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Are customers embracing the digitalization of banking services? BEA (External Bank of Algeria) case study

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Abstract

Our work attempts to shed light on a conceptual approach related to the IBC (Inter Bank Card) on the one hand and on the other hand to highlight some elements of reflection on electronic banking in Algeria punctuated by an empirical study: The practical case in subject attempts to identify the factors that cause owners or holders of the IBC interbank withdrawal and payment card to continue to withdraw their money at bank counters and not through the ATMs (Automated Teller Machine). And this, through a qualitative and quantitative study carried out with a sample of 40 individuals holding the interbank card at the BEA-bank level. The main objective of our research is to be part of the modernization of payment means in Algeria.

Keywords: Digitalization, e-Banking, interbank card, Algerian banking system, e-payment.

Introduction

The banking system has a function of crucial importance for the economic development of countries. Algeria has been investing in a competitive environment since 1990 with the objective of liberalizing its banking system and integrating it internationally, through the promulgation of Law No. 90-10 of 14 April relating to currency and credit. Several reforms followed this promulgation, affecting the entire banking system. In this context, the Algerian banking authorities have engaged in new financial techniques to improve and develop its systems and means of payment, ensuring the flow of the distribution of services with high efficiency.

Indeed, implementation of the modernization of the payment system has been part of the development of the monetics which aims to facilitate commercial transactions and develop the banking of the economy, with greater efficiency and security of services. Also, with the introduction of two payment systems, large amounts and mass payments, compliant with international standards to ensure the proper functioning of funds in a safe, fast and secure manner. Electronic banking has undergone major changes in most developed countries in the field of payment instrument management, with the transition from traditional payment instruments such as cash and cheque to modern instruments such as bank cards. This is due to the migration from paper-based to

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electronic instruments in order to facilitate electronic services.

Compared to other countries, especially our Moroccan and Tunisian neighbors in the process of monetization and the mastery of new payment technologies, Algeria has recorded significant delays, despite the entry of new technologies that have transformed the customer-bank relationship such as Automated Teller Machines (ATMs), Bank Automated Teller Machines (Bank ATMs) and Electronic Payment Terminals (EPT's).

The monetary authorities have established a modern payment system based on the creation of the SATIM (Company of Interbanks and Monetics Automating Transactions), also the real-time gross settlement system (RTGS), and the interbank system for remote clearing of mass payment instruments and finally the launch of E-Banking as a remote banking service for the first time in Algeria, in January 2010. Despite all the efforts made by the monetary authorities and the SATIM to promote the use of the card, they remain insufficient.

This can be explained by mistrust and lack of knowledge of the advantages of this card. Our work is part of the general theme of the modernization of the general introduction of the payment system in Algeria, through the different mechanisms of transfer of funds between banks. It is also a question of explaining the main means of payment and their degree of use.

Problematic

A central question is at the heart of our research problematic: Are customers embracing the digitalization of banking services?

It's important to stress that the central question of our problematic requires other equally important questions to be answered:

What are the new payment systems in Algeria?

How has the Algerian banking system evolved?

How widespread is the use of different payment methods, particularly electronic cards?

Research hypotheses

To answer these questions we have based ourselves on the following assumptions:

H1: The lack of a banking culture is holding back the development of electronic banking in Algeria.

H2: Customers use digital services according to the means of communication used.

Bank Definitions

"The bank is a business like no other, which habitually makes it its profession to receive from the public, in the form of deposits or otherwise, funds which it employs on its own account in credit or financial transactions". (Bernard & Jean-Claude, 1996, p. 170).

According to J. V. CAPUL and O. GARNIER "The bank is a company of a particular type which receives deposits from its customers (companies or individuals), manages their means of payment (credit cards, cheques, etc.) and grants them loans". (CAPUL & GARNIER, 1994, p. 33) "A bank is a private or public institution that facilitates payments for individuals and businesses, advances and receives funds and manages payment methods". (Larousse Dictionary, s.d, p.124)

The digital banking revolution

The digital revolution of the last 15 years has had a strong impact on banks and their businesses. Since ancient times, banks have been key players in the economy. One of their main roles is to collect savings and then distribute them in the form of loans. They also enable monetary exchanges and payments, but the arrival of digital technology will suddenly call everything into question. Since the year 2000, with the advent of the web and the smartphone, we have witnessed the democratization of the internet. Banks have therefore gradually opened up to the web (mainly online account access). A new competition of 100% online activities (pure player) has emerged, which is probably the opposite of the traditional agency model. Then in 2007, another major event occurred. It was the release of the first iPhone.

It was the birth of digital in the truest sense of the word, and naturally gave rise to new behaviors. Internet users are then connected to ATAWAD (anytime, anywhere, anydevice), (LAMIRAULT, 2017). As a result, banks have found themselves facing new threats, including changes in behavior (ultra-connected), the emergence of new competition, better access to information and the loss of certain monopolies. From this effect, digital technology has led to the emergence of a new banking model; connected, agile and social, in which the traditional agency and the advisor have a different place in the relationship with the client. According to (LAMIRAULT, 2017)

"Banks have understood one thing, they don't need a digital strategy... but digital in their strategies". So this is how they have adapted, offering services via new channels such as e-agencies or banking applications. This is where we saw the birth of a new model: distance banking without distance.

The development of online banking

The Internet and new information and communication technologies have made Human life easier. Their uses take on new dimensions every day. As a result, the evolution of banking is keeping pace with the changing needs and uses of customers, traditional banks don't cover it, in particular, anytime, anywhere remote access, in any form, to address a largely unmet need on the banking web. Online banking has evolved in two distinct forms: The first is the creation and development of a fully online operator, while the second is the banks' gradual offer to customers to develop online services with a traditional multi-channel or omni-channel approach. (ROMAN & TCHIBOZO, 2017).

E-Banking

Sometimes multiple terms are used to refer to the same thing, and also sometimes multiple aspects

are used, very different, even partially close. "Electronic banking", "Home banking", "Remote banking" and even "Online banking", as the term develops and the definitions also vary depending on the author.(COPULSKY & WOLF, July-August 1990) Define electronic banking as follows: "transaction Internet banking is a term that refers to the use of computers". It's an electronic means of automatic remittance by "Internet Banking" type, taking into account the existence of other devices including "mobile banking", phones, "Bank TV", digital television, etc.

(STAMOULIS, 1999) Defines electronic banking as "a channel for the distribution and delivery of information", providing financial services on a global scale through expensive multimedia communications".(DINIZ, 1997) Defines electronic banking as "a service provided by multiple financial institutions, enabling customers to carry out banking transactions over the Internet, using means such as personal computer, phone, mini-telecom or other".

According to "revue-banque.fr", remote banking is defined as follows:

"Distance banking is a bank that provides a range of banking services electronically, and primarily via the Internet. Thus, remote banking enables its customers to manage bank accounts and the possibility of accessing advisory accounts, transferring money, obtaining credit or investing in various financial products".

Implementation of BEA's new payment methods

Through its own network of agencies, the BEA offers its customers a wide range of products. Its objective is, on the one hand, to satisfy their needs, and on the other, to rival its competitors on the Algerian banking market.

Interbank electronic payment network

The Interbank electronic payment network allows the exchange of paper money to be managed by a set of interconnected stakeholders. These participants, both material and human, are as follows:

The Card

Magnetic or chip support, is the means of withdrawing cash allowing everyone to have their money at their disposal:

At the desired time.

At the desired place.

For only the amount required for the transaction.

The Holder

Is the cardholder, account owner or authorized person. The cardholder is solely responsible for the use made of the card and must comply with the contract established with his or her financial institution.

The transmitter

Is the financial institution that issues cards enabling cardholders to make ATM withdrawals.

The acquirer

Is the financial institution that accepts withdrawals from cardholders other than its own, on its ATMs installed in its agencies.

The Interbank System

Is an information system whose administrator is a body other than a financial institution. This system guarantees: Cash withdrawal by card when authorization is given, the commercial neutrality of the system (same conditions for all members concerning commission, card cost, etc...), the irrevocability of the reliability of the cash withdrawal authorization system thanks to the controls carried out.

The Interbank Card « IBC »

The IBC card is a payment and/or withdrawal medium issued by a financial institution that is a member of the Interbank Monetics Network (IMN) for the benefit of individuals or legal entities holding bank accounts. It is defined by the instruction of the Bank of Algeria and fully complies with the international EMV (Europay MasterCard Visa) standards. The card is a smart card (microcontroller) implanted on a PVC support.



Figure. 1. The IBC view

Source : Bank document

Mastercard Bank Cards

The MasterCard commercialized by the BEA, is a means of withdrawal and electronic payment, materialized in the form of a chip card, issued to any interested customer (Individual or Company), with an account in dinar and an account in foreign currency. It enables cardholders to make

withdrawals from cash dispensers (ATMs) and payments at MasterCard International-approved Electronic Payment Terminals (EPTs), 24 hours a day, 7 days a week, withdrawal operations on ATMs and payment on Electronic Payment Terminals (EPTs) approved by MasterCard International, as well as Internet purchases. The MasterCard/BEA is a debit card, not a credit card. Cardholders use their card up to their available balance on the account and the authorized weekly limit. The bank card is a secure payment instrument, complying with the ISO 8583 standard. Issued by a payment institution (BEA) affiliated to a payment system enabling a cardholder who has signed a payment services contract to make payments and/or withdrawals.

The evolution of the bank card (BC)

1967: Europeans discover payment cards

1971: Banks make the first ATMs available to their customers.

1980: Electronic payment terminals make their appearance.

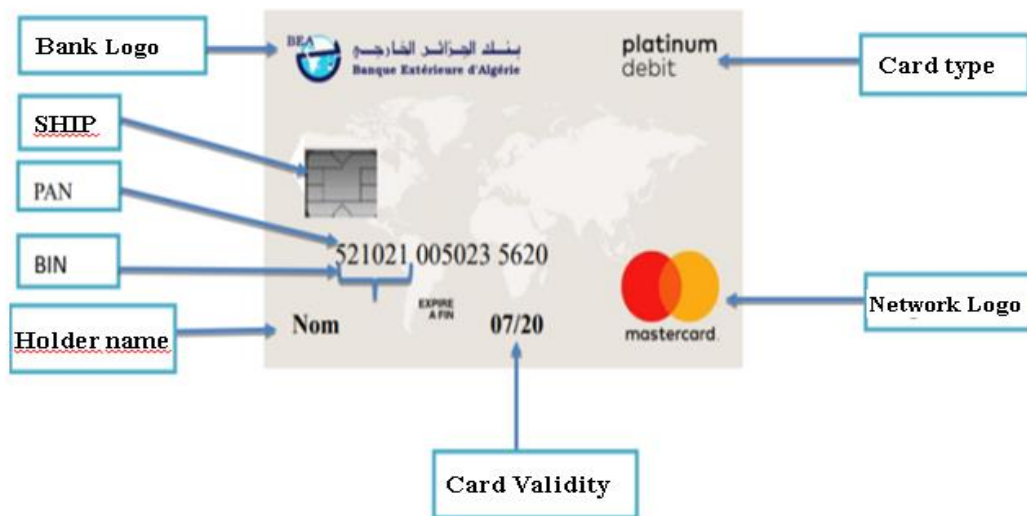
1985: With interbanking, it is now possible to withdraw money with your card in a bank other than yours.

1992: All cards are chip-enabled.

2001: Cardholders in Europe embrace the card, making more transactions with it than with cheques.

2002: Chip cards adopt the EMV international standard.

General View characteristics of the BC: (Both sides)



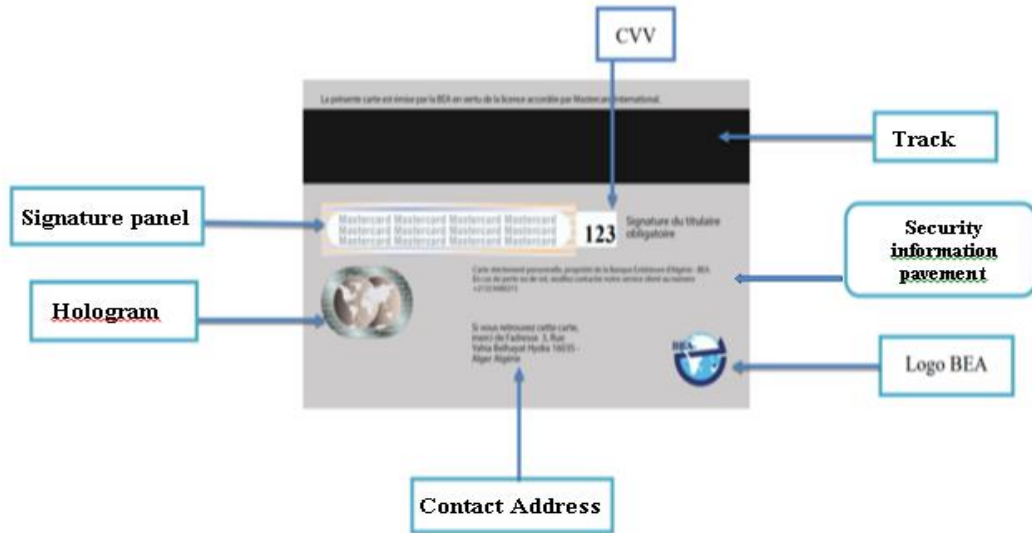


Figure 2 The BC View

Source : Bank document

Bank Cards Types (BC)



Figure 3 The view of the BC types

Source: Bank document

Empirical study on the use of new means of payment

For a better understanding of the effect of the new payment methods, we have made a study of the latter experience at the level of the BEA. We conducted a field survey. The approach consists of: Distributing a questionnaire to BEA's various customers and staff.

On the one hand, the questionnaire aims to illustrate the means and degree of generalization of the use of these new means of payment.

- On the other hand, the latter will enable us to identify the brakes and obstacles to the development of electronic banking. This section will include some methodological elements relating to the presentation of the questionnaire survey, followed by an analysis and interpretation of the questionnaire results.

Methodology and presentation of the questionnaire survey

In this point, we have highlighted the processing methodology concerning the empirical part of our work.

Questionnaire elaboration

The questionnaire is a methodological communication tool; it is composed of a series of questions linked in a structured way, enabling us to collect information in the context of a survey in a direct way. The questionnaire is also designed to test theoretical hypotheses and provides us with precise, usable quantitative or qualitative information, often presented in the form of tables and graphs. In our work, we have opted for a questionnaire addressed to BEA customers and staff. This questionnaire consists of closed-ended questions.

The survey methodology

In our research, we followed an information-gathering approach, according to the most appropriate and efficient method of direct contact, with customers and BEA agents distributing a questionnaire to 40 people.

The purpose of the survey

Our sample survey aims to gain a better understanding of customer expectations, as well as their degree of satisfaction with the services offered by the BEA services and new payment methods existing within that bank. Know how customers are responding to these new features. We also want to find out how customers feel about these new features. Throughout this survey, we will attempt to answer the following questions:

Are banks sufficiently informing their customers?

Are customers satisfied with BEA-Bank's services?

Processing and analysis of results

Analysis of the results carried out with the BEA's customers

The BEA's customers survey

Our survey was carried out at the BEA-Bank agency, located at the address: 10, Boulevard Emir Abd-ElKader, Oran. We spent two weeks designing our questionnaire and conducting the survey, one week collecting responses and one week processing and interpreting the results.

The sample: The study population is composed of 40 individuals (customers and staff of the BEA).

The questionnaire: consists of an identification sheet to give us an overview of BEA's customers, followed by a series of questions, the majority of which are closed-ended. The questions were written in a simple, clear and precise manner.

Results and Discussion

What's your occupation?

Table 1 Sample Distribution by Occupation

Answers	Frequency	%
liberal	06	02%
Employee	18	66%
Trader	08	30%
Student	00	00%
Retired	08	04%
Total	40	100%

Source: Established by us

According to Table 01, our sample shows that BEA customers come from a variety of professions; 2% are self-employed, 66% salaried employees, 30% are traders, and 4% whom are retired.

Have you heard of the interbank card? (IBC)?

Table 2 IBC Acknowledgment

Answers	Frequency	%
YES	32	80%
NO	08	20%
Total	40	100%

Source: Established by us

Of the 40 respondents who were in the bank and next to the ATM, and all of whom were domiciled at the agency, concerning whether or not they were aware of the interbank card of withdrawal and payment, 80% said they were aware of the IBC and 20% were unaware of its existence.

If so, what was the means of communication that allowed you to find out about it?

Table 3 knowledge means

Answers	Frequency	%
TV	03	07%
Newspapers	07	17%
Notices	01	03%
Agency Staff	26	65%
leaflet	03	08%
Site web	0	00%
Total	40	100%

Source: Established by us

It can be seen from the table that the most important information medium is the agency’s staff with a rate of 65%, followed by written and visual media as a good means of information and communication.

In the daily lives of customers, they remain a powerful means of communication, allowing the wide dissemination of information at all levels.

What’s the Card usage frequency?

Table 4 Card usage frequency

Answers	Frequency	%
Frequently	08	20%
Occasionally	20	50%
Rarely	12	30%
Total	40	100%

Source: Established by us

According to the table, (30%) of customers questioned stated that they rarely use the interbank card; and half of the customers say that their card is used occasionally for a rate of 50%; while some stated that they use it frequently, for a rate of 20%.

Based on the results obtained, we can say that this is a good start for electronic banking in Algeria.

If no, why don’t you have a Card?

Table 5 Reasons for not having an Interbank Card

Answers	Frequency	%
High commission	12	30%
Complicated usage	00	00%
Lack of trust	05	12%
Security reasons	08	20%
Insufficiency in Sensibilization actions	07	18%
Fear of technical breakdown or fire of electronic payments	06	15%
Limited Services	02	5%
Total	40	100%

Source: Established by us

According to the customers surveyed within the BEA-Bank and who don’t have an IBC card; (30%) find that the card’s commission is high;

On the other hand the biggest concern is the fear of machine breakdown (15%);

As well as the lack of confidence (12%); the rest of the customers find that the services are limited (5%); (20%) for security reasons; and (18%) of them think that there are insufficient awareness-raising actions.

Is withdrawing from ATMs beneficial?

Table 6 The advantage of withdrawing from ATMs

Answers	Frequency	%
Request account balance	20	50%
Find out about the bank's new products	09	22%
Correct an error immediately	11	28%
Total	40	100%

Source: Established by us

50% of respondents are satisfied with account balance inquiries at the counters, which provide them with information on their financial situation at their domiciliary bank, and with the monitoring of bank operations of withdrawal, deposit and direct debits. 22% of customers are satisfied, because they are kept informed of new launched products, but also updated on new banking and regulatory provisions. And finally, 28% of customers are also attentive to the immediate rectification of any errors that appear on their account.

What do you think of the automatic agency concept?

Table 7 The automatic agency concept

Answers	Fréquence	%
Good initiative	22	55%
Indifferent	08	20%
There's no better than the traditional agency	10	25%
Total	40	100%

Source: Established by us

55% of respondents consider the automatic agency concept to be a good initiative, while 25% believe that it does not get better than the traditional agency, as for the remaining 20% are indifferent customers, with no particular preference.

In your opinion, what is the strategy adopted by the BEA to promote the bank card?

Table 8 The strategy adopted to promote the bank card

Answers	Frequency	%
Media	15	50%
Signage	10	33%
No one	00	00%
Other	05	17%
Total	30	100%

Source: Established by us

The media is the communication tool used by the BEA-Bank to promote the bank card, according to 50% of the respondents: the bank has in fact produced advertisements in newspapers and on the radio, but no heavy media (television) for this product, a quarter of them respond with signage: the BEA has set up in each agency many PSA (point-of-sale advertising) such as leaflets, posters.

In your opinion, what are the potential obstacles that could limit the development of new payment methods?

Table 9 Potential obstacles of the card

Answers	Frequency	%
The weak strategy of communication	06	20%
Lack of ATMs	03	10%
High Commission	00	00%
Lack of electronic payment culture among customers	16	53%
Other	05	17%
Total	30	100%

Source: Established by us

According to the results, the potential obstacles that could limit the development of electronic banking would be: firstly, more than half (53%) respond to the lack of an electronic banking culture among customers, then the weak strategy of communication applied by the BEA-Bank to promote these products (20%), then 10% are apprehensive about the lack of ATMs and finally the rest mentioned other things.

CONCLUSION

In recent years, new technologies have changed the nature of banking and financial services. They are gradually becoming essential to the development of banking activity in particular, and economic activity in general. In this context, Algeria went through several stages in order to adapt to the market economy enacting several laws relating to economic reforms, including Law 90-10 on money and credit, which established the autonomy of the Central Bank and the commerciality of public banks. Subsequently, other laws were enacted to modernize and develop the Algerian banking system (Law 03-11 of 2005 on the CML). Among the electronic payment reforms, which are considered an unavoidable instrument for assessing the degree of modernization of a banking system. Electronic banking in Algeria continues to develop, notably through the spread of new banking tools and services. However, banks have not been able to adapt quickly to this electronic banking project, given the actual state of bankcard use. The widespread use of electronic payment systems in Algeria is quite a difficult task, due to the imbued culture among customers lacking confidence in these new technological innovations. The introduction of new banking products is a tool for the acceptance of electronic banking, but we also notice that customers prefer withdrawals from the teller and cash payments to other means of payment, and this is due to a banking culture.

To achieve our objective and answer our basic problematic, we first tried to define the object of our work at its theoretical level, with the definition of payment and settlement systems, and the presentation of the means of payment that facilitate the economic and commercial transactions.

The behavior of Algerian economic agents is different, and is subject to the weight of legislation and rigorous regulations in contradiction with economic decisions, as well as laxity in the fight

against certain economic scourges, particularly with regard to the informal economy, for example, The absence of incentives from banks, the lack of enthusiasm for advertising campaigns and a single advertising campaign for the launch of a new technological product is not enough.

During our research work, we tried to study the behavior of the BEA-Bank customers with regard to the modernization of payment methods in the city of Oran, by providing some explanations on the reasons for the under-use of the bank card through the elaboration of a questionnaire, in order to answer our hypotheses:

With reference to the study carried out, the work was able to achieve the following results:

H1: The lack of a banking culture is an obstacle to the development of electronic banking in Algeria.

Table 4 relating to the use of the IBC interbank withdrawal and payment card shows no consistency of the use of this card by Oran BEA-Bank cardholders. 50% of cardholders use their cards occasionally, while 20% claim to use them frequently.

To achieve this, we need to instill a genuine electronic banking culture in cardholders through awareness-raising campaigns.

Thus, CIB cardholders do no longer have to walk around with cash, and merchants do no longer have to go to the bank agency to deposit their revenue in cash.

To achieve this, a genuine "electronic banking culture" must be developed towards all economic actors in Algeria. The first research hypothesis is therefore validated.

H2: Customers use digital services according to the means of communication used.

For the second hypothesis concerning the absence of communication and advertising, the answer to the question illustrated in table n°03, the holders of the interbank withdrawal and payment card, who deal with written information media with 17%, and visual media with 7%, as well as with a rate of 65% through the bank's staff playing an essential role in communicating financial products by informing and advising customers, ensuring the transparency of offers and responding to individual needs with a trustful relationship and judicious use of banking products. But this remains not enough in terms of communication, whose aim is to publicize the bank's products and services externally in order to attract customers. Billboard advertising does not seem to be popular with cardholders, as only 3% of the population surveyed has been aware of the new features. This hypothesis is therefore validated. Nevertheless, the absence of banking culture in general is the main obstacle to the development of electronic banking.

The aim of our modest work is to shed light on the modernization of electronic payment systems. We do not claim to have dealt with the subject in its entirety, as it constitutes no more than an initiation to research. Others will shed more light on other aspects of electronic banking that we have not been able to cover in this work.

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