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## END OF STUDIES DISSERTATION

A Dissertation Submitted in Partial Fulfilment of the Requirements for the  
Degree of Master in Strategic Management and Information Systems

**The evaluation of the e-payment methods according to users  
Perspective.**

Study case: Bank BADR electronic cards

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## **Abstract:**

E-payment methods are becoming increasingly popular in Algeria even though it is still in its early stages of development. This research is about the evaluation of the e-payment method in relation to the predictive customer, in order to achieve the objectives of the study, we made this study field on a sample of users of BADR bank e-payment cards with questionnaire to collect data and evaluate their satisfaction depending on 5 factors (price, speed, security, privacy, availability) and analyzing the data visually and statistically using SPSS and EXCEL. From the results a set of conclusions was reached, which are that the users of e-cards are generally satisfied and payment support available in shops effect satisfaction the most their satisfaction even though there are still some major problems with e-payment methods in bank BADR.

**Key words:** E-payment, E-cards, satisfaction, payment support, e-payment methods.

## **Résumé :**

Les méthodes de paiement électronique deviennent de plus en plus populaires en Algérie même si elle est encore dans ses premiers stades de développement. Cette recherche porte sur l'évaluation de méthodes de paiement électronique par rapport au client prédictif, Afin d'atteindre les objectifs de l'étude, nous avons fait cette étude sur un échantillon d'utilisateurs de cartes paiement électronique de la banque BADR avec un questionnaire pour recueillir des données et d'évaluer leur satisfaction en fonction de 5 facteurs (prix, vitesse, sécurité, confidentialité, disponibilité) et d'analyser les données visuellement et statistiquement en utilisant SPSS et EXCEL. Les résultats ont permis de tirer une série de conclusions, à savoir que les utilisateurs de cartes électroniques sont généralement satisfaits et que le support de paiement disponible dans les magasins est le plus satisfaisant, même si les méthodes de paiement électronique de la banque BADR posent encore quelques problèmes majeurs.

**Mots clés :** Paiement électronique, cartes électroniques, satisfaction, aide au paiement, méthodes de paiement électronique.

## ملخص:

تزداد شعبية طرق الدفع الإلكتروني في الجزائر حتى مع العلم أنها لا تزال في مراحلها الأولى من التطوير. من أجل تحقيق أهداف الدراسة حول تقييم أداء الأدوات الدفع الإلكتروني من منظور الزبائن، قمنا بعمل هته الدراسة على عينة من مستخدمي بطاقات الدفع الإلكترونية الخاصة بمصرف البدر مباحث استعمال استبيان لجمع البيانات وتقييم رضاهم اعتمادًا على 5 معايير (السعر والسرعة والأمن والخصوصية والتوفر مكائن الدفع) كما قمنا بتحليل البيانات باستخدام EXEL و SPSS. واستنادا إلى النتائج، تم التوصل إلى مجموعة من الاستنتاجات و هي أن المتعاملين ببطاقة الدفع الخاصة بالبدر راضين كما أنه توفر دعم الدفع في المتاجر هو أكبر مثير على رضى المستخدمين. حيث لا تزال هنالك بعض المشاكل الرئيسية فيما يتعلق بأساليب الدفع الإلكتروني في الجزائر والتي تؤثر سلبا على رضا المستعملين في بنك البدر.

الكلمات المفتاحية: الدفع الإلكتروني ، البطاقات الإلكترونية ، الرضا ، دعم الدفع ، طرق الدفع الإلكتروني.

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## **ABBREVIATIONS AND ACRONYMS LIST:**

<b>E-Payment</b>	<b>Electronic payment</b>
<b>E-Commerce</b>	<b>Electronic commerce</b>
<b>E-Card</b>	<b>Electronic card</b>
<b>E-Cheque</b>	<b>Electronic cheque</b>
<b>ATM</b>	<b>automated teller machine</b>
<b>USA</b>	<b>United states of America</b>
<b>UK</b>	<b>United Kingdom</b>
<b>IGNOU</b>	<b>Indira Gandhi National Open University</b>
<b>UPI</b>	<b>Unified Payments Interface</b>
<b>IP</b>	<b>Internet Protocol adresse</b>
<b>BI</b>	<b>behavioral intention</b>
<b>IR</b>	<b>innovation resistance</b>
<b>E-BOND</b>	<b>Electronic bond</b>
<b>PIN</b>	<b>Postal Index Nimber</b>
<b>E-BANKING</b>	<b>Electronic banking</b>
<b>CIB</b>	<b>carte interbancaire</b>
<b>DA</b>	<b>Dinar Algerian</b>
<b>FAX</b>	<b>Facsimile Automatic Xerox</b>
<b>SPSS</b>	<b>Statistical Package for the Social Sciences</b>

# **INTRODUCTION**

The banking industry has witnessed tangible progress in the field of electronic banking operations, which was made possible by continuous technical innovations and intense competition between banking institutions. Developed trends during the eighties and nineties until the present day, and this was accompanied by the emergence of the use of Internet networks and the linking of computers with each other, and the emergence of the phenomenon of electronic commerce in the light of the use of information and communication technology, which in turn led to the consolidation of the idea of a modern electronic economy (digital economy).

Electronic payment methods are among the most important of these activities, as the degree of demand for them indicates the degree of progress of the country. As for its supply, it achieves the welfare of society, and the world today lives in an era called the age of information or knowledge as a result of the increasing growth of technology in various fields. Business establishments in general, and commercial banks in particular, have witnessed great challenges in recent times. It is believed that the growth in the country and the survival of the banking sector in the field of business depend to a large extent on its ability to face the challenges of the times, so this sector has become required to rise above routine work and pay attention to strategies and policies that It helps to keep it going and progressing.

Since E-cards are the most used E-payment method and the center of the modern payment systems, we made out study on the users of e-cards provided by the BADR. the means of electronic advocacy are directed to users, we will evaluate the performance of online payment according to them.

This research have for goal evaluation the e payment tools according to users in the bank BADR. And in order to achieve it we have to answer the main question of this research:

***How efficient are the tools of e-payment of the BADR bank according to users?***

There are Secondary questions arise from this main question and will serve as a guide during our research:

- Are the users of e-payments satisfied with their cards?
- What's factor bring the most satisfaction to the clients?
- What does the users think of e-cards provided by the bank?

In order to answer the questions above and to solve the problematic, I used qualitative research approach, this thesis is divided into 03 three chapters presented in the following order:

**The first chapter** Theoretical Framework (Literature review and conceptual framework), This chapter is composed of two sections, the first one dedicated to the literature review on e-payment and its customers satisfaction.

As for the second section is about the generalities of e-payment and its features, tools and its types, also the kinds of e-payment cards and their features, and for the last we talked about Customer Satisfaction and its accomplishment.

**The second chapter** is methodological framework and host organization, and it contain 2 main sections.

The first section contains the methodology framework, we defined the approach and methods applied to collect and treat information's used for the study.

In the second section we managed to define BADR bank and its history then defining our host agency that provided us with the valid data for our research.

Finally, in the **last chapter**, we adjust the result that we collected using questionnaires, then analysing the collected data using SPSS and EXEL, the data collected would be discussed in order to get results that lead to the precise answers for our problematic also for our secondary questions.

# **CHAPTER I: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

## SECTION 1: LITERATURE REVIEW

A literature review is the examination of articles particular topic relevant to a particular question, area of research or theory, in order to provide a description, summary and provide a description, overview and an evaluation of these works relevant to the problem being studied. The literature review is designed to provide an overview of the sources explored in researching a particular topic and to show readers how the research fits into a larger field of study.

In order to prepare our literature review, we reviewed the different works dealing with the basic elements of our works subject. In order to better master the main elements of our topic, we have based ourselves on a series of articles.

### Electronic Payment Systems

This article is made by (Donal O'Mahony, 2015 ) College Dublin ·Department of Computer Science. Talked about the Traditional Payment Systems by giving brief history of Forms of Payment which are Cash Cheques Wire transfer and Payment cards. (Credit card, Charge card, Debit card).

The article also talked about Electronic Cash and Micropayments and that Many attempts have been made to transfer the advantages of cash money to digital transactions.

Where the following results are collected:

**Table 1** : Customers preference in non-cash payment 1997

Period / Year	1997 - 1998			
Country	Cheques	Credit transfer	Payments Cards	Debit Cards
USA	69.3 %	3.7 %	25 %	2 %
Netherlands	2.8 %	46.1 %	22.9 %	28.1 %
UK	34.5 %	18.5 %	29.3 %	17.7 %
Germany	5.7 %	50.1 %	4.6 %	42.6 %
Turkey	6.9 %	2.6 %	83.9 %	--

**Source:** Elaborated by us from the article (Donal O'Mahony, 2015 ).

**Table 2:** Customer preferences in non-cash payment year 2001

Period/Year	2001			
	Cheques	Credit transfer	Payment Cards	Direct Debit
USA	53.5 %	5 %	38.3 %	3.1 %
Netherlands	0.2 %	38.2 %	(32.4+1) %	28.2 %
UK	23.5 %	17.7 %	39 %	19.7%
Germany	2.3 %	49.8 %	(11.3+0.2) %	36.4 %
Turkey	--	--	--	--

Source: Elaborated by us from the article (Donal O'Mahony, 2015 ).

**Where the following results were reached:**

\* The usage of payment cards had increased in these countries.

\*Above attributes cause of conditions must be met which are:

- Acceptability independent of transaction amount.
- Guaranteed payment – no risk of later cancellation.
- No transaction charges.
- No authorization, no respective communications traffic.
- Anonymity.

**Adoption of Digital Payment System**

Second article is made by (Sarkar, 2019) Indira Gandhi National Open University (IGNOU), New Delhi, India Published Online, The literature related to the concept of Digital payment System, its growth, importance, factors impacting Digital payment system, challenges faced by consumers, and role the government play taken from reputed database such as Sage, Taylor and Francis, Emerald, ProQuest, Springer, Elsevier and Science Direct is studied and reviewed.

It also shows There are numerous factors including simplicity to use, perceived Usefulness with digital payment system, convenience (i.e. payment anywhere and anytime 24\*7), the fast-growing smart phone penetration in the country, growth of non-banking payment institutions (payments bank, digital wallets, etc.), progressive regulatory policies and escalating consumer readiness to the digital payment platform which lead to exponential growth of the Digital payments in India. UPI, Aadhar linked electronic payments and improvement of the digital infrastructure are another key driver of Digital payments and are being the game changers.

### **Results:**

The results suggest that the behavioural intention (BI) to use and innovation resistance (IR) affect the usage of digital payment systems. The relation between BI to use digital payment systems and the AU of digital payment systems is moderated by the stickiness to cash payments.

### **A Review of E-Payment System in E-Commerce**

The last article was Made by (S Fatonah, 2018) that determined the term Electronic payments as a payment mechanism using electronic media that does not involve cash. Electronic payment system (e-payment) is an important aspect of e-commerce.

In more detailed aspects, The Definition of E-Payment is the use of technology in modern banking services that we know as electronic payment systems makes banking performance more optimal, various activities can be implemented quickly and accurately while impacting productivity. Electronic payment systems can also define as a type of inter-organizational information related to transaction systems, linking various associations, and linking to individual clients. According to the Federal Financial Institutions Examination Council (2010), electronic payment is a new payment practice for retail where a merchant retrieves payment information for goods and services and places this information in an electronic template that creates electronic files for processing over the network. Electronic payments may be defined as an electronic value transfer of a payment from the payer to the recipient through an electronic payment mechanism.

In this study, the researcher used a meta-analysis. Meta-analysis as one of the techniques aimed to re-analyse the results of statistically processed studies based on primary data

collection. In this study, the researcher conducted a review of literature conducted with Google Scholar search engine in July 2018 amounting to 44, the research conducted on e-payment system on e-commerce between the years 2008-2018 from various countries.

**Adjusting the results:**

**Table 3: Place of research and publication**

<b>Place</b>	<b>Total Research</b>
<b>Africa</b>	<b>10</b>
<b>Asia</b>	<b>20</b>
<b>Middle East</b>	<b>9</b>
<b>Europe &amp; America</b>	<b>4</b>
<b>Sum</b>	<b>43</b>

**Source:** Elaborated by us, made by S Fatonah, A Yulandari and F W Wibowo

**We have as results:**

- Almost 46% of empirical e-payment system research on e-commerce is done in Asia. Africa is 23%, the Middle East region shows 20% while the rest of the research conducted in Europe & America shows fewer numbers.
- The low percentage of empirical e-payment system research on e-commerce done in Europe and America could be as result of their progress in technology adoption using electronic payment system from developed countries.
- -there is a need for more research on how to create trust in electronic payment systems
- -methods it's highly recommended for the data collection to use other methods, improving and generating solutions to hidden problems with regard to several issues, especially issues concerning future electronic payments.

## **SECTION 2: CONCEPTUAL FRAME**

In this section, we will discuss the definition of the variables that we would use for our study and present the conceptual bases of our research.

### **1-Electronic Payment**

#### **1-1 Definition of electronic payment**

E-payment or electronic payment is the modern payment, it's all activities related to digital payment, and payment by card. It allows the exchange of money in a paperless manner.

E-payment systems are regarded as one of the key elements of economic development, developing world, and they significantly contribute to enhancing the capabilities and provision of financial services. In reality, a payment system is a collection of rules that permit users to transfer money (**SoleimaniRoozbahani, 2015**).

The payment system is a device that allows money to be transferred from one bank account to another, serving as the financial veins that carry money to various businesses in the economy (**SoleimaniRoozbahani, 2015**).

Between a buyer and a seller, e-payment is a type of financial exchange that is facilitated by electronic communication. In contrast, an electronic payment is one that utilizes information and communication technology, such as encryption and distant communication networks.

E-payment, or paying money through electronic devices, especially the internet, is often defined as doing so through ecommerce when purchasing a good. There are at least four parties involved in making an electronic payment: the payer, the receiver, the bank serving the customer or the financial institution granting the client credit, and the bank serving the seller. E-payment systems can be divided into three broad groups: traditional monetary transactions, digital money, and credit debt payment. These payments systems have many requirements, such as security, acceptance, convenience, cost, control, tracking capability, and encryption control (**SoleimaniRoozbahani, 2015**).

## 1-2 Features of Electronic Payment Methods

There is multiple characteristics of the e-payment, including:

- **Electronic payment is international:** E-payment is an acceptable method from all countries, Transactions made electronically worldwide.
- **Payment is made using electronic money:** a cash value included in a digital memory card or a main memory.
- **The need for a bank system designed to complete this:** that is, the availability of devices to handle these remote operations to facilitate Dealing between parties and providing confidence between them.

## 1-3 Advantages of electronic payment:

**For the holder:** The electronic payment methods provide the holder with many advantages, the most important of which is ease and ease of use, as well as giving him security instead of carrying paper money and avoiding theft and loss, and the holder has the opportunity to obtain free credit for a specific period, as well as enabling him to complete his transactions immediately by simply mentioning the card number(باتوبارة، 1999) .

**For the merchant:** It is the strongest guarantee of the seller's rights, contributes to increasing sales and removes the burden of following up on customers debts as long as the burden falls on the bank and the exporting companies(باتوبارة، 1999) .

**Regarding the bank:** Interests, fees and penalties are among the profits achieved by banks and financial institutions. Bank City achieved profits from credit card holders in 1997, amounting to \$7 billion(باتوبارة، 1999) .

## 1-4 Disadvantages of electronic payment:

**For the holder:** One of the risks resulting from the use of these means is an increase in borrowing and spending beyond the financial capacity, and the failure of the card holder to pay its value on time will result in his name being placed in the black list(باتوبارة، 1999) .

**For the merchant:** the mere occurrence of some violations on his part or his non-compliance with the conditions causes the bank to cancel dealing with him and put his name on the black

list, which means that the merchant will suffer great difficulties in his commercial activity (باتوبارة، 1999)

**For the bank:** The most important risk facing its issuer is the extent to which card holders pay the debts owed to them, and the issuing bank bears the expenses of losing them (باتوبارة، 1999).

### **1-5 Types of Electronic Payment Methods**

**Electronic money:** One of the innovations made by the banking industry in the development of commercial exchange settlement systems, the aim of which is to facilitate media transition (الله و عمر).

Electronic money was defined by the European Central as: “an electronic stock of cash value on a technical method commonly used to make payments to contractors other than its issuance, without the need for a bank account when the transaction is made and used as a prepaid portable tool (BOUAKAZ, 2020).

#### **Electronic Cambelt (E-SEFTA):**

E-cambelt or Seychelles Electronic Funds Transfer It is a fully or partially processed electronic triplex editor that includes an order from a person named the tug of another person named as withdrawn to pay a certain amount to a third person named the beneficiary upon viewing or a particular date. The formation of electronic Kimpel is associated with the desire to take advantage of modern information tools and electronic processing in the presence of computer clearing.

**E-Bond:** is a partially or wholly processed bilateral editor whose editor undertakes to pay a certain amount in a particular date for the permission of another person named the beneficiary.

**E-Cheque:** It is defined as a verified and secure message sent by the source of the cheque to the recipient of the cheque and provided to the bank working online to first transfer the value of the cheque to the account of the cheque holder And then he cancels the cheque, and his electronic habit is to the recipient of the cheque, holding it to be proof that the cheque has already been cashed, The recipient of the cheque can be assured that the amount has been transferred to his account.

**Electronic Financial Transfers:** Transfers between banking and financial institutions are among the most important processes and activities that focus on them to achieve the established objectives. They are defined as a set of rules and procedures adopted in the transfer of funds through electronic banks and licensed Internet banks. With the strengthening of security systems, electronic financial transfers have become more and more reliable and secure for the dealers, as well as the system's shortening time, saving effort and cost.

**Electronic portfolios:** It is an electronic application based on the arrangement and regulation of all financial movements, defined as a hypothetical method used to pay very low amounts directly or indirectly.

**Bank Card:** Defined as a bank tool for fulfilling obligations, issued by a financial institution to the user, enabling him to make a cash withdrawal from the bank or purchase a commodity and services from merchants with his obligation to pay the exporting bank, under the terms and conditions of their contract.

Most companies look for online payment in order to enhance sales by taking credit cards. By embracing online credit payments, businesses can lessen the inherent risks they face while also giving customers more payment options. Improved cash flow efficiency, assured transactions, cost savings, better protection of sensitive information, and increased protection of the payment provider are five ways that providers add value to enterprises.

### **Reasons to use e-payment**

Most businesses want to improve sales by accepting bankcards online.

- Increasing the number of payment choices offered to clients.
- Using online credit payment might help firms mitigate some inherent dangers.

Cash flow effectiveness

- Transactions with guarantees
- Lower costs
- Improved security for confidential data
- Improved security for the payment processor.

## **2- Bank cards**

### **2-1 Definition of bank cards**

A bank card is any card issued against a depository account, such as an ATM card or a debit card, is referred to as a "bank card." Since Visa and MasterCard are credit cards rather than debit cards and are issued by banks as well, the phrase is occasionally also used to describe them (**investopedia, 2022**).

Some bank cards may only be usable at ATMs or for specific types of purchases, which would limit their usefulness. The majority of bank ATM cards also need a PIN to be used (**investopedia, 2022**).

### **2-2 Benefits of Bank Cards:** (باتوبارة, 1999)

- More accurate than paper money.
- Modern, electronic and security licence
- Thin and fast to use.
- The card is linked to the banking activity.
- Cardholder receives commissions
- Get the profit margin (باتوبارة, 1999).
- Capitalization of new products and services.
- Development of business activity.
- Development of services granted to customers.
- The card clearly identifies the objectives of the sale.
- Control of technical points.

## **2- 3The most important electronic payment cards.**

### **2-3-1 Debit card**

A debit card is a payment card defined by the ISO 7810 standard, with immediate debit. This means that the account is debited each time it is used, like a cheque payment, but with the advantage that it is not each use, like a cheque payment, but with the advantage of speed of use speed of use, better security and an unlimited number of uses. number of uses (NASSILI & Haoues, 2014).

The holder is authorized to pay for the goods and services as that counterpart is transferred from the customer's account to the merchant's account so this card depends on the actual balances of the customer with the bank.

### **2-3-2 Credit card**

A credit card is one of the most widely used electronic payment methods. It is different from a debit card in that the card issuer lends money to the customer rather than having money taken from the customer's account. Similarly, it is different from a charge card in that (NASSILI & Haoues, 2014, p. 5).

by having a credit card, you can choose to pay the full monthly balance on your card when it is due and thus benefit from interest-free financing of your purchases. We can also make a partial payment or the minimum payment minimum payment according to our budget. However, if you have a payment card, you must pay the full payment card, we have to pay the full balance of our account each month (NASSILI & Haoues, 2014, p. 5).

### **2-3-3 Smart card**

It is a plastic card containing the name of the customer, address, the issuing bank, the method of exchange, and the date of the customer's banking life.

The smart card enables the holder to choose how to deal with it whether this transaction is credit or by prompt payment, it is also considered for the customer as a mobile computer, and it is protected against forgery, counterfeiting and not imitating it.

The smart card holder can carry it to a place. The card also gives the owner the opportunity to request multiple personal services. It is also one of the keys that helps to increase and spread the use of mobile telephone in trade operations(2009، محمود) .

### **2-3-4 Charge card**

This card allows the holder to purchase on the account immediately, with payment to be made later, it does not include any meaning of credit, but the holder must pay the value of his purchases directly once the invoice is sent to him and does not incur any interest. in the period between purchase and payment, and the period of credit does not exceed the duration of the month as the accounting is done monthly in the event of a delay in payment within the

specified period, the bank carries interest ranging from 5.1% to 75.1% per month (محمود، 2009).

These cards are different from credit cards in payment. They must be made in full in terms of the customer to the bank during the month in which the withdrawal took place (محمود، 2009).

#### **2-4 Obstacles to the use of bank cards in Algeria:** (سميرة، 2010، صفحة 110)

- Absence of sensitization campaigns and advertising processes that promote electronic payment cards.
- The illiteracy rate in Algeria is approximately 30%.
- There is no diversity in the services provided by cards to users.
- Disruption of the permanent resemblance of dispensers.
- Low proliferation of electronic payment devices by vendors.
- Poor infrastructure.
- High competition risk, operating risk, increasing theft offences, forgery and fraud.

### **3 Customer Satisfaction and its accomplishment**

#### **3-1 Customer satisfaction**

Customer satisfaction is a metric that measures a company's customers' level of satisfaction with its goods, services, and capabilities. Information about customer satisfaction, such as surveys and ratings, can assist a business in deciding how best to adjust or enhance its goods and services.

Quality and customer satisfaction have always been crucial to an organization's ability to thrive in today's cutthroat marketplace. Since it has a significant influence on customers behaviours and purchase intentions, customer satisfaction has garnered the most attention in the marketing literature. Customer satisfaction is a feeling or thought that has a specific emphasis (expectation, product, consuming experience, etc.) and occurs at a specific time (after consumption, after selection, based on experience). Regarding the desired quality (Fatemeh SoleimaniRoosbahani, 2015).

a credible classification would divide customer requests into three levels or layers, with each qualitative layer's realization depending on the success of the preceding one in order to boost

long-term client happiness. These layers comprise fundamental calibre (the minimum value that prevents dissatisfaction), efficiency quality (performance necessities that ignoring them dissatisfies the customers), and motivational quality (features that ignoring them does not dissatisfy the customers, but realizing them by a manufacturer causes tangible customer satisfaction) . efficient quality (performance requirements that manufacturers must meet or customers would be dissatisfied), and motivational quality (features that manufacturers must implement since doing so results in tangibly higher customer happiness) (Fatemeh SoleimaniRoozbahani, 2015).

### **3-2 Accomplishment of customer satisfaction.**

and to accomplish customer satisfaction it is needed spee and efficiency,security and trust, accountability (Fatemeh SoleimaniRoozbahani, 2015).

#### **3.2.1. Speed and Efficiency**

Speed in e-payment tools refers to the ability of new technologies to quickly integrate with existing systems and methodologies in order to quickly respond to the demands and expectations of customers. On the other hand, an e-payment system is effective when it completes each stage of the transaction with the best performance possible. Users must therefore be assured of the system's effectiveness since, if they are not, they won't use it. In fact, a system with the required efficiency should be able to perform tiny payment procedures without incurring expenses or having other issues. Thus, completing the transaction quickly and efficiently means saving time (Fatemeh SoleimaniRoozbahani, 2015).

#### **3.2.2. Security and Trust**

Security simply refers to protecting advantages. Concerns about information security and privacy are among the difficulties that e-banking encounters. Users and business settings naturally embrace highly trustworthy systems since the provision of services and processes by commercial units rely on the accessibility and effective functioning of the payment infrastructures. As a result, we may conclude that confidence and security are key components of embracing e-banking and e-payment, and a lack of security is a major barrier to doing so. Thus, we can say that trust in payment systems refers to whether the system is sufficiently strong to prevent the loss of transactions or money in the event of blackouts, server failures,

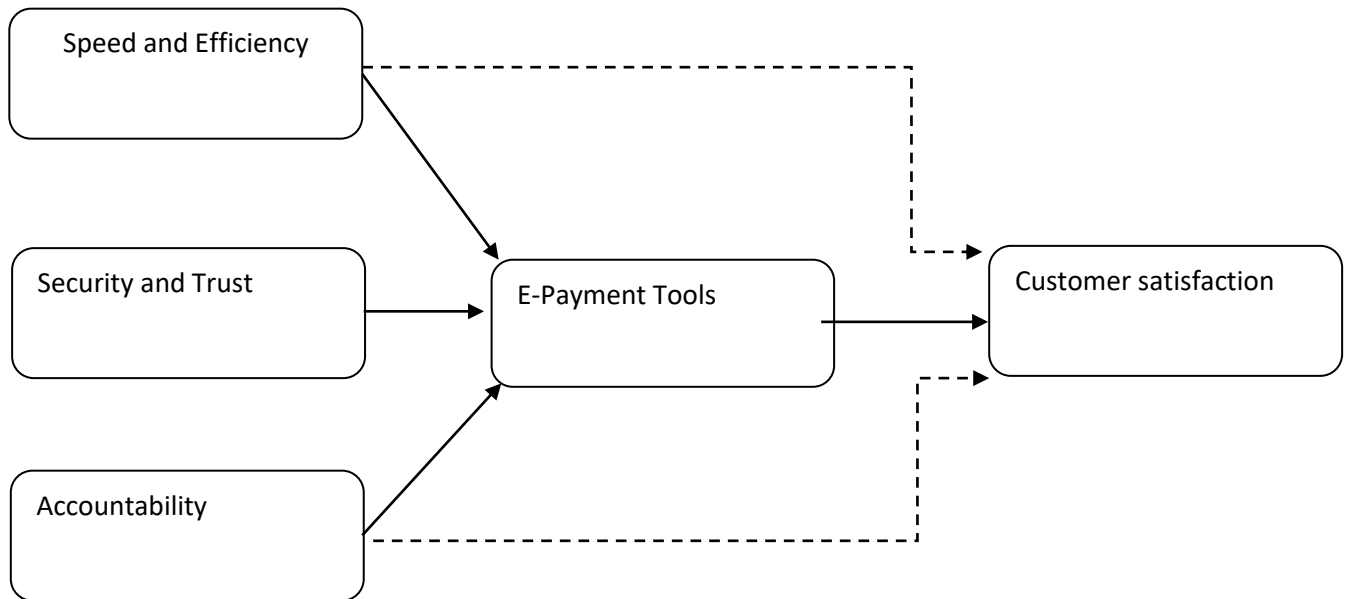
and other similar events. Security in payment systems refers to the transformation of national and personal information into a form that prevents its disclosure to other groups. and personal data are translated into a form that prevents exposure to other organizations, and trust refers to whether the system is sufficiently robust to maintain its integrity. Trust refers to whether the system is sufficiently robust to prevent the loss of transactions or money in the event of blackouts, server failures, network problems, or unexpected user input (SoleimaniRoozbahani, 2015).

### **3-2-3 Information and Accountability**

Being dedicated to responding to inquiries and requests is what response and accountability are all about. Information is one of the most fundamental aspects of online banking, and firms prefer to be accountable when it comes to helping clients and delivering services as promised **(Fateme SoleimaniRoozbahani, 2015)**.

Through public or private networks, the bank provides information about its services and operational procedures. Customers' education and training needs might be looked into from several perspectives. The most important thing, though, seems to be becoming educated and trained in e-payment and e-banking services. The benefits of providing consumers with the right information and training go beyond only cost-cutting; they may also have social, economic, and cultural effects, such as lowering the cost of printing bills, health, and control **(Fateme SoleimaniRoozbahani, 2015)**.

**Figure 1** : The research conceptual model



**Source:** Elaborate by us from (Fatemeh SoleimaniRoozbahani, 2015)

#### **4-Hypotheses**

Based on the conceptual framework retained and the literature review, we have developed the following hypotheses, which express the links between the variables of our research.

##### **Satisfaction of the users when it comes to BADR cards**

When it comes to BADR e-payment cards there isn't a specific study that's can indicate the satisfaction of e-cards of the BADR, but according to (Yacine Djebar, 2021), in his article he mentioned that E-payment applied by "Algeria Telecom" insufficient compared to their counterparts. By dropping, we can conclude we can assume that it could be the same case.

**H1.** The users are not satisfied enough when it comes to e-payment applied by the BADR.

### **the factor that bring the most satisfaction to the clients**

After (Shrestha, 2020), As a result of his correlation analysis, it was shown that customer happiness and security are significantly positively correlated. It is safe to scale his study to make out hypotheses since the users use the same type and nature of product. E-cards.

**H2:** Security brings the most satisfaction to the clients.

**CHAPTER II: METHODOLOGICAL  
FRAMEWORK AND HOST  
ORGANIZATION**

The objective of this second chapter is first to present the methodological framework chosen to carry out this study. Then, we will present the host organization “BADR agency 281 Khemis-Miliana”.

## **SECTION 01: METHODOLOGICAL FRAMEWORK**

In this section, we will present the methodological approach used to conduct this study, as well as the data collection tools and data analysis instruments adopted to achieve our research objectives.

### **1-Methodological approach**

The term "method" in the sciences has a very precise meaning, "It is the set of steps that follows the mind to discover and demonstrate the truth" (Mialaret, 2004). According to (Gavard-Perret, Gotteland, Haon, & Jolibert, 2008), methodology is generally defined as the study of methods intended to develop knowledge.

The methodological approach is "the way to move, to walk, to progress towards a goal, to describe the fundamental principles to be implemented in the work of research".

In order to carry out our empirical study, and to answer our research problem and the sub-questions that arise from it, we opted for a qualitative approach

### **2- Qualitative approach**

Quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon.

### **Qualitative approach tools used in this these**

In all qualitative research, the main instrument is data, it is important to collect information and data in order to analyse and process them for a complete and detailed description of the research subject, and to implement the evaluation of the e-payment tools to the client perspective.

During the course of our research the data collection was based on different techniques and methods adopted to the context and nature of our research in order to collect a maximum of data and information necessary for our study among: Documentary research, Observation, Semi-structured interviews, The questionnaire.

In this research I used documentary research and questionnaire.

### **The documentary researches**

The documentary research is the first step and it is the basis on which we started our research work by scanning the publications, whether they are books, articles, reports or theses that have dealt with the problems of IS e-payment and its contributions that we found on search engines, the Internet and the ENSM library.

Consequently, this approach allowed us to identify the approaches that correspond to our case, the elements necessary to the drafting of the theoretical framework.

### **The questionnaire**

The questionnaire is one of the three main methods used for the collection of information to understand on this we have elaborated a questionnaire for our customers especially the users of BADR e-payment tools

### **Data analysis**

Defined as the process of cleaning, transforming, and modelling data to find information useful for business decision-making. The purpose of data analysis is to extract useful information from data and make decisions based on data analysis.

We use google forum to analyse the data collected from the questionnaire and SPSS to analyse the outputs of our study.

## **SECTION 1: PRESENTATION OF THE BANK BADR**

### **1- General presentation of the bank**

The Bank for Agriculture and Rural Development (BADR) is a national financial institution created on 13 March 1982. It has the legal form of a joint stock company (**badrbanque, 2022**).

For 36 years, BADR Bank has been actively supporting the development of its territory and the projects of its clients, including the financing of agriculture, agri-food industries, fisheries and aquaculture. All these fields put it in line with the banks, thus constituting a support for the development and improvement of the national economy (**badrbanque, 2022**).

In order to bring the greatest satisfaction to the customers, the BADR bank has put more than 7000 employees with a team of 1200 customer service agents at their disposal through its 321 branches, 39 regional groups of exploitation deployed on the national territory; as well as a new information system for more security, easiness, efficiency and speed (badrbanque, 2022).

In some points the BADR it is:

- The first bank in Algeria.
- The use of SWIFT since 1991.
- The densest network.
- A universal bank which intervenes in the financing of all the operations economic operations.
- The computerized treatment of all the foreign accounts.
- 30% of the Algerian foreign trade.
- Nearly 5.8 billion dollars of total assets.
- First Algerian bank to materialize the concept of "sitting bank" with personalized service.
- The total information of the network on the basis of software owned by BADR and development by its own information.

## **1-2 Brief history of the BADR:**

BADR is a national financial institution with the status of a commercial bank which was created on March 13, 1982 (**badrbanque, 2022**).

In execution of the law 88-01-1988 bearing orientation law on public economic enterprises, it was the transformation of BADR into a joint stock company without creating a new legal entity or creation of a new legal entity nor any modification brought to the social object to the name, and the duration or capital (**badrbanque, 2022**).

It currently has more than 312 branches and 39 regional offices. Some 7,000 executives and employees work in the central, regional and local structures. The density of its network and the importance of its staff make of BADR the first network bank at the national level. It is considered as the largest bank in Algeria in terms of its network and its staff. The Bankers Almanach ranks it at the first place in Algeria and at the 688th place worldwide out of about 4100 banks ranked. Over the years, BADR has become particularly since the promulgation of the law 90/10 of April 14, 1990 relating to the currency and credit, a universal bank which intervenes in the financing of all the sectors of activities (badrbanque, 2022).

## **1-3 The missions/goals/objectives of BADR:**

The BADR was created to meet an economic need, born of a political will to restructure the agricultural system, to ensure the economic independence of the country and to raise the standard of living of rural populations.

### **Goals of the BADR: (MENAD, 2022)**

- Improve the quality of services and relationships with customers.
- It remains the largest controlling bank in the agricultural fields.
- Accomplish reater payoff.

### **Missions of the BADR: (MENAD, 2022)**

- Processing all transactions performed by any commercial bank (loan, exchange or storage);
- Open accounts for each person applying.
- Participation in all areas of savings and reserves.

- Dealing with public loan institutions.
- Finance foreign trade transactions and try to provide facilities for national investment.
- Grant short -and medium-term loans.
- Develop the Bank's resources and uses by upgrading savings and investment.
- Contribute to the development of the agricultural and other sectors.

#### **1-4 Objectives of the BADR:** (badr.ca, 2022)

**Integration:** To offer immigrant families and young people support and accompaniment to break the isolation and support against psychological distress, violence and promote integration through various workshops and other leisure activities.

**Diversity:** Promote cultural diversity within the East End community in a healthy, welcoming and respectful environment.

**Partnership:** To promote partnership, twinning and inter-cultural relations between immigrants and the host society, to revive the feeling of belonging and the notion of citizenship.

**Recreation:** To offer a variety of leisure activities to reach out to the community of different ethnicities

**Quality of Life:** Contribute to improving the quality of life and health of families and individuals in the neighbourhood through actions that improve their living conditions (providing respite for mothers, ensuring food security, raising awareness of healthy habits and a healthy lifestyle through sports and healthy eating).

**Solidarity:** Encouraging mutual aid, solidarity, capacity building and the valorisation of achievements.

**Reintegration:** To offer a variety of leisure activities to join the community of different ethnic groups

**Supervision:** To provide a better educational, recreational and sports environment for young residents of the east end of Montreal.

### **1-5 Cancellation policy of the bank: (badr.ca, 2022)**

BADR reserves the right to cancel any activity if the number of participants is insufficient or for any other reason deemed relevant by the organization.

- The registration fee will be refunded in full in such cases.
- No refunds will be made after the start of any activity for any reason except in the case of illness with proof of illness.
- All requests for refunds must be made at least 10 working days before the start of the activity.
- In this case, a cancellation fee of \$50 will be deducted without notice from each refund per participant.
- Membership fees for sports activities are non-refundable.

### **1-6 Types of electronic cards used by agency:**

There are four types of cards used, namely:

**CIB Debit Card:** It is a withdrawal and transfer card, intended for wage earners, farmers, merchants and everyone who owns a current account. Dealing with this card began at the agency level in 2009. Dealers with it can carry out transfers to a savings account only, but it has not been embodied on the ground until now despite One-year anniversary of its existence

**CIB classic Payment Card:** It is an interbank payment and debit card, used in all ATM machines. The agency started dealing with it in 2009, the withdrawal limit per transaction is 1/3 of the income

**The GOLD CIB card:** It is a card dedicated to important customers, characterized by the fact that the withdrawal is With great values, but within the limits of the concluded contract (1/3 according to the contract), provided that it does not exceed a maximum of 100,000 DA in 72 hours. The agency started dealing with it in 2009.

**TAWFIR Savings Card:** It is a withdrawal and savings card for those who have a savings account, with which they can withdraw whatever; its value is a maximum of 50.000 DA once in 72 hours. The agency started dealing with it in 2012.

## **BADR master card**

BADR "MASTERCARD" cards are international payment and withdrawal cards in accordance with the international regulations in force, intended for physical customers of Algerian or foreign nationalities residing in Algeria (19 years old and over) and holders of a foreign currency account and / or their duly authorized representatives. They are intended in two (02) types of product: The Master Classic card and the Master Titanium card

- **The MasterCard Classic:** it has an initial deposit of 500 Euros and the minimum balance is 100 Euros; the limits of use are: for online purchases 200 Euros per week; for payments 2500 Euros per week and for withdrawals 800 Euros per week.
- **The MasterCard Titanium:** the limits of use are: for withdrawals 1000 euros per week and for online purchases 5000 Euros per week.

**Note:** BADR Agency customers can make electronic card withdrawals within the limits of the ceilings granted to them from any ATM at the level of all types of Algerian banks that have GAB or DAB machines, the same conditions for withdrawals are applied to them in the Badr Agency, without distinguishing between them and the rest of the other banks.

## **SECTION 2: PRESENTATION OF THE HOST ORGANIZATION**

### **1-1 Presentation of BADR agency n 281-Khemis-Miliana**

Through our internship at the Agency of the Bank of Agriculture and Rural Development No. 281 located in Khemis-Miliana, we're going to provide a glimpse our internship:

The establishment of the Agency for the Bank of Agriculture and Rural Development No. 281.

This agency is like other agencies spread across the territory The National Bank, which appeared after the birth of the mother bank of the Bank for Agriculture and Rural Development, this agency was established in 1995, due to the agricultural nature of the area surrounding the municipality of Khemis-Miliana, despite the presence of other agencies in the same place, which shows.

Located in the centre of the city of Khemis-Miliana, exactly on Al-Aqeed Street Baqra No. 92, where it started its activity in the same year it was established with a capital of 500 million DA. This agency also covers six Areas within the Wilayat of Ain Defla (which are Khemis-Miliana, Sidi Lakhdar, Bir Ould Khalifa, Prince Khaled Tower, Tariq bin Ziyad and Ayn Al-Sultan), the agency contributes to the development of the agricultural sector and the promotion of the activities of the traditional industry and agriculture. (In addition to other banking services such as granting loans, accepting deposits, providing guidance...etc.

### **1-2 The organizational structure of the Khamis Miliana Agency 281:** (Mouhamed, 2022)

The Khamis-Miliana Agency, which was placed under the indicative number 281 it, contains a number of interests, including:

**The Director:** He manages the agency and is considered the first official, as he has several tasks, including: drawing up and planning the general policy of the agency to present the bank to the local authorities as an important financial institution, also fixing tasks and following up on their implementation.

The secretariat: it organizes and arranges everything related to the director's inputs and outputs, primarily reception and direction, and includes several tasks represented in the following: recording incoming messages; receiving and sending phone calls; printing on the machine and computer; organizing and arranging documents...

**Administrative Department:** It operates within the framework of decisions regulating services provided to customers.

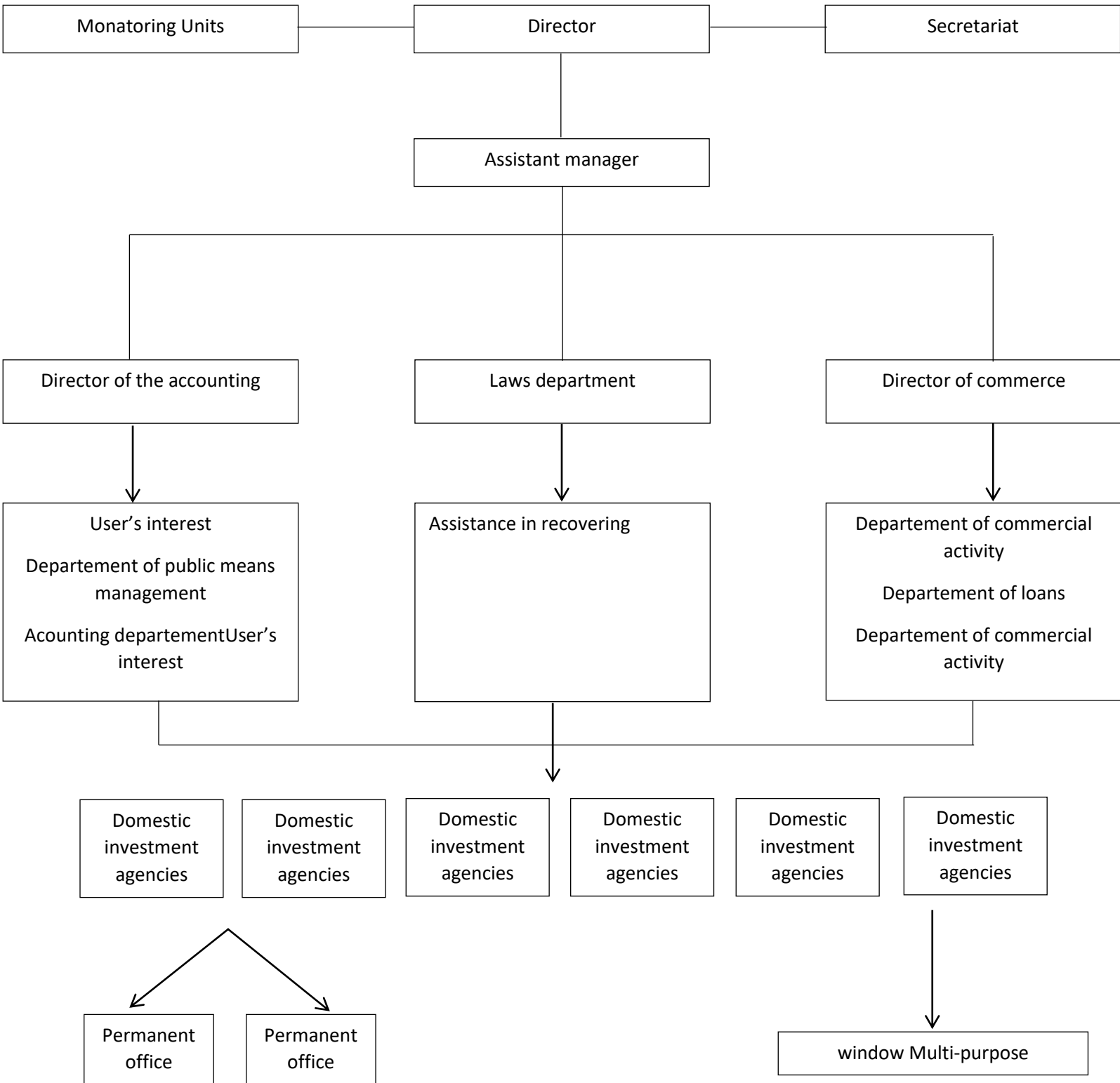
**Loans Department:** files are studied and followed up, various loans are managed, and customers are helped to choose appropriate loans according to the nature of their activity and the legal status of their institutions, and it is headed by the head of the department.

**Control and Accounting Department:** This cell accounts for the cashier's account of the amount of money issued and received on the last day, especially the permanent monitoring imposed

**External Exploitation Department:** It is a department specialized in carrying out money transfers from foreign currency to Algerian dinar and from Algerian dinar to foreign currency (foreign exchange).

## 1-2 Organigram of the agency

Figure 2: Structural organisation of agency 281



source: Elaborated by student

## **2-The reality of the use of electronic cards by the agency:**

Cards were dealt with at the agency in 1998 for the first time through debit cards, and then, starting from 2009, other cards were used

### **2-Conditions for obtaining an electronic card from Badr Agency 281: (Mouhamed, 2022)**

#### **2-1 from legal terms**

The agency requires the following: Reaching the legal age, which is equivalent to 19 years; Eligibility, i.e. the client must have full mental capabilities; The card applicant must have an account with the agency or open an account when applying for the card.

#### **2-2 The file required to obtain the electronic card:**

- Requires the following documents: Request for a bank card Birth certificate number 12
- Residence certificate; A copy of the national identification card Work certificate according to the type of activity practiced
- Pay a specified amount for the first balance in the account (500 DA for both CBRI and TAWFIR cards, 600 DA for CIB card, (as for the GOLD CIB card, an amount of 1200 DA must be paid)

**Notes:** BADR Agency clients can, on average, obtain their required electronic cards within a month and a half as a maximum, due to the procedures followed to issue them and inform their owners that they have been prepared for them, and if the owners do not come to receive them within two years, this electronic card will be destroyed by an employee The bank cut it in half after filling out a special paper and send a copy of this paper to the research cell by writing (fax or mail) on which the personal data of the customer and the information of his electronic card are written.

### 3-The demand on modern payment methods by the agency

#### 3-1 Evolution of of electronic cheques and electronic financial transfers

*Table 4 : Evolution of the number of electronic cheques and electronic financial transfers (from 2012-2015)*

<b>Years</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Electronic cheques</b>	1028875	1138010	1227262	1278577
<b>Electronic financial transfers</b>	439823	1296825	1539790	1815091

**Source:** Elaborated by students, from the information's collected by "SAIDI Mohamed"

Through the above table we note that there is an evolution in the issuance of electronic cheques as well as financial transfers.

#### 3-2 E-Cards Given to Customers at Agency

*Table 5 : Evolution of the number of E-cards made by the agency (from 2012-2015)*

<b>Years</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Cards</b>	560	930	1606	2339

**Source:** Elaborated by students, from the information's collected by "SAIDI Mohamed"

The number of customers on the E-cards is continuously increasing during the years 2012/2015. This indicates that e-cards have become more widely accepted by customers.

# **CHAPTER III: RESULTS AND DISCUSSION**

## **SECTION 1: RESULTS**

### **1- Population of the study**

This part of the survey aims to provide a brief description of the demographic data on the respondent's profiles.

The e-payment sector in particular is a consumer sector with a large audience. For our research, we have retained only the users of the BADR bank E-cards. We drew the sample for the study using the convenience method. It is therefore a non-probability sampling. To do this, we made the questionnaire online via the Google Forms platform and shared it in social media platforms (like Facebook and Linked)

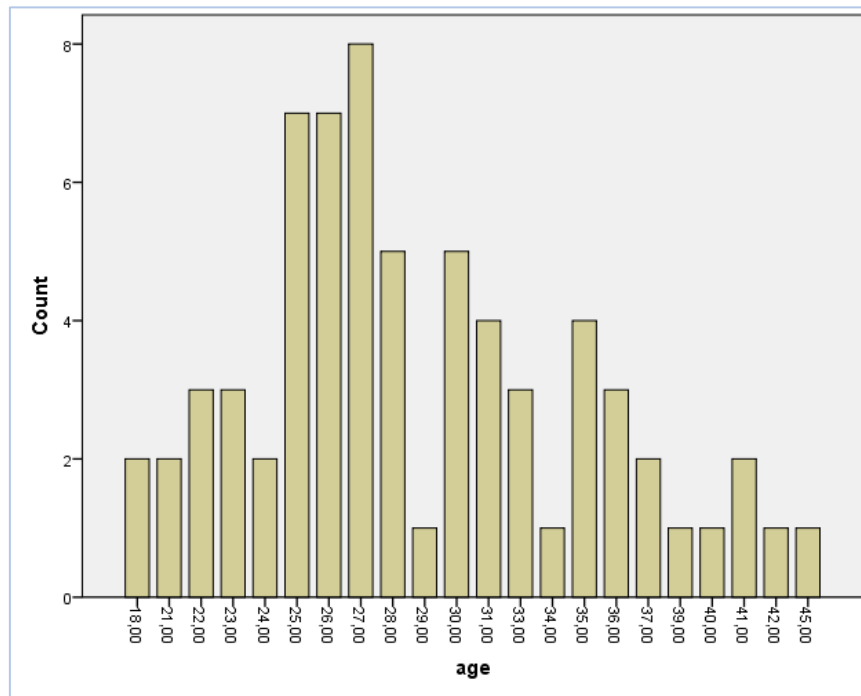
Our sample size at the beginning of the survey was 83 respondents, but only 68 were users of BADR electronic payment cards who were eligible for our study.

To begin with it is important to know our profiles in terms of gender, age and status. The table below represents the profiles of the respondents

## 1-1 Age representation

The pie chart below represents the percentage of our respondents when it comes to their age.

**Figure 3: Age représentation**



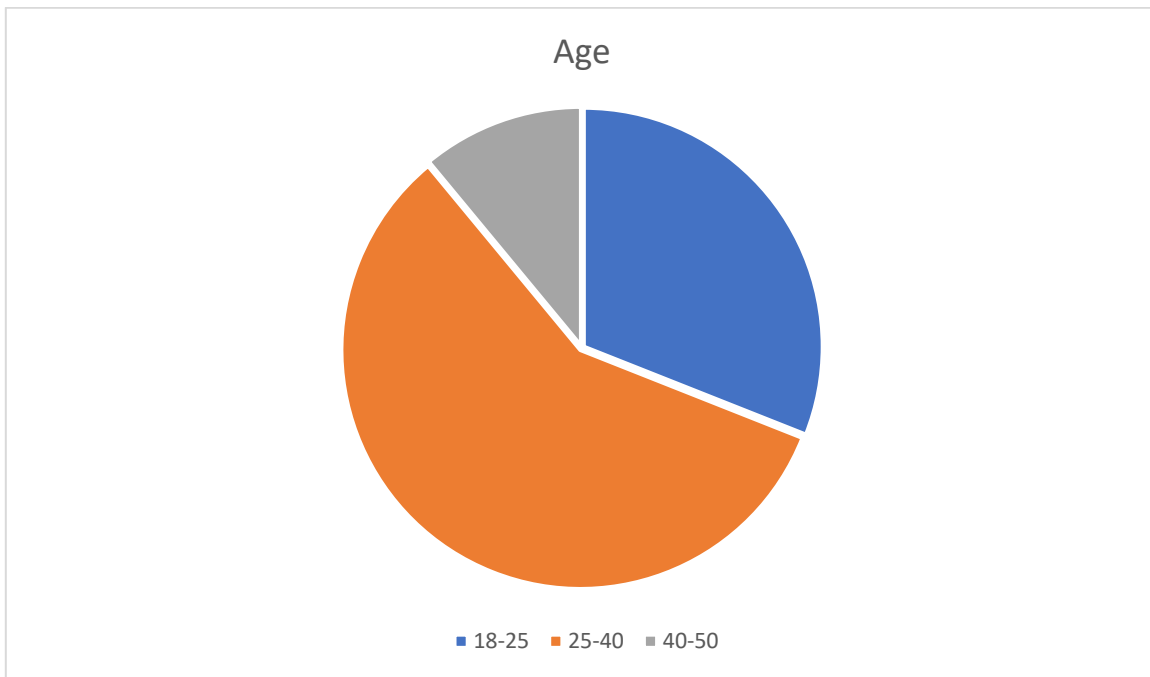
source: SPSS

Due to the presence of many variables and the difficulty of extracting the results from the chart above, we made pie chart using word program in order to shows the percentages of the respondents in terms of the age groups.

We classified the ages into 3 main age groups:

- 18-25: young-adults
- 25-40: middle-aged
- 40-50: represent elders

**Figure 4: Age rages**



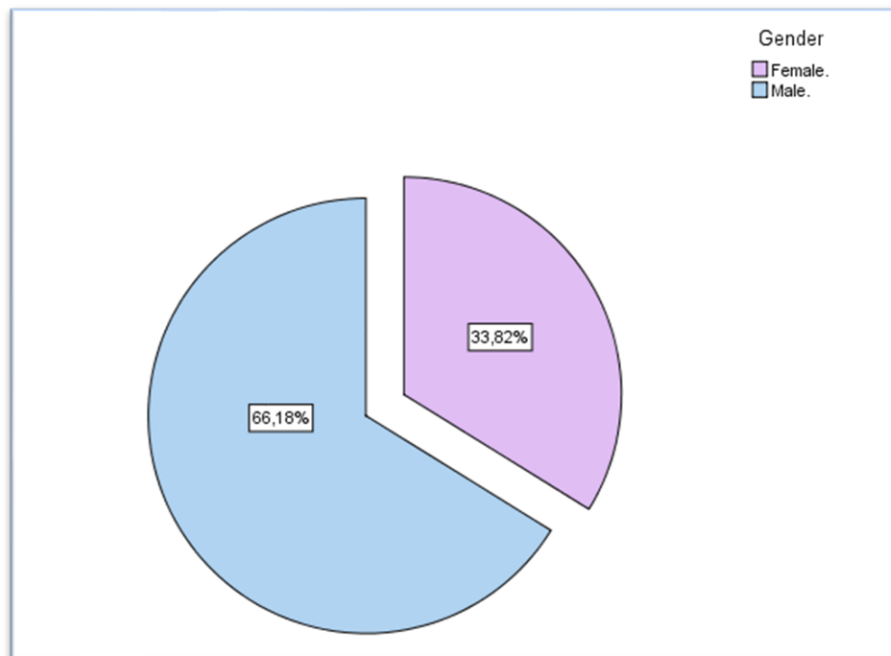
*Source: EXEL*

As it is shown by the pie chart below most the users are the middle-aged representing 58% of the pie chart, then it comes the young adults by 31% and finally the elders represent the minority by 11%.

## 1-2 Representation of the gender

The pie chart below represents the percentage of our respondents when it come to their gender.

**Figure 5:** Representation of the gender



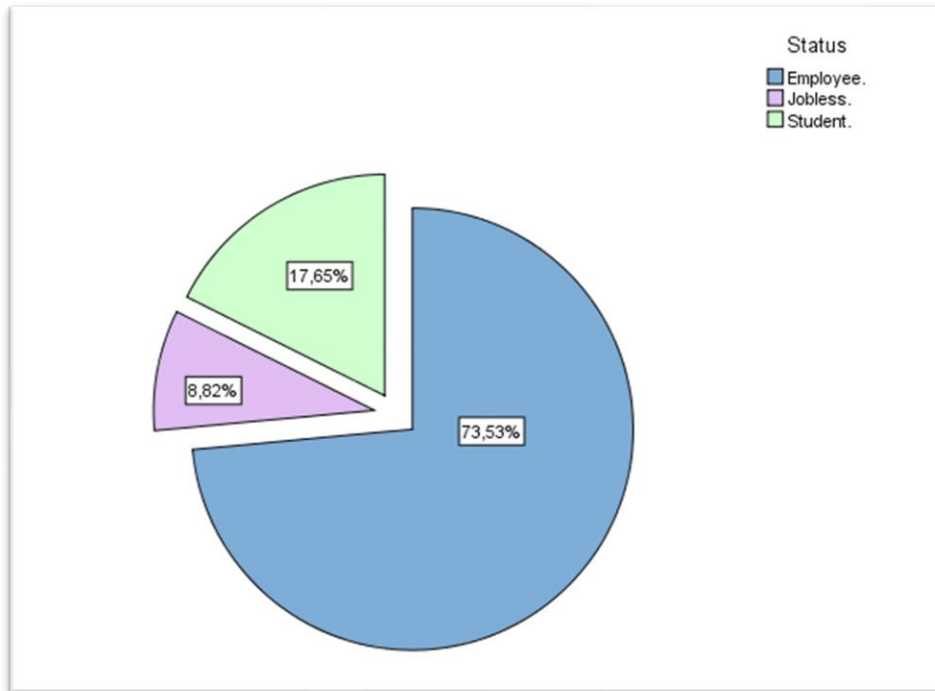
**Source:** SPSS

The pie chart shows that most users are the males by 66.18% while females represent 32.82% or the users.

## 1-2 Representation of the status

The pie chart below represents the percentage of our respondents when it come to their status.

Source 1:Representation of status



Source: PSS

This pie chart indicate that the employees are the most to use BADR cards by 73.53%, followed by the student who represent 17.65%, and finally comes the jobless people who represent the least percentage at using bank cards by 8.82%.

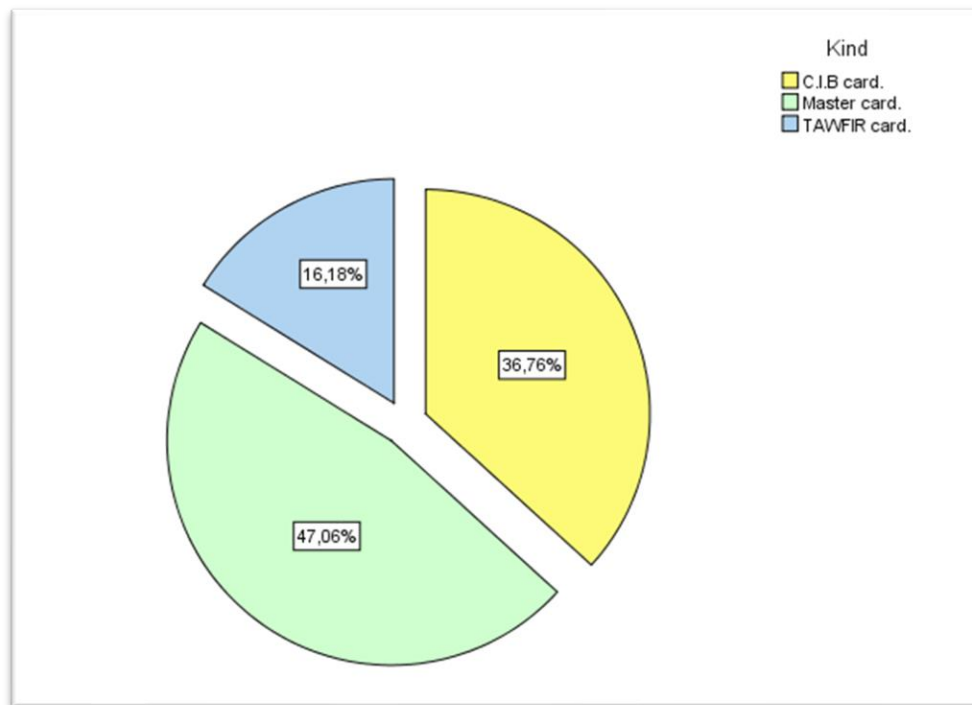
**Remark:** the middle-aged are the dominant users of this card since most users the workers and then comes the young adults that mainly use it for gaming, freelancing and e-shopping, and finally the elders that's use it mostly for savings.

## 2.General card uses

In this part we would know the card use by our respondents and for what they are using the card for and how much do they use BADR electronic cards and analysing then outputs.

### 2-1 When it come to the type of cards

Figure 6:Tupe of cards owned

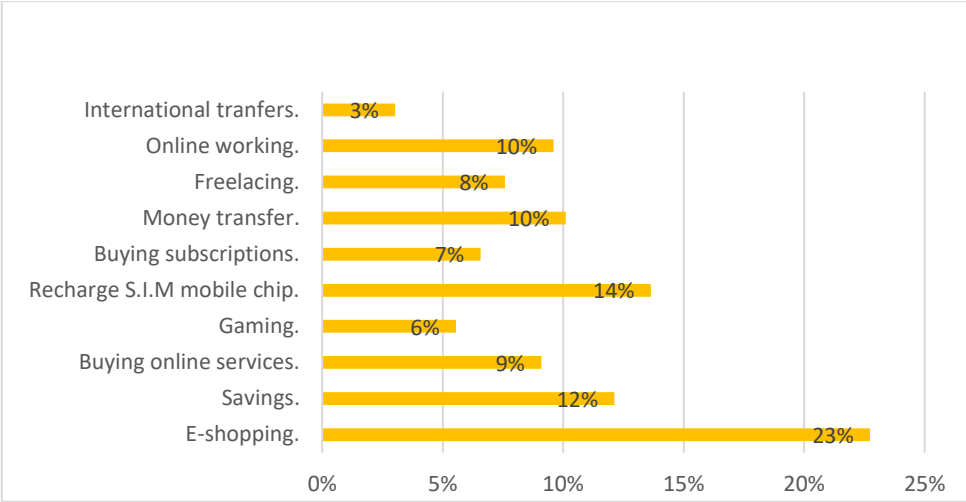


Source: SPSS

When it comes to the type of the card used, the data represented in the chart shows that the "master card" is the most used type by our respondents representing 47.06% of the pie chart, followed by the "CIB card" by 36.76%, which leaves the last place to the "tawfir card" by 16.18%.

**2-2 When it comes the kind of usage**

**Figure 7: the kind of badr e-cards usage**

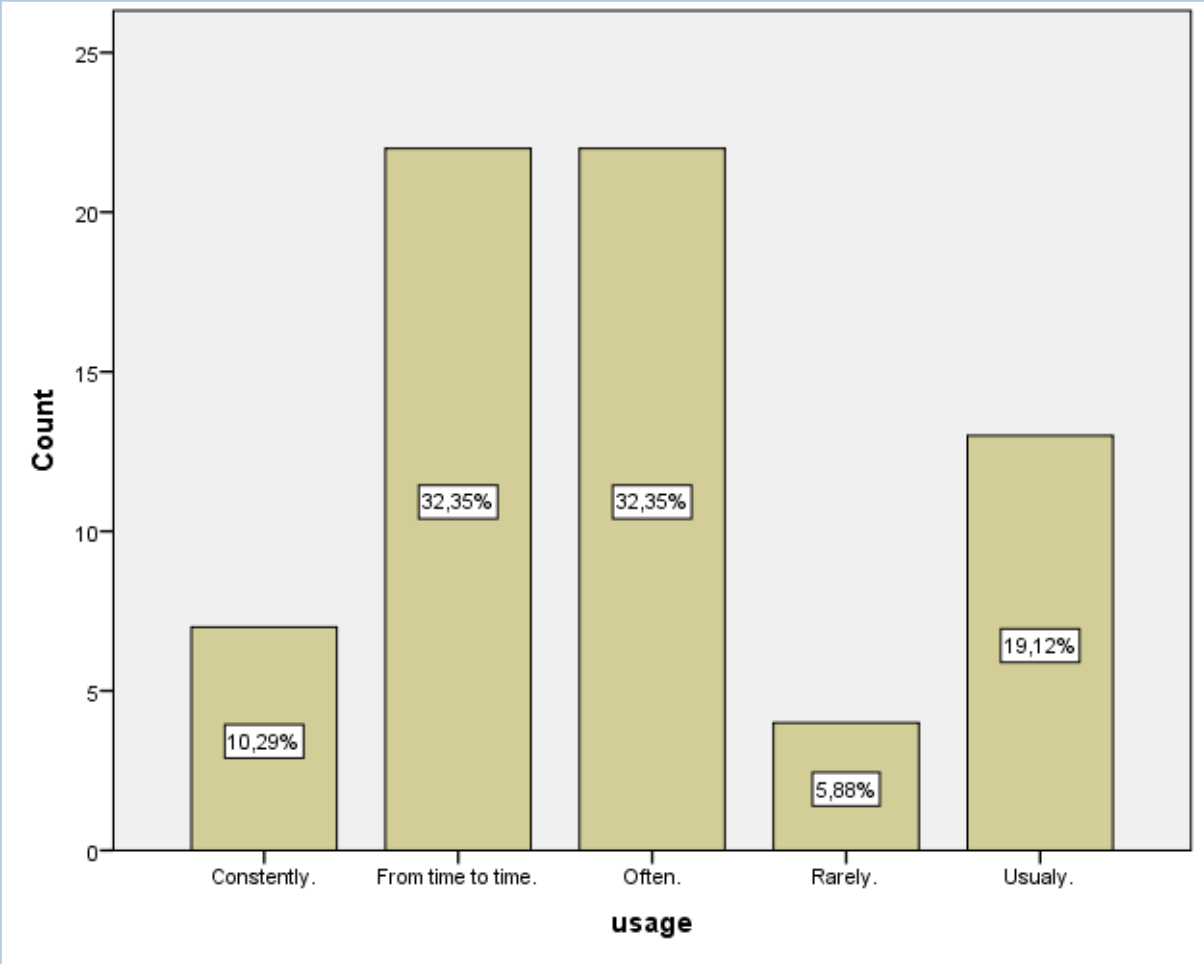


Source: EXEL

When it come to the types of use, the diagram shows that most of the respondents use their cards for E-shopping, and after that the cards are used for recharge SIM mobile chip; while other respondents use their cards for savings and online work, after that cards are used for money transfer and buying online services; after that less respondents use their cards for freelancing and buying subscriptions, last but not least cards are used for gaming, finally international transfers takes the last place as a used type by our respondents

**2-3 Continuity of use**

**Figure 8:** The continuity of use



Source: SPSS

When it comes to the continuity of use, the bar chart shows that the majority who represent 32.35% use their cards often, while 32.35.7% use it from time to time, around 19.12% of the

respondents use their cards usually, and 10.29% of the respondents use their cards constantly. Finally, 5.88% rarely use their cards.

### **3. Evaluation of your BADR card.**

This part is the focus of the research where we sort out the ratings of respondents to see the degree of their satisfaction in general term and in terms of : ease of use, Price, Speed, Security, Privacy and availability of payment places.

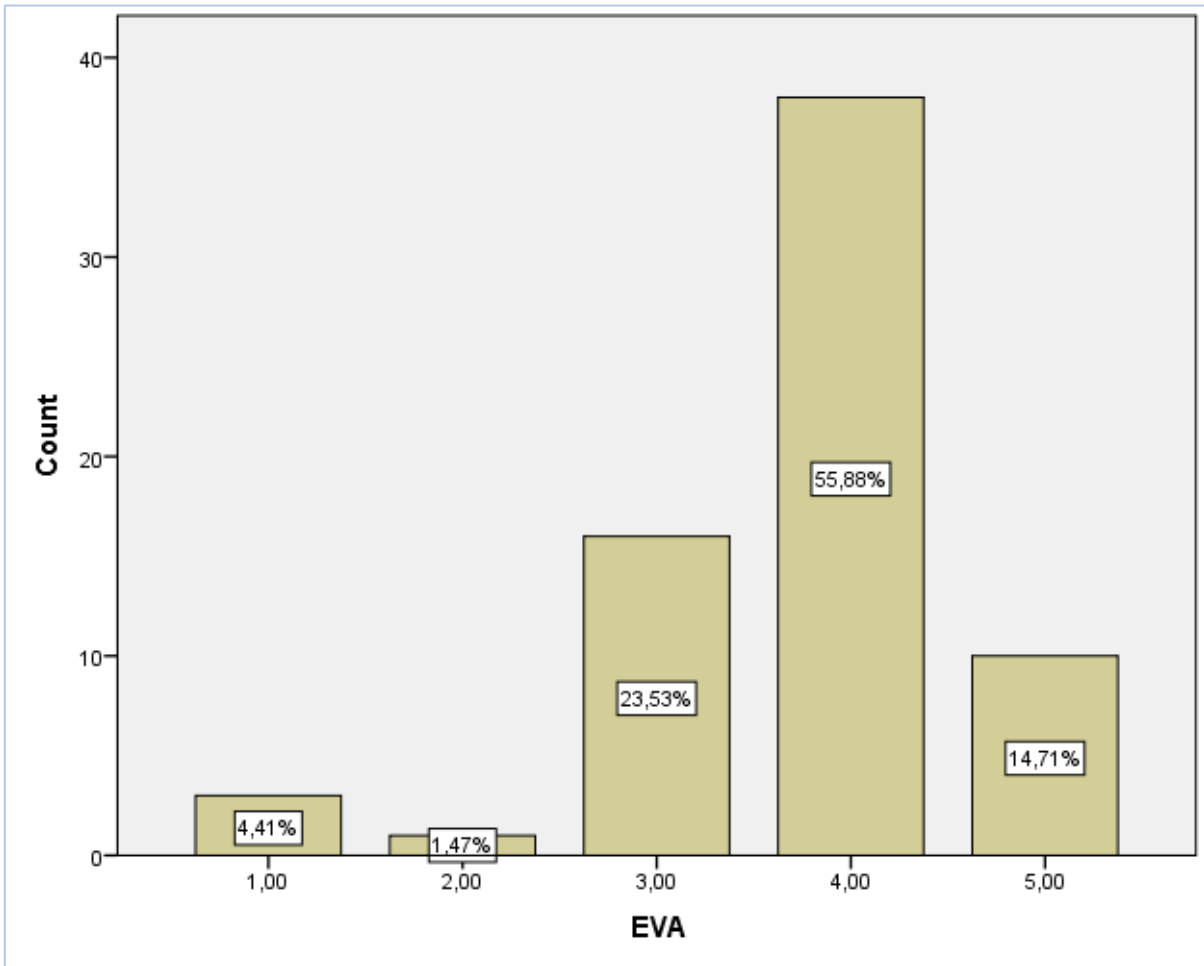
And at the end we asked our respondents to give us there opinions about the cards and for the features that's you want to see in this card in the future.

#### **3-1 The evaluation of the card in general**

In this study we made the general rating as the dependent variable since it represents the degree of satisfaction of our respondents, so it is safe to say that the mean we found using SPSS witch was 3.75/5 represent the degree of satisfaction in of our respondents.

Using SPSS, we found out that the mean was 3.7/5 meaning that most of our response are generously satisfied.

**Figure 9: General rating**



Source: SPSS

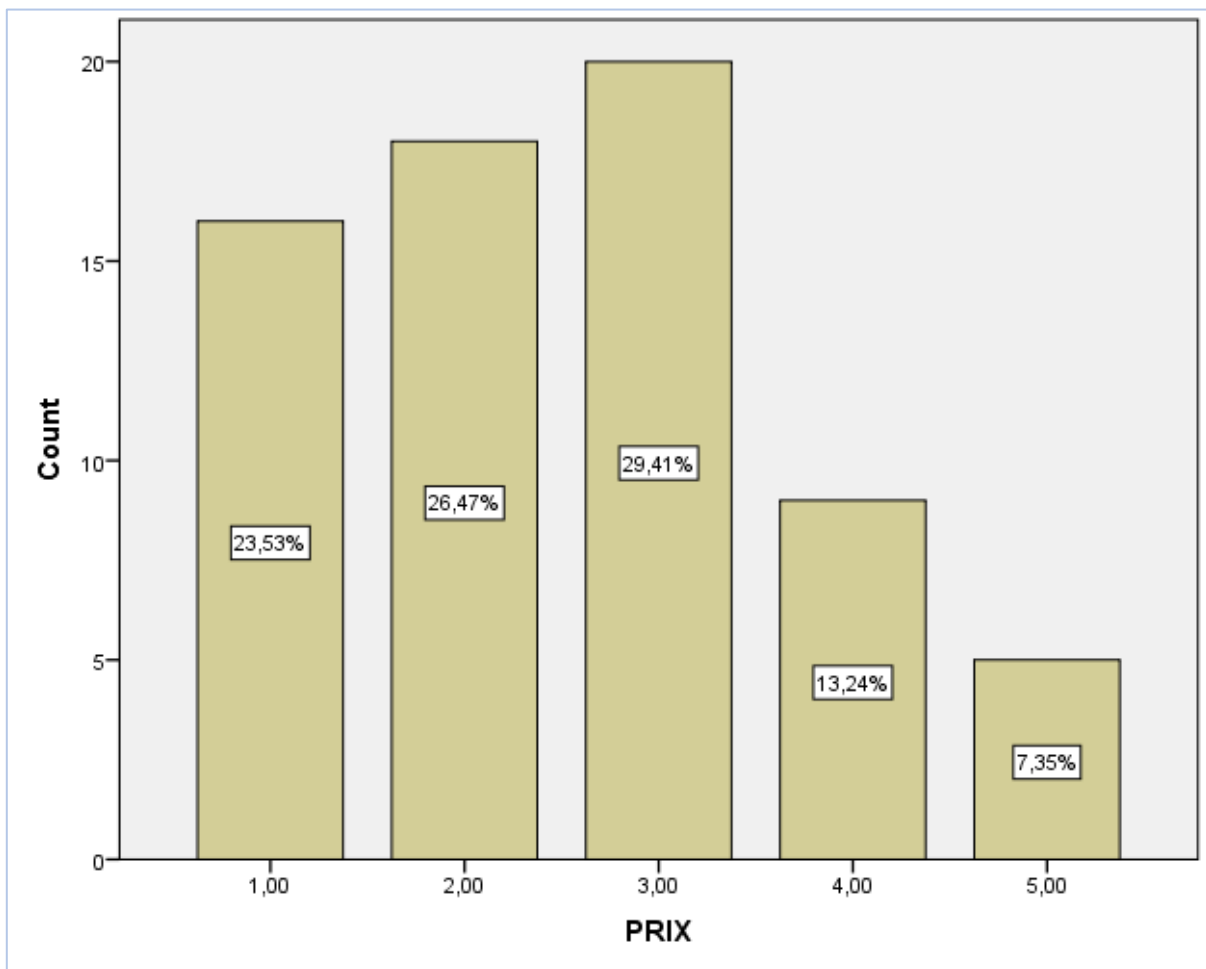
The chart shows that the majority of the respondents rated are positive since the majority of the ratings are above 3/5 by 70.59%, and about 5.88% are above 3/5 meaning that they are not satisfied with the card and about 23.53% are mutual about the card.

### 3-2 When it comes to the price

Since the scale was going from cheap to expensive we had to reverse the ratings so we could get the satisfaction values from it. Higher the scale goes the more expensive it gets.

So, we got the bar chart below goes from 1 - unsatisfied from the prices (expensive) to 5 which means the highest satisfaction scale since it means that's the card is affordable.

Figure 10: Price rating



Source: SPSS

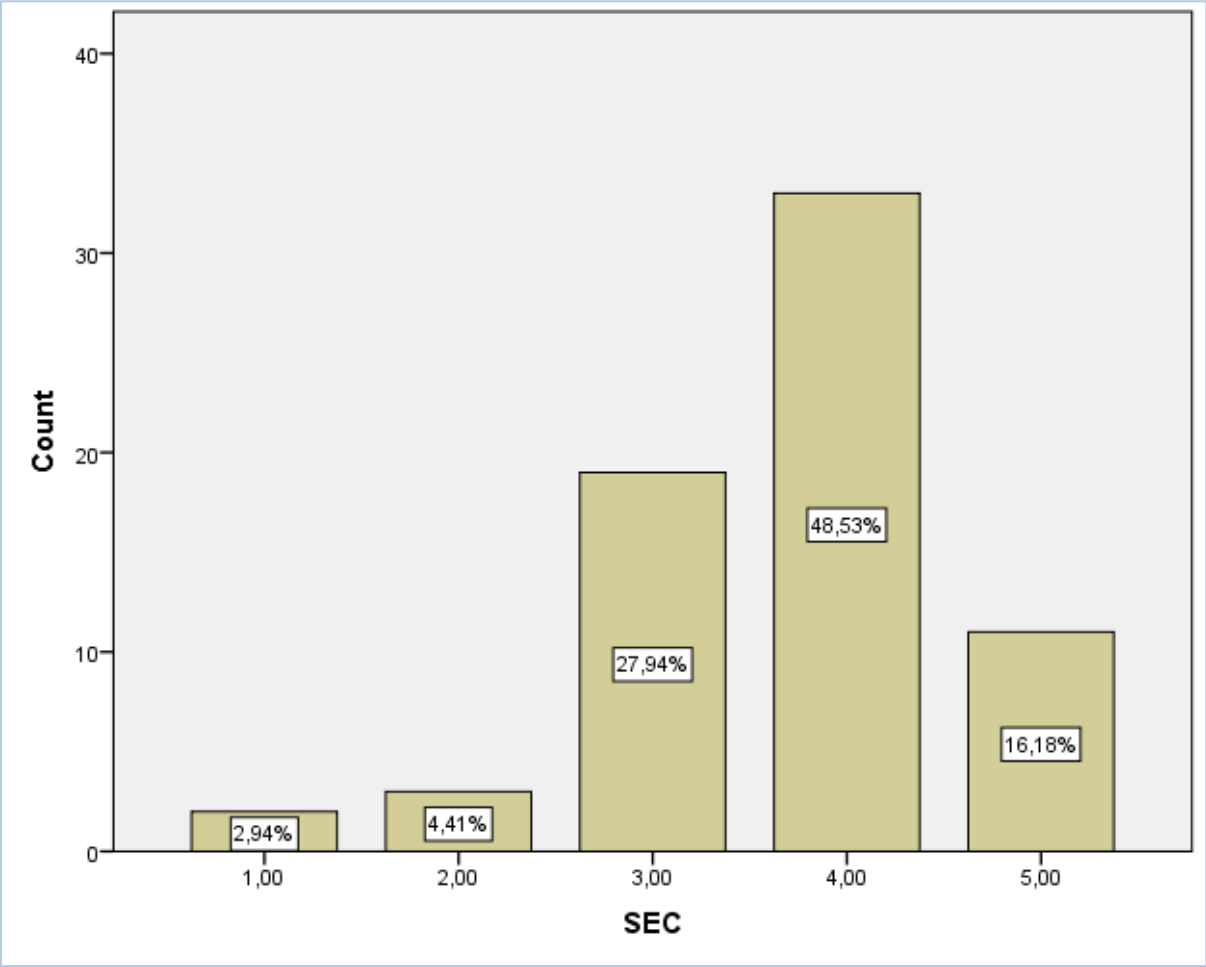
Most of the users are unsatisfied when it comes to the prices since 50% of the ratings are under 3/5 while 20.59% are satisfied of the prices and around 29.41 are mutual.

The SPSS indicate that the mean when it comes to the price was 2.54/5 which is under the threshold of satisfaction, the means our respondents are unsatisfied when it come to the pricings and expenses of the card.

**3-3 Evaluation when it comes to security**

The security the most basic factor when it comes to satisfaction. In the bar chart below, we consider the safer the users feel about the card and its services the more they are satisfied when it comes to security.

**Figure 11: Security ratings**



Source: SPSS

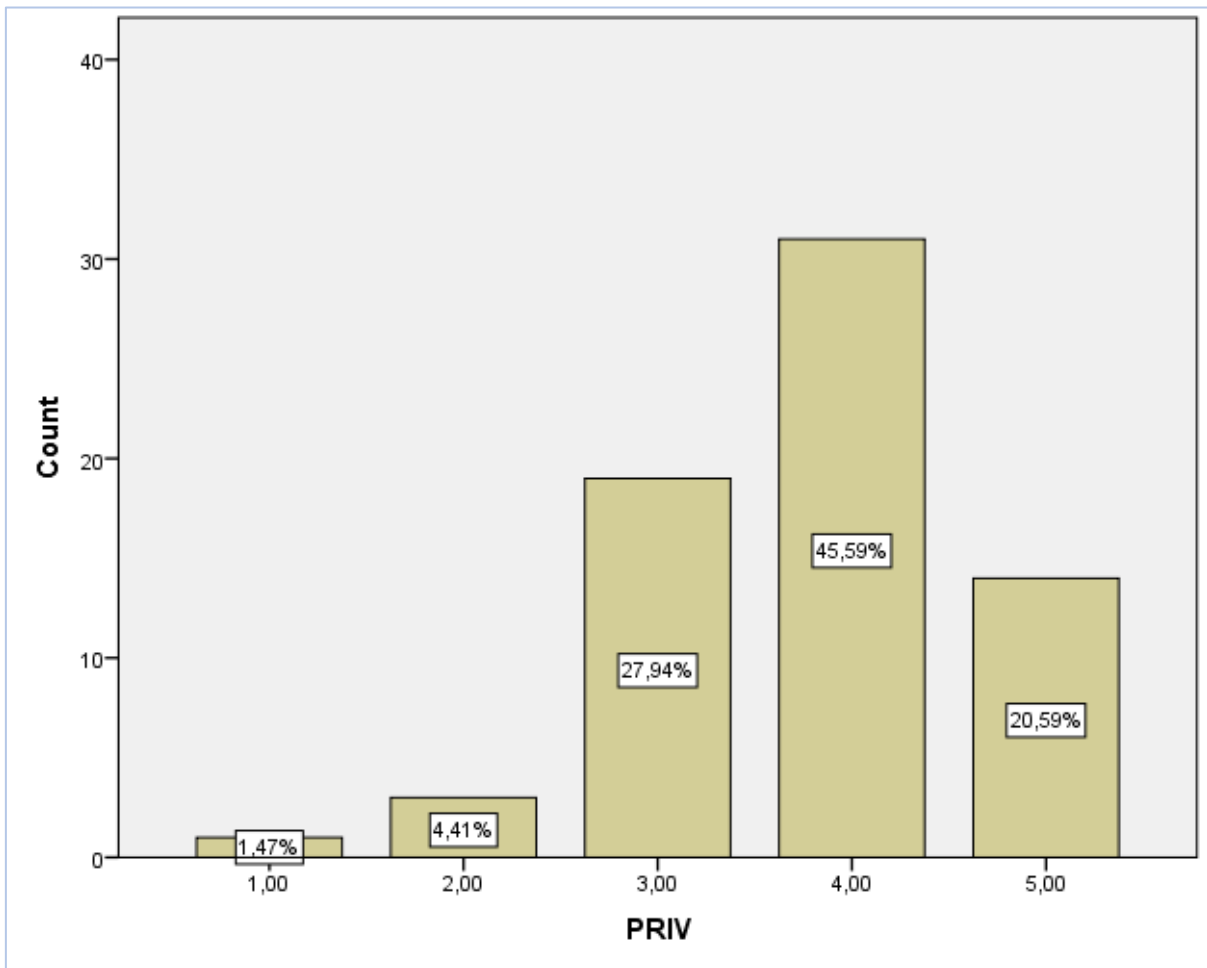
64.96 of the users find BADR cards to be secured and around 7.35% of the respondents are unsecured about there cards and 27.94% are mutual.

The SPSS indicate that the mean when it comes to the security was 3.70/5 means that they are satisfied when it comes to security of their assets.

### **3-4 Evaluation when it comes to privacy**

By protecting client privacy Personal information may lead to identity theft, financial fraud, and other issues that cost individuals, companies, and governments millions of dollars annually when it is exploited or insufficiently safeguarded. So it is important that the users feel safe about their personal data and the chart below shows the satisfaction of out respondents when it comes to their personal data and privacy.

**Figure 12: Privacy ratings**



*Source: SPSS*

When it comes to privacy 66.18 find that their personal data is safe while 8.55% feel the contrary and 27.49% are mutual.

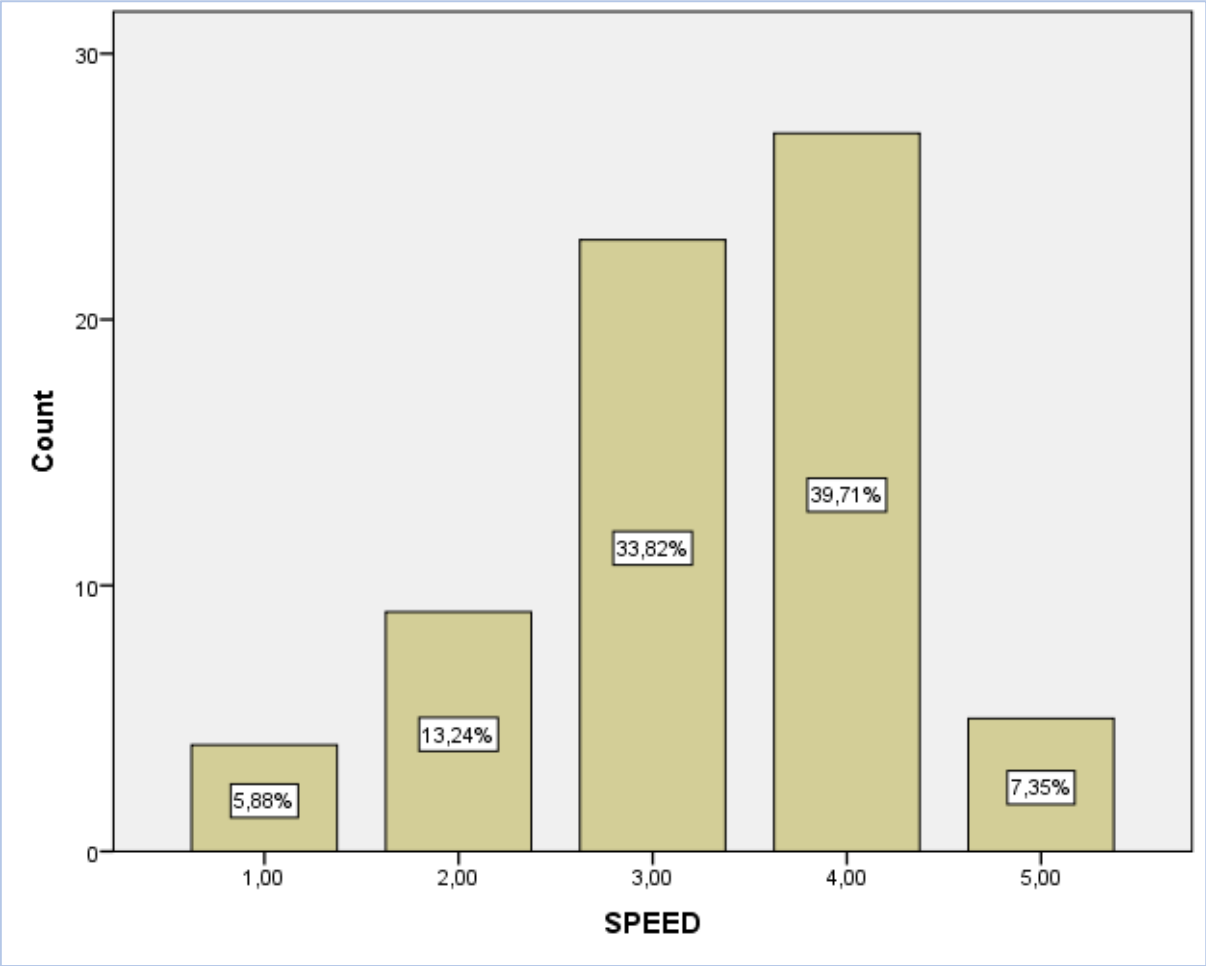
The SPSS indicate that the mean when it comes to privacy was 3.79/5 which is the highest mean rating we got in our study, since the costumers feel safe about their personal informations.

### **3-5 Evaluation when it comes to speed**

Speed is one of the most important factors that affect customer satisfaction, regardless of the type of service or goods obtained. BADR cards are not an exception.

The bar chart below represents the satisfaction of users when it comes to the speed of the services offered by the cards.

**Figure 13:** Speed of services ratings



Source: SPSS

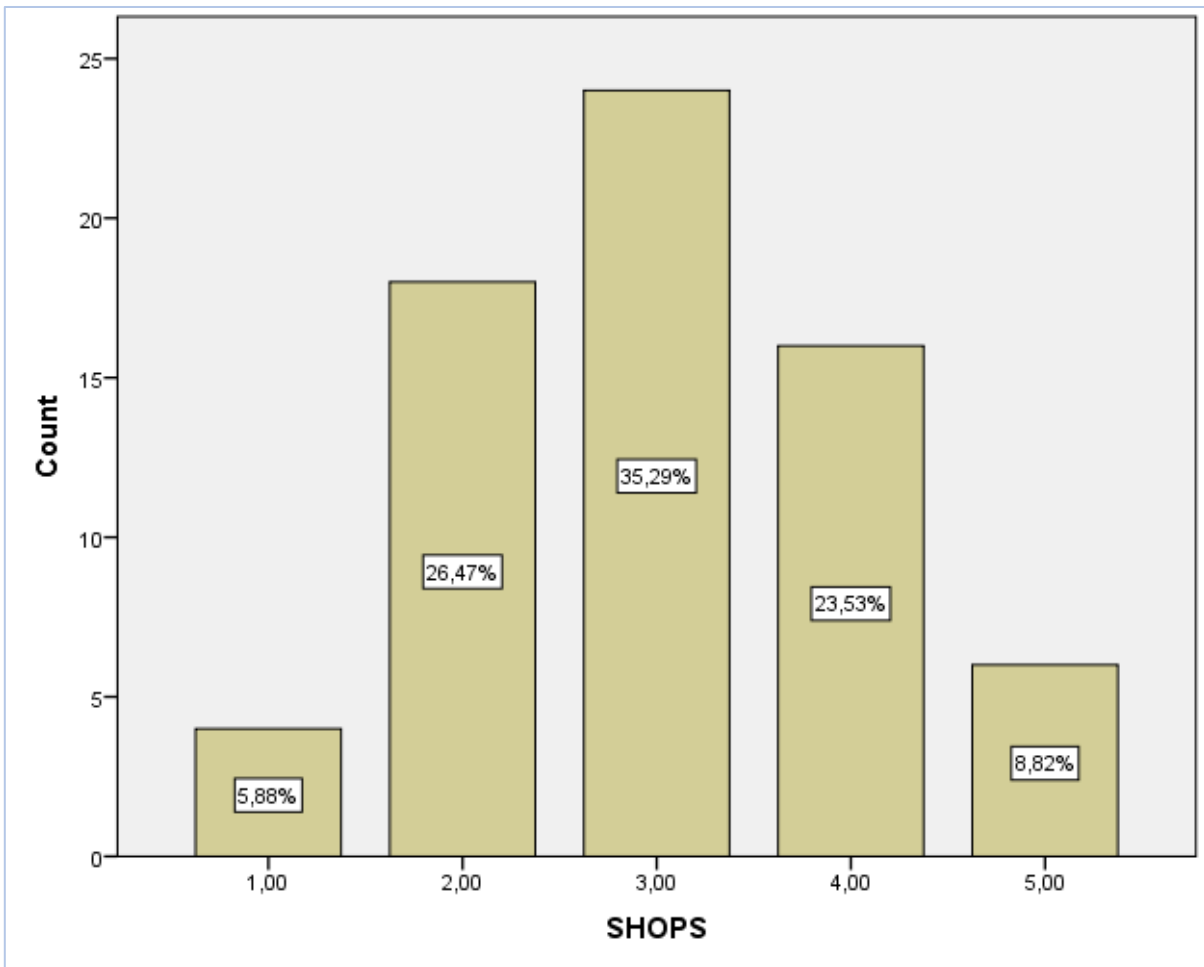
When it it comes to speed most of the users are satisfied by 47.06 while 19.12 are not satisfies and 33.82 are mutual.

According too SPSS speed got ratteding of 3.29 out of 5 indicating that users are satisfied when it comes to speed services in general.

### 3-6 Evaluation when it comes to shops support disponibility

One of the most important features when it comes to e-payment is the ability to buy goods and services with there card without holding physical money. And this chart shows us the disponability of payment support for electronic payment in shops.

**Figure 14:** Shops payment support ratings



Source: SPSS

As for shops there is a variety of evaluations obtained since 32.35% are satisfied and 32.35 are not while 35.29 are mutual.

When it comes to the shops, we got a score of 3.02/5 meaning that it is acceptable.

Some personal opinion about the card

features that's they want to see in the future.

#### 4 Testing the hypotheses

The hypotheses of our research were tested by conducting regression analyses. The nature of the variables in the research model allowed us to perform these analyses.

##### 4.1 Testing Satisfaction of the users when it comes to BADR cards

Using SPSS, we calculated the mean of every rating so we could know the satisfaction of every factor of our study.

**Table 6:** Factors and their ratings mean

<b>Factors</b>	<b>Mean</b>
<b>GENERAL</b>	3,7500
<b>SPEED</b>	3,2941
<b>SECURITY</b>	3,7059
<b>PRIX</b>	2,5441
<b>PRIV</b>	3,7941
<b>SHOPS</b>	3,0294

Source: SPSS

As it is shown four respondents are satisfied from their cards in general since they are satisfied with the speed, security, privacy and unsatisfied by the pricing of the cards. And when it comes to the shops support its acceptable.

**H1:** invalid

#### 4.2 The factor that impact satisfaction the most.

We perform a regression analysis between the dependent variable, customer satisfaction, and the independent variables and the table below show coefficients of correlation that we got.

**Table 7: Regressions of satisfaction**

<b>Correlations</b>						
	<b>EVA</b>	<b>SPEED</b>	<b>SEC</b>	<b>PRIX</b>	<b>PRIV</b>	<b>SHOPS</b>
<b>EVA</b>	1,000	0,220	0,243	0,269	0,144	0,456
<b>SPEED</b>	0,220	1,000	0,583	0,039	0,449	0,564
<b>SEC</b>	0,243	0,583	1,000	-0,181	0,625	0,325
<b>PRIX</b>	0,269	0,039	-0,181	1,000	-0,133	0,105
<b>PRIV</b>	0,144	0,449	0,625	-0,133	1,000	0,251
<b>SHOPS</b>	0,456	0,564	0,325	0,105	0,251	1,000

source: SPSS

As it is showing the correlation coefficient between general evaluation and shops support is the highest by 45.6% which mean that E-cards support is shops effect satisfaction the most. in other words, that's what the users rely their satisfaction the most off.

Second, comes the price by 26.9 % then comes speed by 22% then security by 24.0% after that comes security by 24.3% then speed by 22% and finally privacy by 14.2% which indicate that it has the least effect of satisfaction of our respondents.

**H2:** is invalid.

## SECTION 2: DISCUSSION

From the result we collected and analysed we conclude that both hypotheses are invalid and does not relate to our study, since we got all the results needed as answers we conclude the followings:

It is clear that from the results that the customers are satisfied with their e-cards in general, and according to correlation coefficient table we got by analysing the incomes of our questionnaire that the presence of payment devices in magazines or the ability to purchase by card in shops effect the most when it comes to users satisfaction since it's the main base of the e-payment system "paying without physical cash", the mean or the general rating when it comes to payment support or the ability to purchase by card in shops there is a variety of evaluations obtained. This is due primarily to the geographical location. As the stores that support card payments are abundant in large cities, commercial malls, and places where the economic movement is relatively high. Turbid areas with less economic movement, remote areas and remote areas.

The second factor that effect user's satisfaction is the price and the expenses of the cards, unfortunately, the mean of the price was the lowest in our study indicating that most users are unsatisfied with the prices provided by the bank. The prices for using the card do not theoretically fluctuate with the income level of the average citizen due to a number of factors, including high expenses when registration and making of the card, high monthly and usage fees.

Then comes security, the assessment of users has been relatively positive. This indicates that they feel safe about their savings and money, despite the existence of some negative evaluations and feedback. This is due to the disruption of payment machines that comes to the weakness or lack of coverage, which causes financial losses to the user or the failure to complete the payment despite the transfer of the amount from the user to the seller.

Finally, as it comes to preserving user's privacy, the majority respondents consider that the Bank saves users' privacy to the fullest, the rating was the highest we got in our study plus we didn't collect any critics about privacy

In addition, there are some variables that affected customer satisfaction with these cards, including:

- Weak technical support for these cards, technical and marketing for these cards.
- Weak marketing made by the banks;
- Fragile infrastructure of e-payment system;
- Master card short card validity period (two years);
- Limited use of the CIB card.

And we conclude our study by suggestions made by our respondents in order to improve the e-payment features provided by the bank BADR.

- The need to extend the expiring date when it comes to master cards.
- Lowering fees and expenses.
- Making it possible to link it to PayPal,
- making the service faster.
- Being accepted in more shops.
- Adding gifting system (depends on the frequency of the use) .
- building an app for the cards to make it easier to use.

# **CONCLUSION**

E-payment methods are becoming increasingly popular in Algeria, even though e-payment in Algeria is still in its early stages of development. They offer a convenient and secure way to make payments. With more and more customers accepting e-payments, since modern payment methods are targeted to the users like any products or services, I made this research about the evaluation of the e-payment method in relation to the predictive customer. In order to achieve the objectives of the study, we made this study field on a sample of users of BADR bank electronic-payment cards using a questionnaire using Google Forms in order to get the results to evaluate their satisfaction using 5 standards (price, speed, security, privacy, availability).

From the results a set of conclusions was reached, even though that the users are satisfied in general but there are still some major problems with e-payment methods in Algeria that impact in a negative way the satisfaction of the users and that is caused by the high expenses and fees of the Electronic-cards and reduced the presence of shops that deal with modern payment methods in remote and semi-remote cities, and sometimes even large ones, since e-payment in Algeria is still in its early stages of development, however, there were some positive responses as well when it comes to security and privacy of the users meaning that they feel safe using the card, it is also clear that these problems are not insurmountable. With a little bit of effort, it should be possible to improve the situation and make e-payments more widely available and convenient for everyone.

Overall, I found that collecting data was the real challenge. There were many problems that I encountered, it was hard and took some time to get the sample I needed for my study since my target sample are hard to find but thanks to social media platforms (mainly Facebook and LinkedIn) I collected the sample needed for my study, Also collection of information from the BANK was challenging since most of it is restricted, I could not use the modern data so I had to use old ones for my study.

In conclusion, online payments are growing in popularity all over the world. In Algeria, however, there is still a need for more studies to be done on the topic in order to understand the full potential of e-payments in the country. With more research, we can better understand how to make online payments more accessible and secure for Algerian consumers and businesses alike.

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# **APPENDIX A-questionnaire**

## **A1. Evaluation of e-payment tools.**

N1. Full name.

N2. Age.

N3. Gender.

- Male
- Female

N4. Do you use BADR payment card?

- Yes
- No

N5 Do you use BADR payment card?

- Student
- Employee
- Jobless

## **A2. General card uses**

N1. What kind of BADR credit card are you using?

- Master card
- C.I.B card
- TAWFIR card

N2. For what do you use your card.

- Savings
- E-shopping
- R
- Recharging S.I.M card
- Buying subscriptions

- Online working
- Money transfer
- International transfers
- Freelancing
- Buying online services
- Gaming

N3. How often do you use your BADR card?

- Constantly
- Often
- Usually
- From time to time
- Rarely

**A3. Evaluation of your BADR card.**

N1. How do you evaluate your BADR card in general?

1.	2	3	4	5
Good				Bad

N2. How do you evaluate your card when it comes to price?

1.	2	3	4	5
Cheap				Expansive

N3. How do you evaluate your card when it comes to its security?

1.	2	3	4	5
Ricky				Secure

N4. How do you evaluate your card when it comes to the services speed?

1.	2	3	4	5
Slow				Fast

N5. How do you evaluate your card when it comes to its privacy (safety of your personal informations) ?

1.	2	3	4	5
Safe				Not Safe

N6. What are the availability of shops that support payment with your BADR card?

1.	2	3	4	5
Rare				plentiful available

N7. What is your opinion about this card?

N8. What are features that you want to see in this card in the future?

## **APPENDIXE B- Tables**

**Table1** : Customers preference in non-cash payment 1997

Period / Year	1997 - 1998			
Country	Cheques	Credit transfer	Payments Cards	Debit Cards
USA	69.3 %	3.7 %	25 %	2 %
Netherlands	2.8 %	46.1 %	22.9 %	28.1 %
UK	34.5 %	18.5 %	29.3 %	17.7 %
Germany	5.7 %	50.1 %	4.6 %	42.6 %
Turkey	6.9 %	2.6 %	83.9 %	--

Source: Elaborated by us from the article (Donal O'Mahony, 2015 ).

**Table 2**: Customer preferences in non-cash payment year 2001

Period/Year	2001			
Country	Cheques	Credit transfer	Payment Cards	Direct Debit
USA	53.5 %	5 %	38.3 %	3.1 %
Netherlands	0.2 %	38.2 %	(32.4+1) %	28.2 %
UK	23.5 %	17.7 %	39 %	19.7%
Germany	2.3 %	49.8 %	(11.3+0.2) %	36.4 %
Turkey	--	--	--	--

Source: Elaborated by us from the article (Donal O'Mahony, 2015 ).

**Table 3**: Place of research and publication

Place	Total Research
Africa	10
Asia	20
Middle East	9
Europe & America	4
Sum	43

Source: Elaborated by us, made by S Fatonah, A Yulandari and F W Wibowo

**Table 4 :** Evolution of the number of electronic cheques and electronic financial transfers (from 2012-2015)

<b>Years</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Electronic cheques</b>	1028875	1138010	1227262	1278577
<b>Electronic financial transfers</b>	439823	1296825	1539790	1815091

**Source:** Elaborated by students, from the information's collected by "SAIDI Mohamed"

**Table 5:** Evolution of the number of E-cards made by the agency (from 2012-2015)

<b>Years</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Cards</b>	560	930	1606	2339

**Source:** Elaborated by students, from the information's collected by "SAIDI Mohamed"

**Table 6:** Factors and their ratings mean

<b>Factors</b>	<b>Mean</b>
<b>GENERAL</b>	3,7500
<b>SPEED</b>	3,2941
<b>SECURITY</b>	3,7059
<b>PRIX</b>	2,5441
<b>PRIV</b>	3,7941
<b>SHOPS</b>	3,0294

**Source :** SPSS

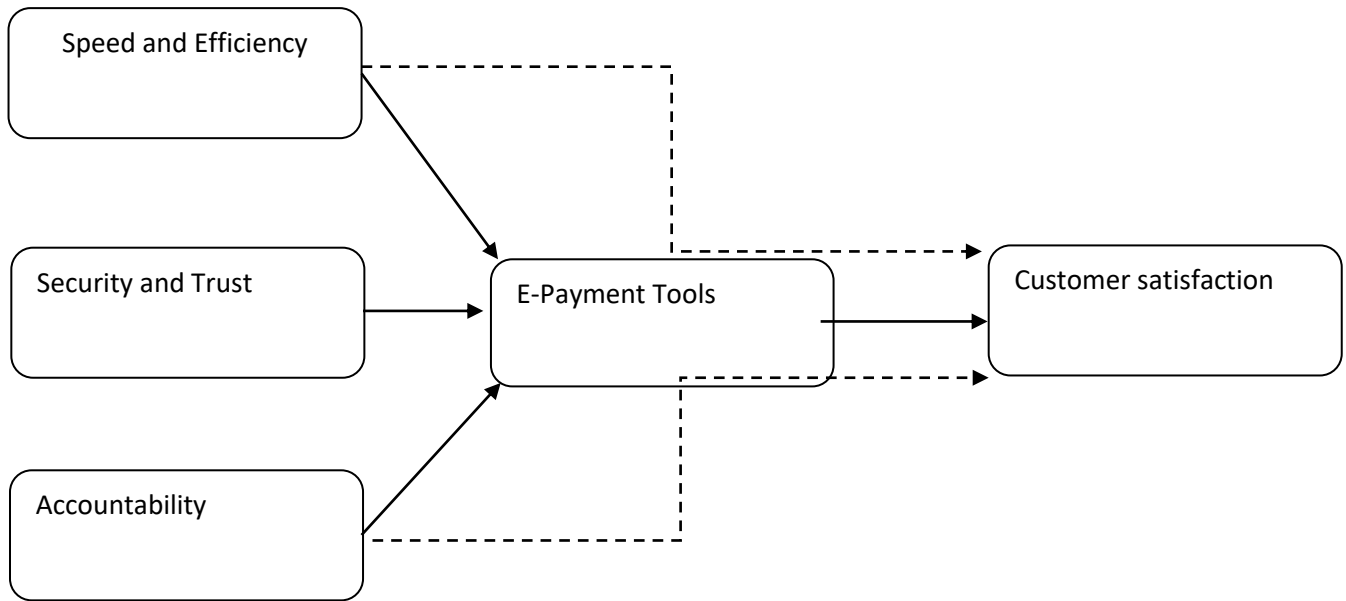
**Table 7: Regressions of satisfaction**

<b>Correlations</b>						
	<b>EVA</b>	<b>SPEED</b>	<b>SEC</b>	<b>PRIX</b>	<b>PRIV</b>	<b>SHOPS</b>
<b>EVA</b>	<b>1,000</b>	<b>0,220</b>	<b>0,243</b>	<b>0,269</b>	<b>0,144</b>	<b>0,456</b>
<b>SPEED</b>	<b>0,220</b>	<b>1,000</b>	<b>0,583</b>	<b>0,039</b>	<b>0,449</b>	<b>0,564</b>
<b>SEC</b>	<b>0,243</b>	<b>0,583</b>	<b>1,000</b>	<b>-0,181</b>	<b>0,625</b>	<b>0,325</b>
<b>PRIX</b>	<b>0,269</b>	<b>0,039</b>	<b>-0,181</b>	<b>1,000</b>	<b>-0,133</b>	<b>0,105</b>
<b>PRIV</b>	<b>0,144</b>	<b>0,449</b>	<b>,0625</b>	<b>-0,133</b>	<b>1,000</b>	<b>0,251</b>
<b>SHOPS</b>	<b>0,456</b>	<b>0,564</b>	<b>0,325</b>	<b>0,105</b>	<b>0,251</b>	<b>1,000</b>

source: SPSS

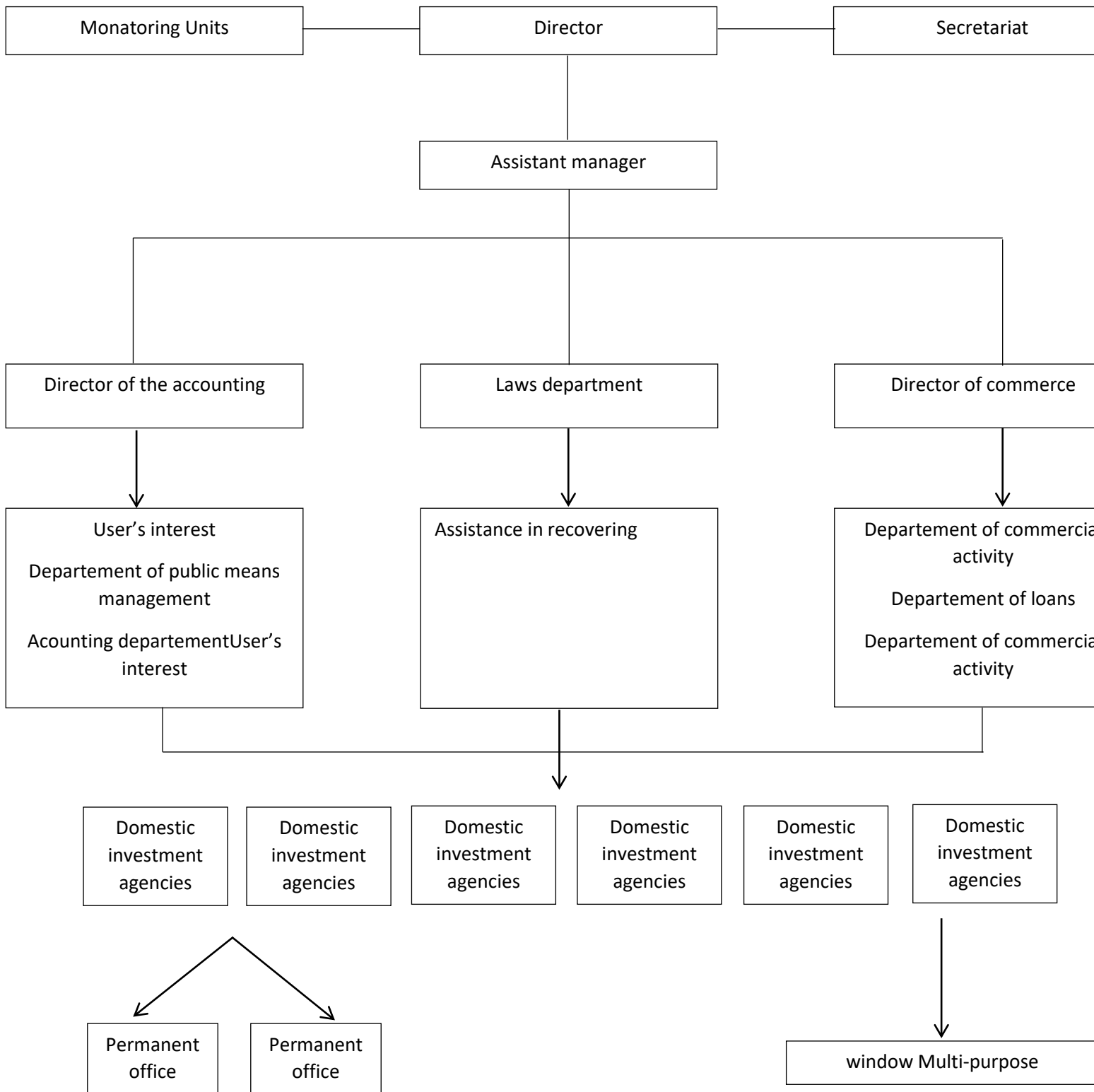
## **APPENDIXE C- Figures**

**Figure 1** : The research conceptual model



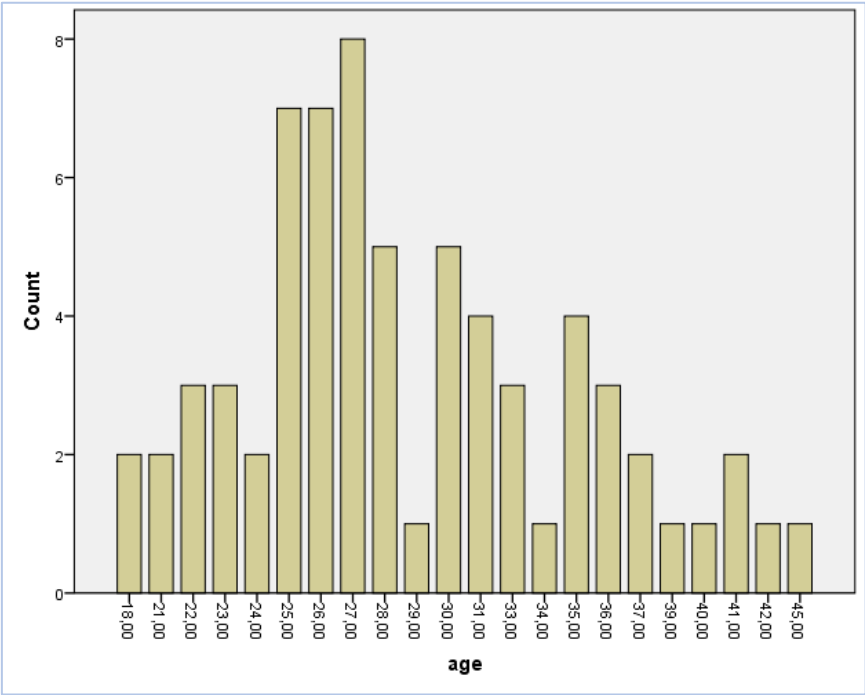
**Source:** Elaborate by us from **(Fatemeh SoleimaniRoozbahani, 2015)**

**Figure 2: Structural organisation of agency 281**



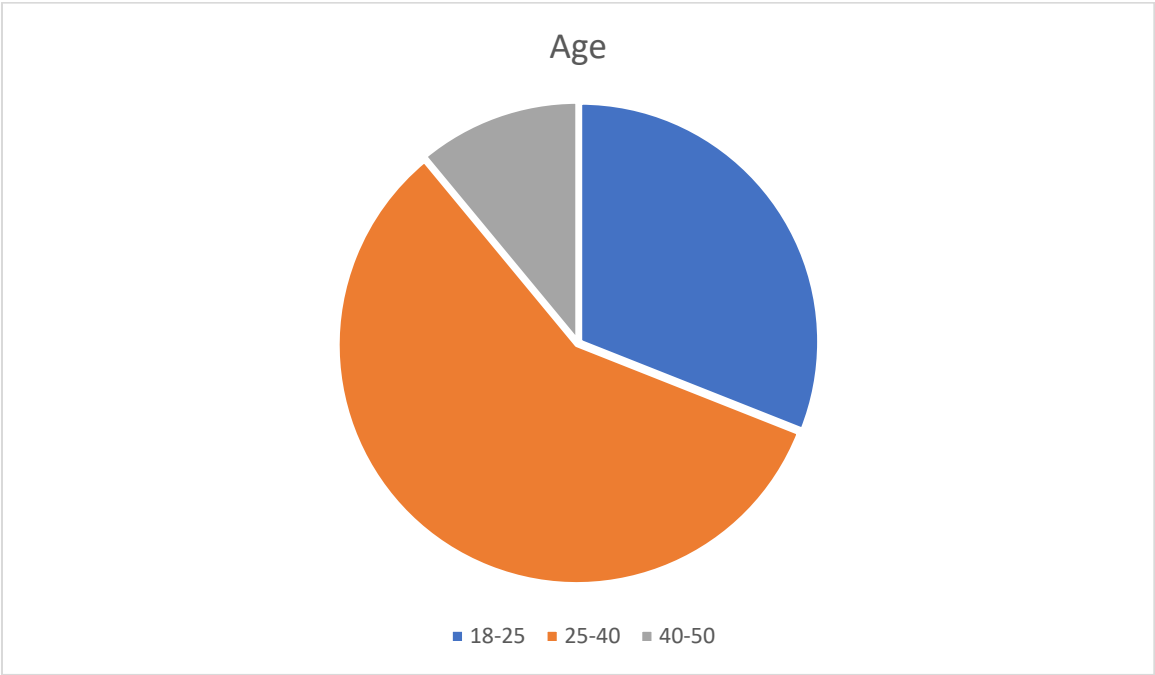
source: Elaborated by student

**Figure 3** Age représentation



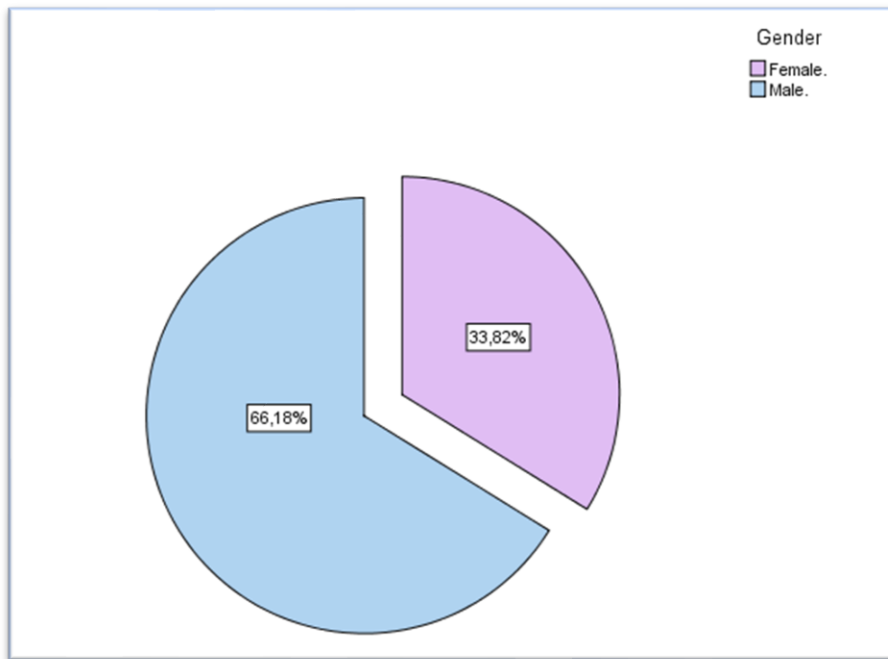
source: SPSS

**Figure 4 :** Age rages



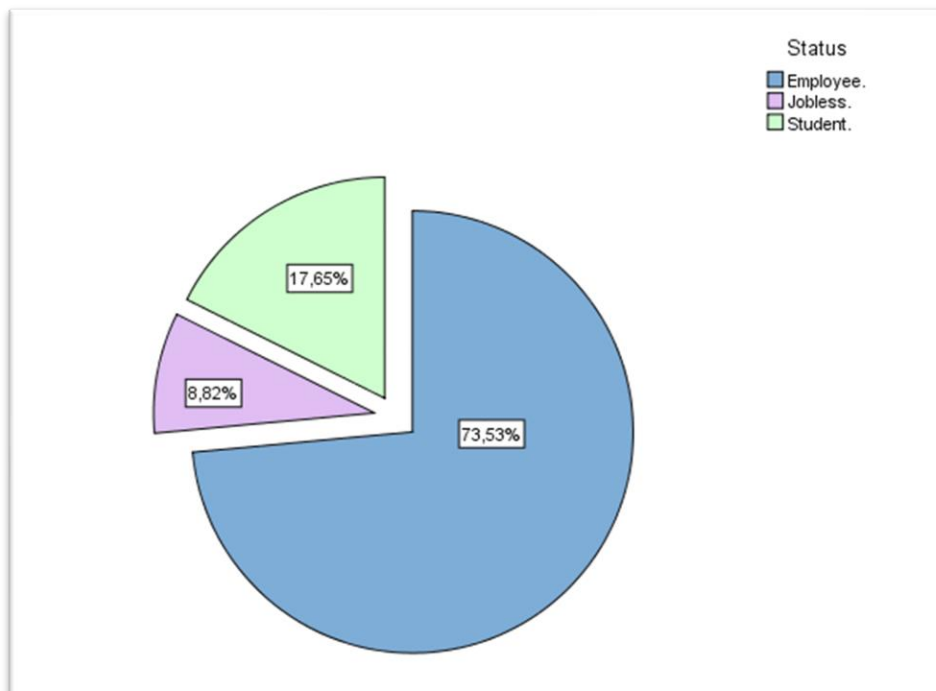
Source: Elaborates by student

**Figure 5:** Representation of the gender



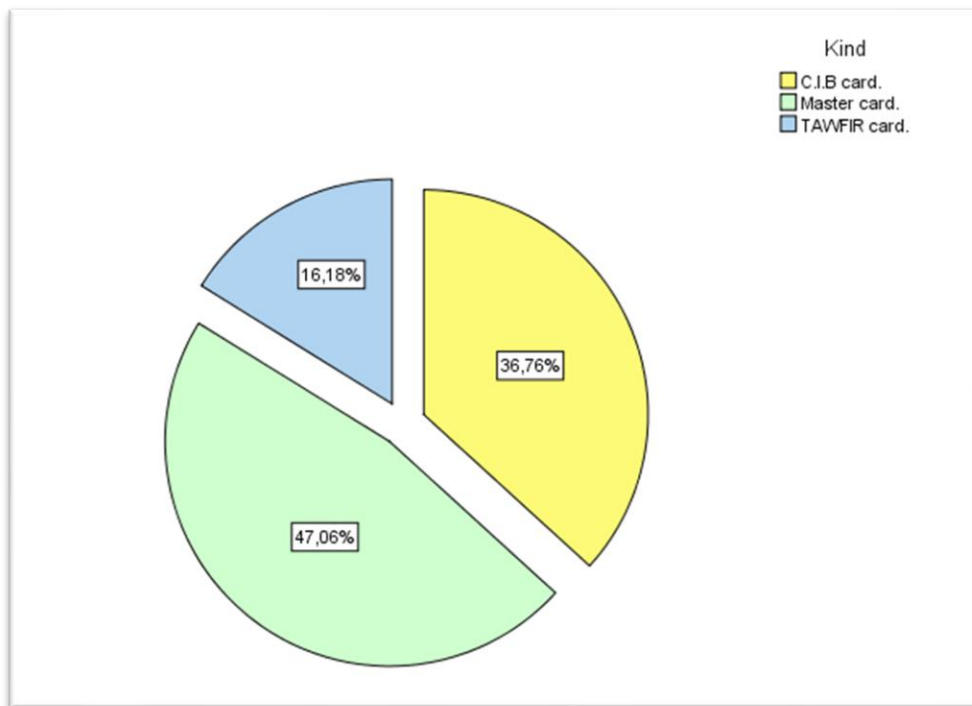
**Source:** SPSS

**Source 6:** Representation of status



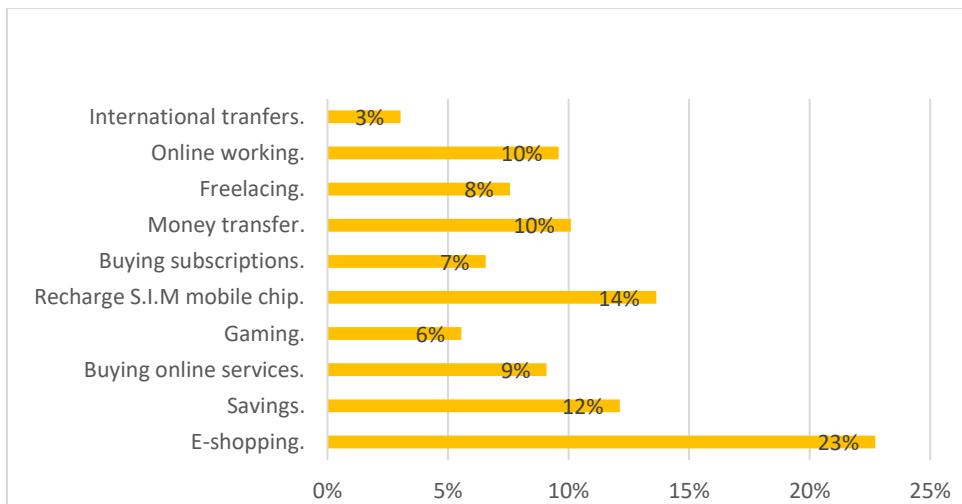
**Source:** SPSS

**Figure 7:** Tupe of cards owned



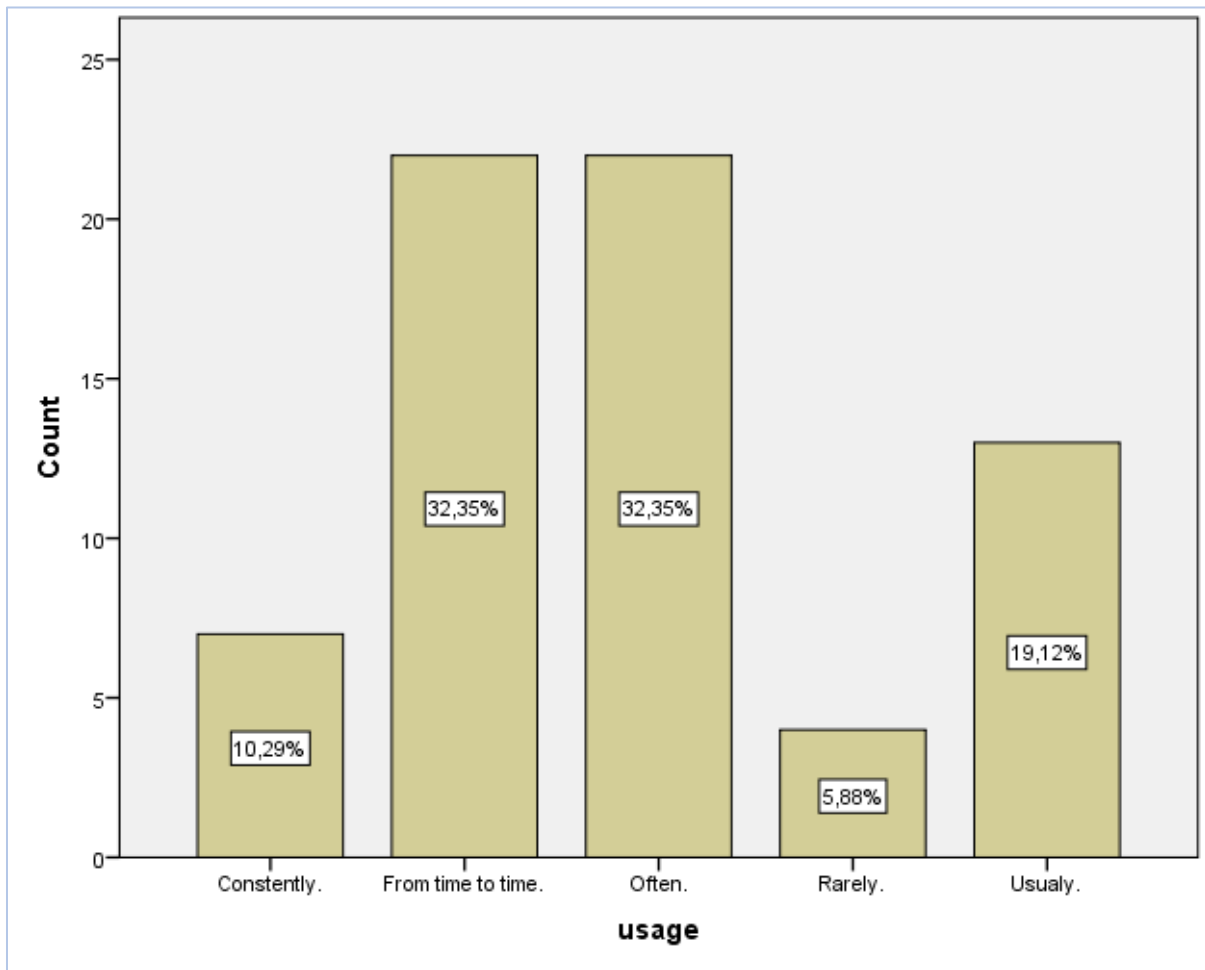
Source: SPSS

**Figure 8:** the kind of badr e-cards usage



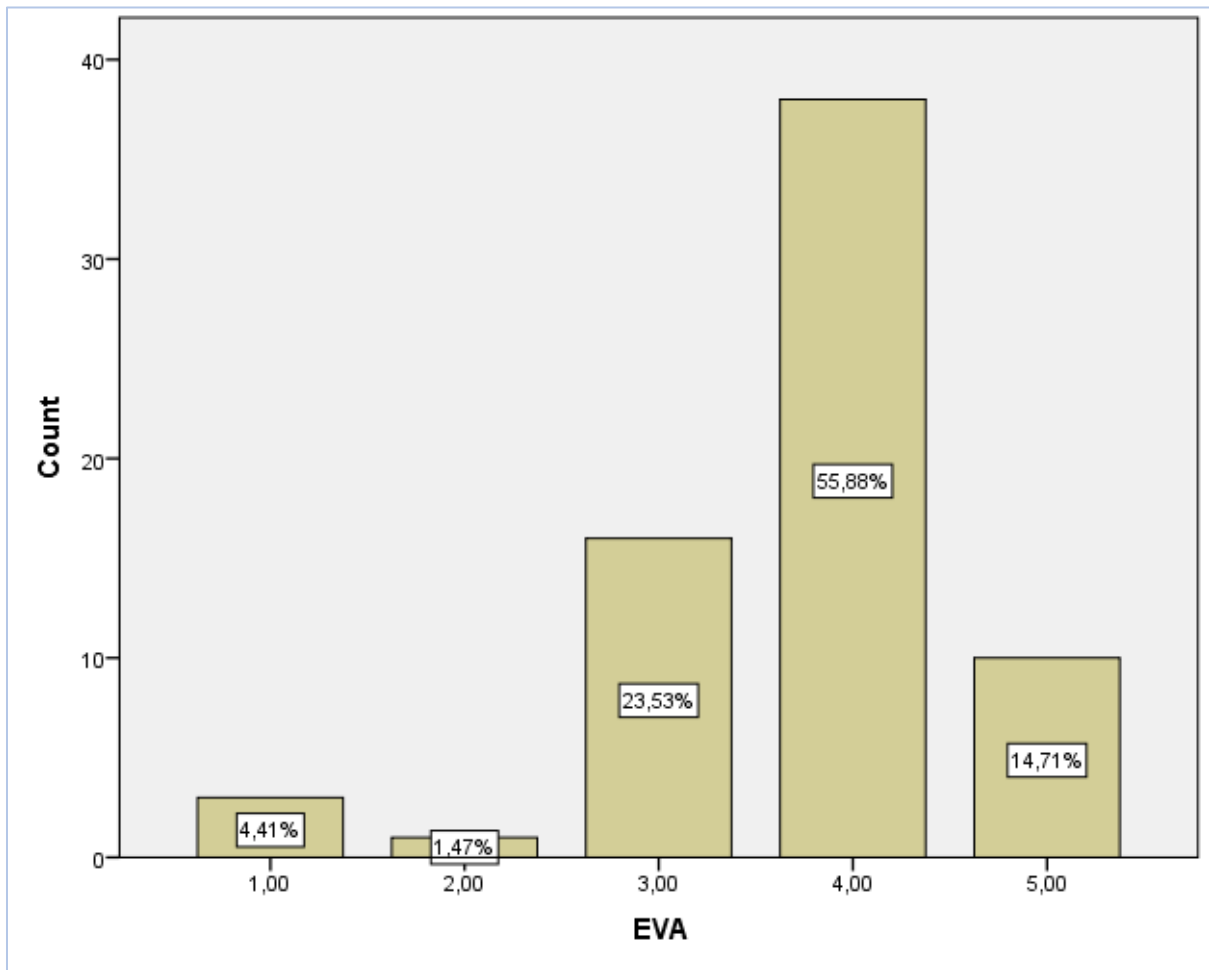
Source: EXEL

**Figure 9:** The continuity of use



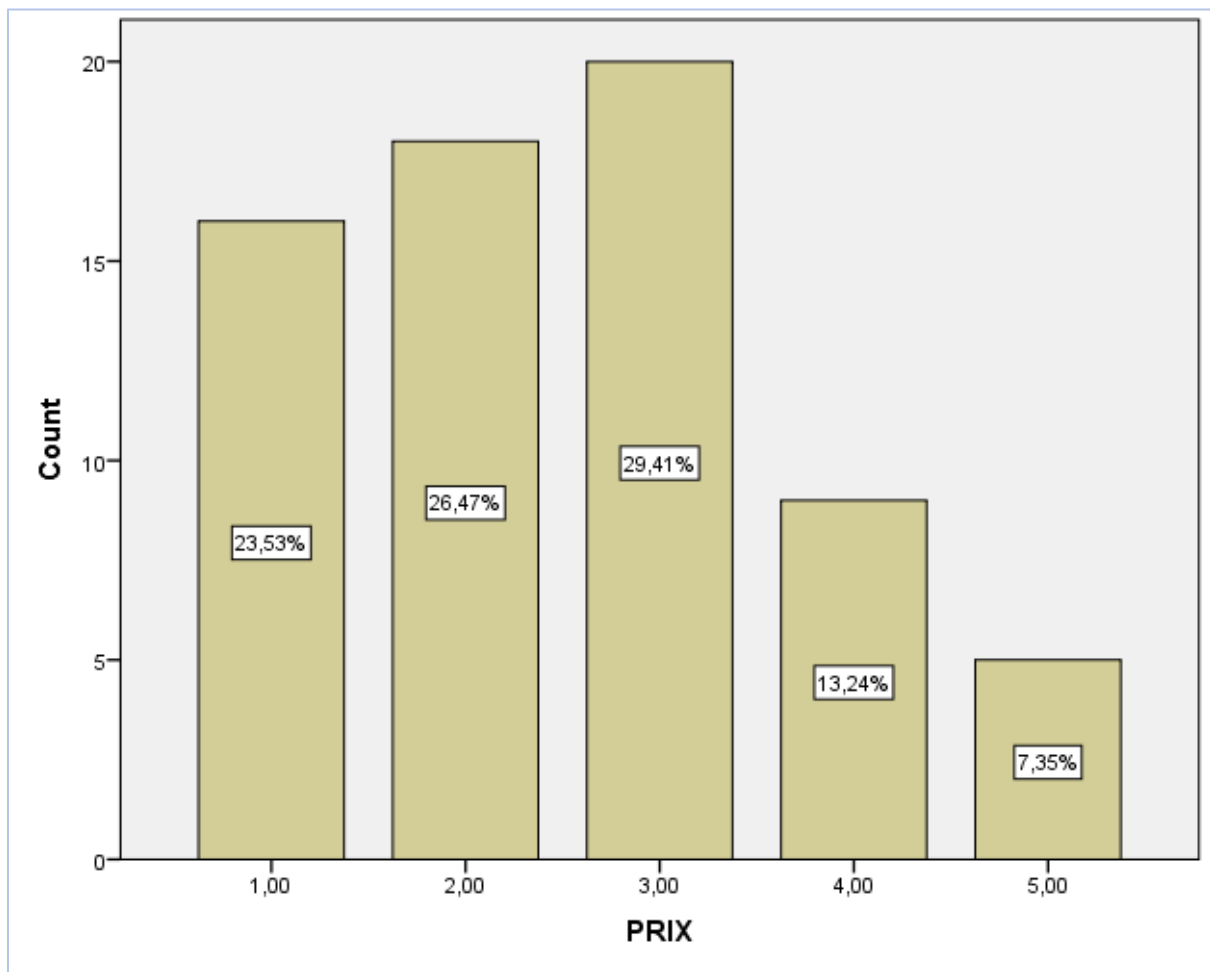
Source: SPSS

**Figure 10: General rating**



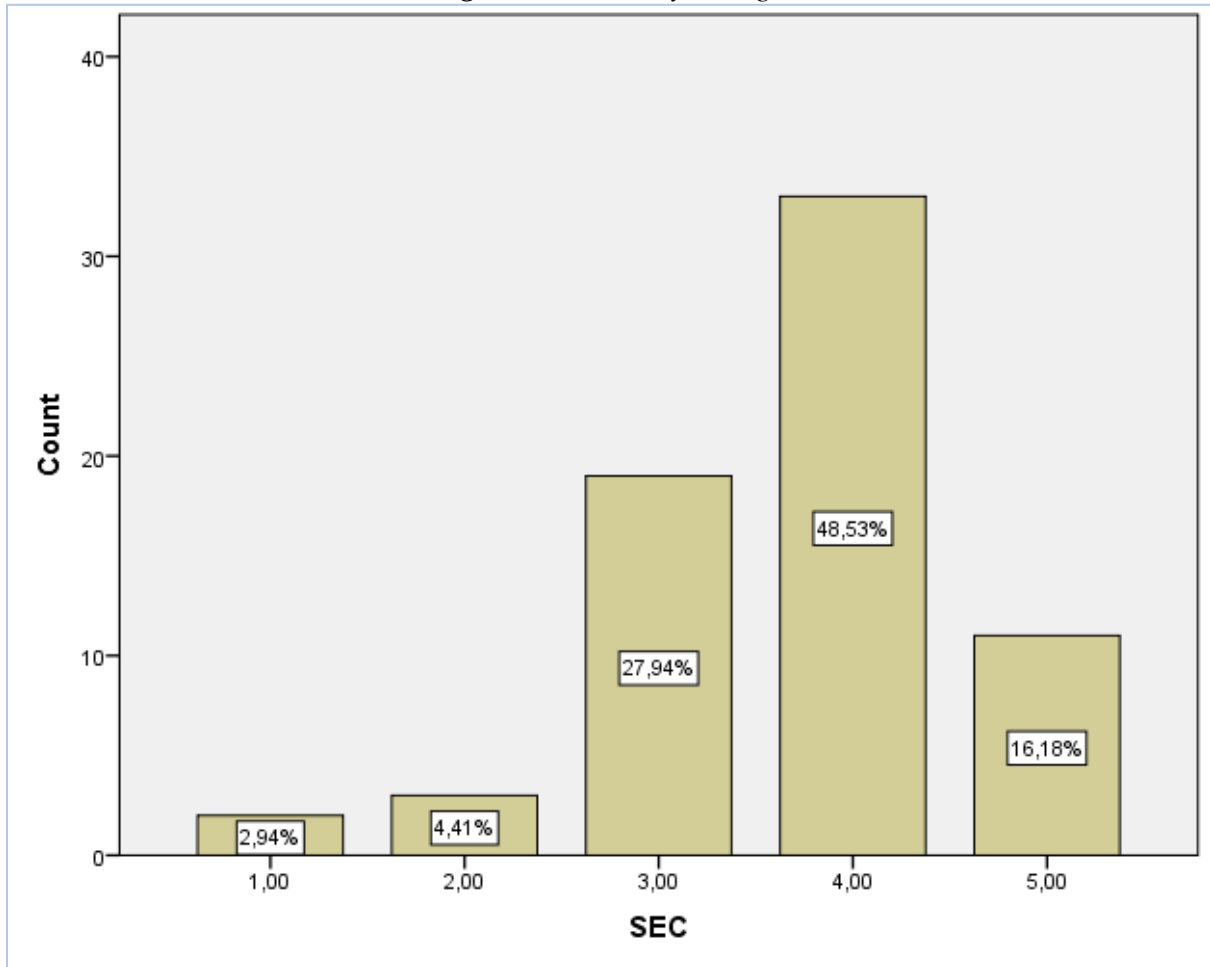
Source: SPSS

**Figure 11: Price rating**



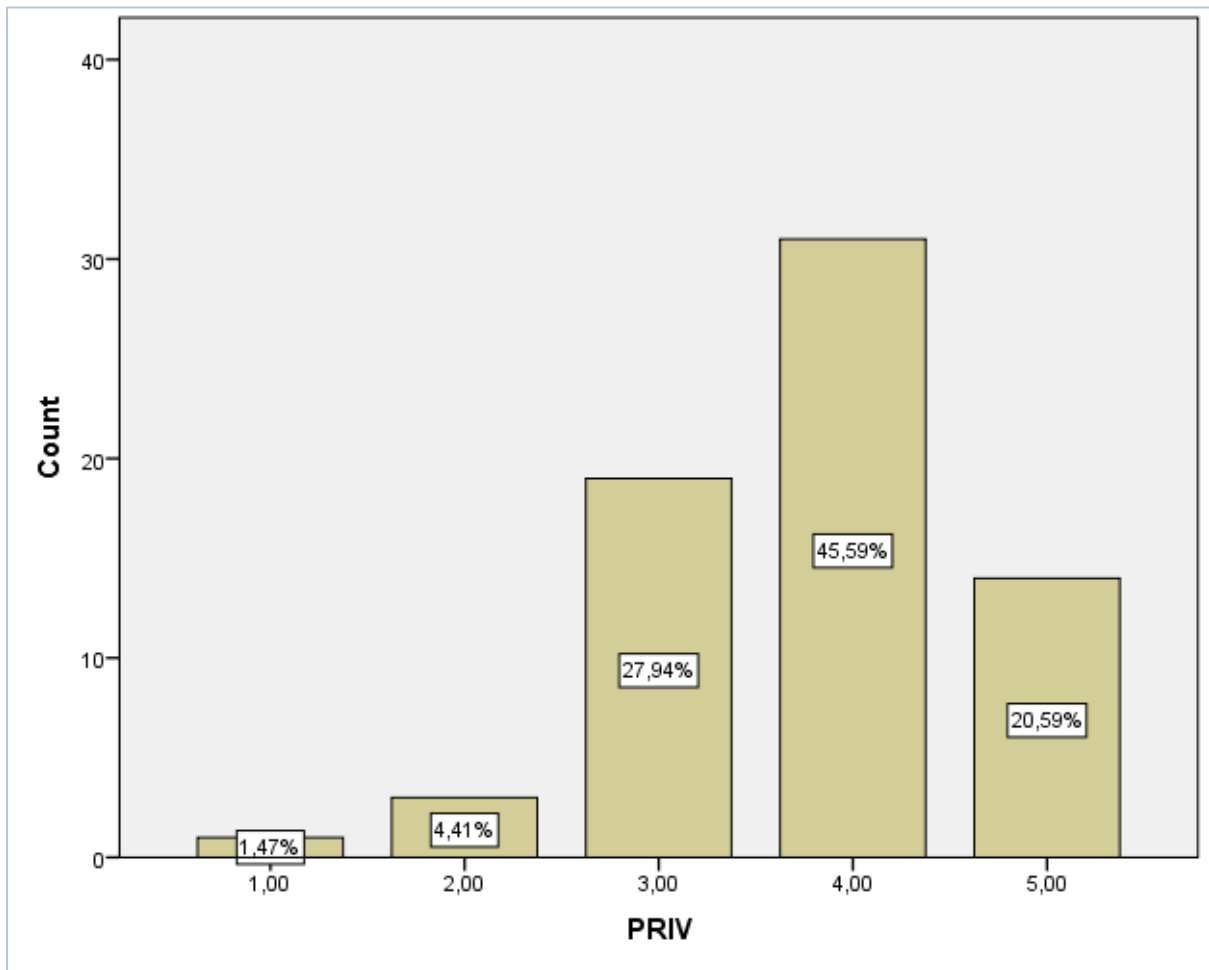
Source: SPSS

**Figure 12: Security ratings**



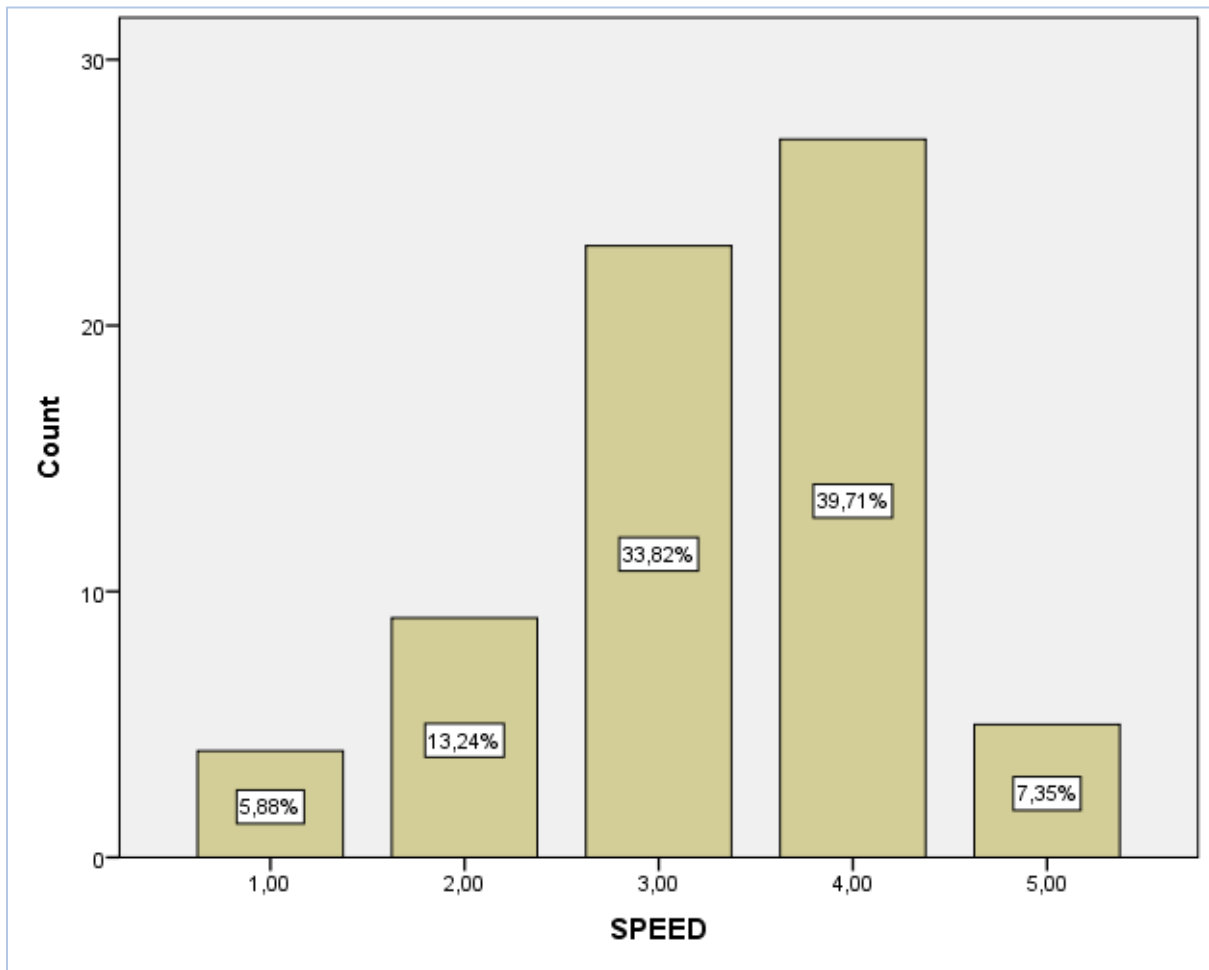
**Source: SPSS**

**Figure 13:** Privacy ratings



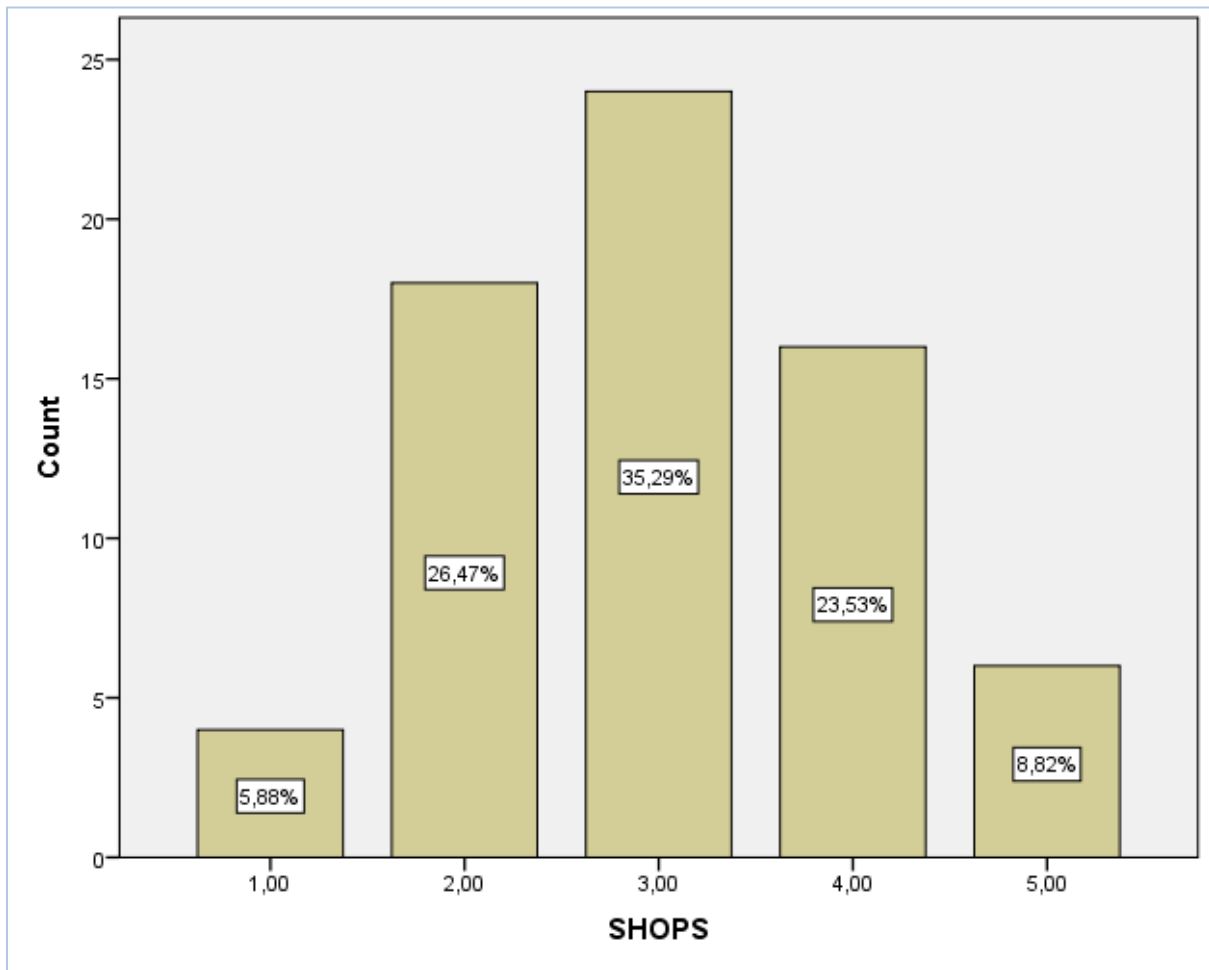
*Source: SPSS*

**Figure 14:** Speed of services ratings



Source: SPSS

**Figure 15:** Shops payment support ratings



Source: SPSS