vision, enabling us to propose ideas, new methods and relevant solutions related to our problematic, with the aim of

coming up with ready-to-implement recommendations for the workplace, dedicated to bank personnel, whether they are managers or not, as we've seen, all professions in financial establishments are concerned.

A number of recommendations were developed in this study, the main ones being as follows:

- Waiting times at reception and availability of branch advisors
- Pro-activity in advisor posture
- Responsiveness and speed of response
- Regular change of advisors
- Use of Big-Data to optimize activity and compliance
- Reinforced communication on social networks.

Finally, based on the results of our study, we can affirm that all these investments mobilized by banks to digitalize their services are having a positive impact on customers, and this is what has shaken up consumer behavior, while enabling them to make a real difference. And with the competition, the institution can legitimately establish itself as tomorrow's banking reference for customers.

References

- Adala, A., & Djellam, A. (2015). "The role of digital marketing in improving the performance of Algerian commercial banks", a statistical analytical study. *Finances et marchés*, pp. 26-44.
- Baray, J. (2018, January). "Artificial intelligence: what impact on tomorrow's marketing?". French Marketing Association.
- Benavent, C. (2000, July). "The NITC and strategic marketing: the challenges of competition". Revue française de gestion.
- Bessai-Kessouh, F. (2020). "Performance analysis of public and private banks in Algeria". *Finances et marchés*, pp. 71-87.
- Copulsky, J., & Wolf, M. (1990, July-August). "Relationship marketing: positioning for the future". U.S.A.
- Diniz, E. (1997). "Web marketing in USA". Journal of internet banking and commerce.
- Hashem Sheri. M, (2007). "Secured electronic payments", polytechnique et universitaires romandes, Press Edition.
- Lamirault, F. (2017). "The evolution of the banking, model in the digital age". Paris: *Livres blancs*.
- Lejealle, C., & Delecolle, T. (2017). "Digital marketing memory aid checklist". Paris: *Dunod.*
- Lucas-Boursier, J., & Pelet, J.-E. (2017). "Digital communication". Paris: *Eyrolles Editions*.
- Roman, B., & Tchibozo, A. (2017). "Transforming banking: what strategies in the digital age?". Paris: *Dunod Editions*.
- Stamoulis, D. (1999). "How banks fit in an internet commerce business activities banking". *Journal of management information systems*.
- Zollinger, M., & Lamanque, E. (2004). "Marketing and and bank strategy". Paris: Eyrolles Editions.