

E-Payment in Algeria Case of the Interbank/Edahabia Card

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Abstract: *Electronic banking is defined by the major changes that the banking and financial world is currently going through. Despite the launch of the project to modernize the Algerian payment system, Algeria is lagging behind quite significantly in terms of introducing and mastering new payment technologies, namely; payment by CIB and EDAHABIA interbank card. The main objective of this article is to question the adoption of electronic payment and the behavior of Algerian consumers towards this modern means of payment.*

Keywords— Bank; Electronic payment; Consumer; CIB; EDAHABIA

1. INTRODUCTION

Information and communication technologies are very decisive in the design and construction of modern and secure payment systems [1]. Indeed, with the evolution of information and communication technologies, traditional money is experiencing a new transition towards electronic or even virtual money, which has led to the appearance of new means of electronic payment [2].

Electronic payment is a new means of payment made via the Internet, allowing commercial transactions to be carried out for the exchange of goods or services on the Internet [3]. These transactions can occur between professionals and individuals in several ways.

In Algeria, the CIB interbank card for withdrawal and payment was introduced in 2006. The Société d'Automatisation et de Transactions Interbancaires et de Monétique (SATIM) injected an interbank card into the Algerian market, enabling its holders to make electronic payments and cash withdrawals at ATMs 24 hours a day, as well as the EDAHABIA card launched by Algérie Poste in 2017 which allows electronic payments to be made.

Despite these advances in terms of electronic banking, online payment in Algeria remains below its progression in the world [5]. In this context, wondering about the behavior of the Algerian consumer in the face of this new means of payment; this article offers a study centered on the perception of e-payment by the Algerian consumer, and to analyze the obstacles and motivations for the generalization of this modern means of payment.

In the first section, we will present online payment, its main players and its regulations in Algeria. In the second section, we will detail the results of our quantitative survey carried out on a sample of 400 adults.

2 PRESENTATION OF ELECTRONIC PAYMENT

2.1 Electronic payment players in Algeria

The introduction of electronic banking in the Algerian banking sector is essential in the era of computers and the Internet. Thus, in 1995, eight Algerian banking institutions decided to unite to create SATIM. It is with the creation of the latter that the electronic money movement was born in Algeria [6].

Created in 1995 on the initiative of the banking community, "SATIM" is a subsidiary of 07 Algerian Banks BADR, BDL, BEA, BNA, CPA, CNEP, ALBARAKA and the CNMA insurance institution. SATIM is the interbank payment operator for national and international cards.

It is one of the technical instruments supporting the program for the development and modernization of banks and particularly the promotion of means of payment by card.

SATIM has experienced significant development and sustained growth in its services in recent years.

To date, more than 1,351 ATMs and 36,000 electronic payment terminals deployed are connected to its servers, to which must be added the 108 Web merchant sites operational on its platform [7].

The main missions of SATIM¹ are:

- Work on the development and use of electronic payment methods
- Implementation and management of the technical and organizational platform ensuring full interoperability between all actors of the Electronic Payment Network in Algeria
- Participation in the implementation of interbank rules for the management of interbank electronic payment products
- Support for banks in the implementation and development of electronic payment products
- Personalization of payment and cash withdrawal cards

The creation of the Monetics Economic Interest Group (GIE Monetics)² in June 2014 supported the strategic approach by regulating the interbank electronic banking system and defining the missions and attributions of all the players in this system. The GIE Monétique is a community entity which

¹ <https://www.satim.dz/fr/>

² <https://giemonetique.dz/>

intervenes, within the framework of its statutory missions, in the regulation of the interbank electronic payment system.

This is materialized by the implementation of the operating rules of this system, opposable to all members and the supervision of all interbank electronic payment activity. It also leads community actions such as the fight against fraud, awareness of the use of electronic payment methods, training and communication [8].

The missions of the GIE electronic banking are multiple.

- E-payment interbanking: The GIE ensures the interbanking of the electronic payment system and its interoperability with local or international electronic payment networks. The members of the Groupement are visually identified by the interbank logo

- Regulation: The EIG dictates the rules to the adhering members, manages relations between them and ensures compliance with the rules.

- Promotion: The objective being to promote electronic banking by generalizing the use of electronic means of payment.

- Approval: The GIE thus embodies transparency in the definition of standards and rules for electronic payment activity in order to free up investment initiatives in the electronic payment industry. It issues approvals, certifications and authorisations.

- Security: The GIE fights against fraud, makes it possible to secure the various means and tools of electronic payment.

SATIM offers merchants the solution of local payment through the CIB card on Electronic Payment Terminals (TPE) as well as on e-commerce, these bank cards are equipped with the latest standards in terms of electronic security, namely the "3Dsecure".

3D Secure is a security protocol that aims to offer a high level of security, as it makes it possible to verify the identity of the cardholder with their bank.

The objective of 3D Secure is to protect merchants against the risk of fraud and to increase the level of security of remote payments by adding an authentication step carried out by the cardholder's bank, and according to the authentication mode of choice, the most common remains a code sent by SMS to enter directly on the site (One-Time Password) [9].

CIB SATIM cards are equipped with Europay Mastercard Visa standards, abbreviated by the acronym EMV international payment card security standard (smart cards).

SATIM via the EMV standard allows the security of transactions and the safety of people against theft, assault and counterfeit money through the use of a confidential code.

This international standard adopted by Algeria has many advantages:

- The EMV standard specifies the interoperability between EMV cards with microprocessors (chip cards) and EMV payment terminals throughout the world.
- The EMV standard on payment cards brings an improvement in security
- The EMV standard allows the deployment of "multi-application" cards, several applications can fit on a single

card, for example: a "debit" application to debit the current account; an electronic wallet.

2.2 Electronic payment regulations in Algeria

Electronic means of payment are defined by law as payment instruments that allow their holders to make local or remote payments through an electronic system [].

Articles 27, 28, 29 of Law No. 18-05 of May 10, 2018 relating to electronic commerce provide for the regulation of electronic payment in Algeria:

Art. 27. - Payment for electronic commercial transactions is made remotely or on delivery of the product, by means of payment authorized in accordance with the legislation in force.

Art. 28. - The connection of the e-supplier's website to an electronic payment platform must be secured by an electronic certification system.

Art. 29. - The electronic payment platforms established and operated in accordance with article 27 above, are subject to the control of the Bank of Algeria to guarantee that they meet the requirements of interoperability, confidentiality, integrity, authentication and security of data exchanges.

According to the Algerian Commercial Code, the regulation of bank cards is provided as follows:

Art. 543 bis 23. - Constitutes a payment card any card issued by duly authorized banks and financial institutions and allowing its holder to withdraw or transfer funds.

Constitutes a withdrawal card any card issued by banks or duly authorized financial institutions and allowing its holder, exclusively, to withdraw funds.

Art. 543 bis 24. - The order or commitment to pay, given by means of a payment card, is irrevocable. Payment can only be stopped in the event of duly declared loss or theft of the card, legal settlement or bankruptcy of the beneficiary.

2.3 Presentation of the credit card

A bank card is a means of payment certified by the ISO7810 standard, the payment card in the form of a plastic card measuring 85.60 × 53.98 mm: i.e. a length of 85.6 mm, a width of 53.98 mm and a thickness of 0.76mm.

It is equipped with a magnetic stripe and/or electronic chip, and allows payment from physical businesses with an electronic payment terminal (TPE) or from online commerce [10]. The figure below shows the main characteristics of an interbank card in Algeria (Fig. 1):



Fig. 1. Characteristics of the interbank card in Algeria

Withdrawal cards are cards whose main functionality is the withdrawal of cash from ATMs, either in the ATMs of all banking establishments, or only those of the customer's banking network.

2.4. The different types of credit card

2.4.1. Withdrawal cards

Withdrawal cards are cards whose main functionality is the withdrawal of cash from ATMs, either in the ATMs of all banking establishments, or only those of the customer's banking network.

These cards also offer additional features such as account consultation, transfers, checkbook orders, etc.

2.4.2. Payment cards:

Payment cards or credit cards allow both to withdraw money from an ATM and to make purchases in stores or online. There are two kinds

- Credit cards: Credit cards allow you to pay not with the money available in your bank account, but with a revolving credit, taken out with the organization that issued the card and whose rate has been contractually fixed ;
- Debit cards: The debit card is the most used bank card. It is traditionally the card issued after opening a current account at the bank. Thus, the acquirer of the card can make a withdrawal and/or a payment, it is the bank account associated with the debit card that is debited. It can be a national (CIB logo) or international (Visa or Mastercard logo) bank card. They can be immediate debit, deferred or with systematic authorization, they can be professional or even prepaid.

3. PRESENTATION OF SURVEY RESULTS

The survey conducted among 400 adults via Google forms and analyzed by SPSS from December 2021 to February 2022, allowed us to have the following results (Fig.2) :

3.1. Identification of individuals

We note that in our sample the female and male proportions are practically equal, namely 52% female and 48% male.

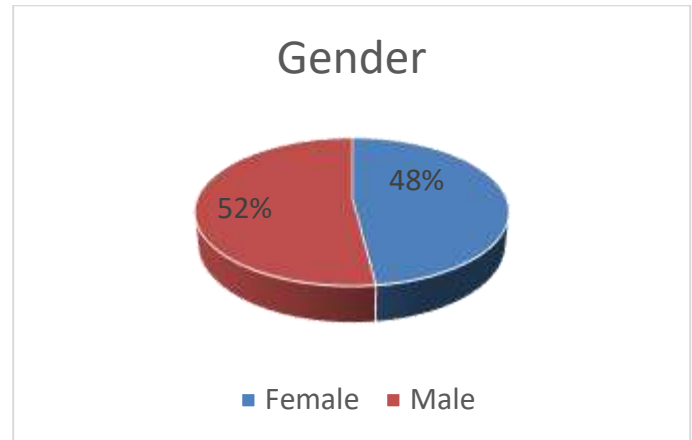


Fig. 2. Circular diagram representing the distribution of individuals according to their gender

In our sample, Baby Boomers make up 23%, Gen X and Y make up 31% and 28% respectively, and Gen Z makes up 18% (Fig.3).

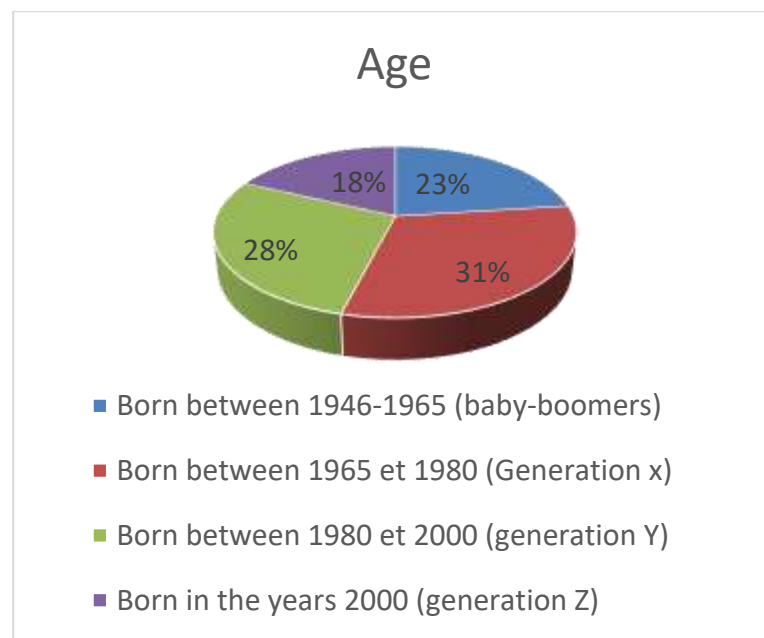


Fig. 3. Circular diagram representing the 400 individuals according to their age

We note that our sample is made up of 6% retirees, 13% unemployed, 18% students, 22% liberal professions and 41% employees (Fig.4).

Socio-professional category

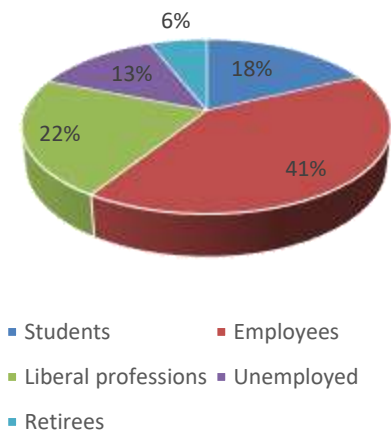


Fig. 4. Circular diagram representing the distribution of individuals according to socio-professional category

12% of individuals declare to connect less than 1 hour per day on the internet, 26% declare to connect between 1 hour and 3 hours per day, 41% connect between 3 and 5 hours per day and 21% declare to use the Internet more than 5 hours per day (Fig. 5).

How often do you use the internet?

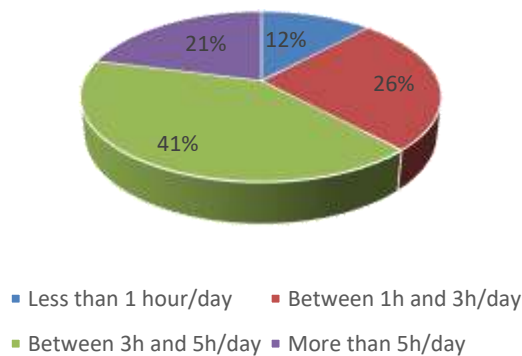


Fig. 5. pie chart representing the distribution of individuals according to time spent on the internet

3.2. Electronic Payment Questions:

89% of respondents say they have an interbank/Edahabia card, and only 11% say they do not have one (Fig.6).

Do you have a interbank/Edahabia card?

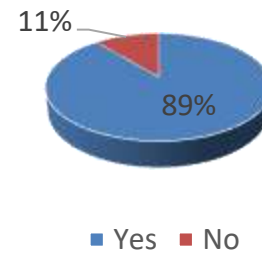


Fig. 6. Circular diagram representing the distribution of individuals according to the possession of an interbank card

In response to this question containing multiple-choice proposals, 84% of respondents say they use their interbank/Edahabia card for withdrawing money, 58% say they pay with in-store, and 31% say they make online payments (Fig.7).

What do you use your interbank/Edahabia card for?



Fig. 7. Bar chart representing the use of the interbank/Edahabia card by individuals

75% of respondents say that the covid19 pandemic prompted them to transact with CIB/Edahabia, compared to only 18% who say the pandemic has had no effect on their purchasing behaviour (Fig.8).

Has the global pandemic linked to covid19 pushed you to electronic payment?

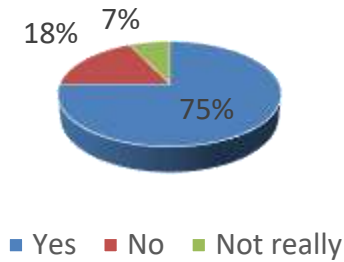


Fig. 8. Circular diagram representing the impact of Covid19 on the use of electronic payment

We can say that users of the interbank/Edahabia card are satisfied with the operations carried out with the latter. Indeed, 67% say they are very satisfied, 22% satisfied, against only 5% moderately satisfied, 4% not satisfied, and 2% not at all satisfied (Fig.9).

Are you satisfied with the transactions made with your interbank/edahabia card?

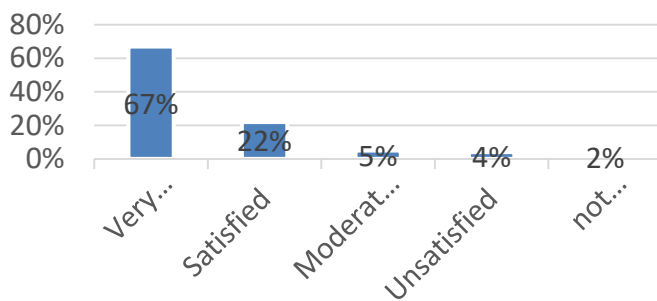


Fig. 9. Bar chart representing user satisfaction with operations carried out by CIB/Edahabia

The main element that drives the use of electronic payment is for 38% of respondents the ease of use, for 33% of respondents the speed of transactions, for 29% of respondents the security of the means of payment (Fig.10).

What are the elements that push you to use your interbank/Edahabia card?

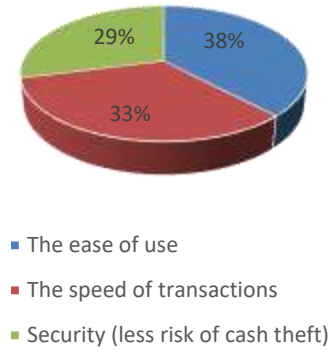


Fig.10. Circular diagram representing the elements pushing consumers to electronic payment

20% of respondents believe that the use of electronic payment is hampered by the cash culture of Algerians, 18% believe it is because of the lack of electronic payment terminals available at merchants, 28% say it is the fear of being hacked, stolen or having their banking information revealed. 34% believe that the main obstacle to the use of electronic payment is the lack of information and training in the use of this method of payment (Fig.11).

In your opinion, what are the obstacles to the use of e-payment in Algeria?

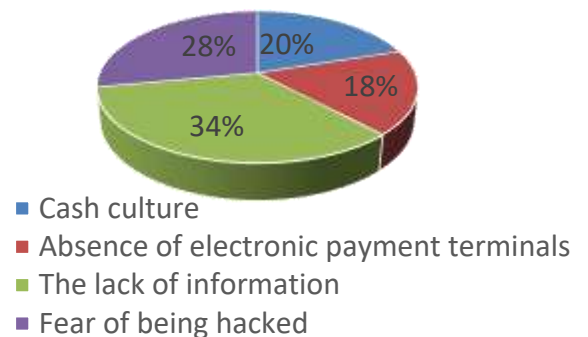


Fig. 11. Circular diagram representing the obstacles to the use of electronic payment in Algeria

4. CONCLUSION

The development of technology in various sectors, economic or social, has led to rethinking different systems, professions, etc. The banking universe is not to be outdone, banks are beginning to gradually invest in the field of information and communication technologies (ICT) under the directives of the state, which is more concerned than ever with developing the digitalization of this sector.

Information and communication technologies have become an essential vector in the development of banking activity. The progress made in this area has led to the appearance of new payment procedures and instruments, in particular the bank card.

According to the study that we conducted, it appears that the Algerian consumer is indeed ready for this new means of payment, that it is beginning to spread to the entire population that consumers are less reluctant to pay by card compared to the results of studies carried out a few years ago. Nevertheless, there are still major problems that need to be resolved, such as the absence of a banking culture and the lack of awareness among Algerians of this new means of payment, the lack of cooperation from merchants who have nevertheless had the obligation to equip themselves with TPE since 2020 but which do not offer consumers this means of payment.

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