

Assessing resistance to accept electronic wallets in Egypt

Karim Alaaeldin Ahmed Fouad

ESLSCA University || Egypt

Alaa Tarek Erakat

Faculty of commerce || Cairo university || Egypt

Abstract: The purpose of this study is to determine the factors that obstruct the diffusion of electronic wallets in the Egyptian society. As there is great resistance to the use of electronic payment services provided by governmental and private banks, and the insistence of customers to use cash due to the many reasons that were discussed in the research. In spite of this, several countries such as Morocco, Algeria, Malaysia and India, as an example similar to the Egyptian example, have come forward and found many solutions to switch from cash to electronic payment. Nowadays, cell phones have become a fundamental piece of one's everyday life. Users would be able to utilize their Smartphones to make money transactions or online payments by using applications on their phones. There are many mobile wallets, which provide these types of services. Electronic wallets are computerized version of traditional wallets that somebody would carry in their pocket. They offer payment service through which the people/business can receive/send money by smart phones. The current paper highlights the factors that affect Egyptians' consumer behavior towards electronic wallets, either directly or indirectly and the reasons behind rejecting the idea of replacing cash payments with electronic payments, despite the global trend to reduce the use of cash especially in the current period of the Coronavirus pandemic. A recent statistic from the Central Bank of Egypt stated that 67% of Egyptians do not have bank accounts, this alarming statistic shows that Egyptians might be uncomfortable dealing with banks, this reflects the level of resistance that Electronic wallet services will face in building familiarity and acceptance with the Egyptian consumers. Through interviews and phone calls with a group of 48 executives and team leaders from government and private banks, in addition to 62 individuals from different age groups- who owned bank accounts in different banks- it was found that the age group from 20 to 40 are the most frequent users of electronic wallets and electronic payment services. Service quality emerged strongly during the study as a variable moderating the acceptance of electronic wallets by customers. Study also indicated that banks' customers who had concerns about using the electronic wallet for other reasons including making a wrong transaction, refund period, mobile phone coverage when payment is required urgently and on top of this customers had safety concerns and problems dealing with mobile applications. According to 2024 expectations, there is an increase of more than 50% for users of e-wallets for bank account holders, however, through breeding familiarity with the concept of electronic wallets and banks investment in a highly secured and user friendly applications percentage could go higher.

Recommendations to increase the diffusion rate of e-wallets in the Egyptian society:

- A planned and systematic awareness campaign introducing government's efforts towards using electronic payment services.
- Training of the section concerned with technical support to service electronic wallets in all banks to solve all customer problems easily and quickly, which in turn makes the customer satisfied with the service.
- Simplifying and facilitating electronic payment applications on mobile phones to facilitate handling by elderly or low-education persons.

• Motivating customers to use e-wallets through loyalty program and sales promotions.

Keywords: E-wallet, Services quality, Customer Satisfaction, demographics, pros and cons, education, resistance, Egypt, safety, online payment.

تقييم مقاومة قبول المحافظ الإلكترونية في مصر

كريم علاء الدين أحمد فؤاد

جامعة اسلسكا || مصر

آلاء طارق عراقات

كلية التجارة || جامعة القاهرة || مصر

المستخلص: الغرض من هذه الدراسة هو تحديد العوامل التي تعيق انتشار المحافظ الإلكترونية في المجتمع المصري. حيث أن هناك مقاومة كبيرة لاستخدام خدمات الدفع الإلكتروني التي تقدمها البنوك الحكومية والخاصة، وإصرار العملاء على استخدام الدفع النقدي لأسباب عديدة تمت مناقشتها في البحث. وعلى الرغم من ذلك، فإن هناك عدة دول مثل المغرب والجزائر وماليزيا والهند، كأمثلة شبيهة بالمثال المصري، ووجدت العديد من الحلول للتحويل من الدفع النقدي إلى الدفع الإلكتروني. في الوقت الحاضر، أصبحت الهواتف المحمولة جزءًا أساسيًا من الحياة اليومية للفرد. سيتمكن حاملي الهواتف الذكية من استخدام هواتفهم الذكية لإجراء معاملات مالية أو مدفوعات عبر الإنترنت باستخدام التطبيقات الموجودة على هواتفهم. هناك العديد من محافظ الهواتف المحمولة التي تقدم هذه الأنواع من الخدمات. المحافظ الإلكترونية هي نسخة محوسبة من المحافظ التقليدية التي قد يحملها شخص ما في جيبه. أنها توفر خدمة الدفع التي يمكن للأفراد / الشركات من خلالها تلقي / إرسال الأموال عن طريق الهواتف الذكية. تسلط الدراسة الحالية الضوء على العوامل التي تؤثر على سلوك المستهلك المصري تجاه المحافظ الإلكترونية، سواء بشكل مباشر أو غير مباشر، والأسباب الكامنة وراء رفض فكرة استبدال المدفوعات النقدية بالمدفوعات الإلكترونية، على الرغم من الاتجاه العالمي لتقليل استخدام النقد خاصة في الوقت الحالي بسبب انتشار جائحة فيروس كورونا. أشارت إحصائية حديثة للبنك المركزي المصري إلى أن 67% من المصريين ليس لديهم حسابات بنكية، وهذه الإحصائية المقلقة تظهر أن المصريين قد يكونون غير مرتاحين في التعامل مع البنوك، وهذا يعكس مستوى المقاومة التي تواجهها خدمات المحفظة الإلكترونية في بناء الثقة والقبول لدى المستهلكين المصريين. من خلال المقابلات والمكالمات الهاتفية مع مجموعة من 48 مديرا تنفيذيا وقادة فريق من البنوك الحكومية والخاصة، بالإضافة إلى 62 فردا من مختلف الفئات العمرية - الذين يمتلكون حسابات بنكية في بنوك مختلفة - تبين أن الفئة العمرية من 20 إلى 40 هي أكثر مستخدمي المحافظ الإلكترونية وخدمات الدفع الإلكتروني. ظهرت جودة الخدمة بقوة خلال الدراسة كمتغير متوسط لقبول المحافظ الإلكترونية من قبل العملاء. أشارت الدراسة أيضًا إلى أن عملاء البنوك الذين لديهم مخاوف بشأن استخدام المحفظة الإلكترونية لأسباب أخرى مثل إجراء معاملة خاطئة وفترة استرداد الأموال وتغطية الهاتف المحمول عندما يكون الدفع مطلوبًا بشكل عاجل بالإضافة إلى أن العملاء لديهم مخاوف تتعلق بالأمان ومشاكل في التعامل مع تطبيقات الهاتف المحمول. وفقًا لتوقعات عام 2024، هناك زيادة بنسبة تزيد عن 50% لمستخدمي المحافظ الإلكترونية لأصحاب الحسابات البنكية، ومع ذلك، من خلال الإلمام بمفهوم المحافظ الإلكترونية واستثمار البنوك في تطوير تطبيقات آمنة للغاية وسهلة الاستخدام يمكن أن تصبح النسبة أعلى.

توصيات لزيادة معدل انتشار المحافظ الإلكترونية في المجتمع المصري:

- حملة توعية مخططة ومنهجية للتعريف بجهود الحكومة نحو استخدام خدمات الدفع الإلكتروني.
- تدريب القسم المعني بالدعم الفني على خدمة المحافظ الإلكترونية في جميع البنوك لحل جميع مشاكل العملاء بسهولة وسرعة مما يجعل العميل راضياً عن الخدمة.
- تبسيط وتسهيل تطبيقات الدفع الإلكتروني على الهواتف المحمولة لتسهيل التعامل مع كبار السن أو ذوي التعليم المنخفض.
- تحفيز العملاء على استخدام المحافظ الإلكترونية من خلال برنامج الولاء والترجيع للمبيعات.

الكلمات المفتاحية: المحفظة الإلكترونية، جودة الخدمات، رضا العملاء، التركيبة السكانية، الإيجابيات والسلبيات، التعليم، المقاومة، مصر، الأمان، الدفع الإلكتروني.

1. Introduction

E-wallet is contemporary payment framework refers to using any smart phone or online service that faces people to sort electronic transactions. This can be included buying products online with a processor or using a cell phone to buy somewhat. A customer bank account can likewise be linked to the e wallet. They may also have their driver's - car license, medical services, and other ID documents stored on the smart phones. Progressively, e wallets are being made financial transactions as well as authenticate the holder's credentials certifications. For instance, E-wallet could verify the age of the purchaser to the store while purchasing malt. The system has already gained resistance in Egypt. E wallet has both a software and data part. The system provides security and encryption to the personal data and for the transactions. Regularly, e wallets are put away on the customer side and are effectively self-kept up and completely compatible with most online payment Websites. A server side e wallet, e wallets are acquiring popularity among significant retailers excessively because of the security, efficiency, and added utility it gives to the end-user, which builds their satisfaction of their general purchase. And for many reasons related to the level of education and culture in Egypt, as well as the responsibility to spread awareness about the use of modern technology, the great influence on the refusal of many people to use this technology and from this study, we found some countries that are very similar to the conditions of Egypt, but they are more ready to deal with that technology and there are some It still refuses to use it for some cultural and security reasons as well. The study will be divided into several sections after the introduction, the first section is the literature review that reviews the other researchers who presented to such study or similar topics of study to help in the assessment and the judgment on this study results Then the second part is the data that collected through authorize bodies to make sure that the sources are reliable to test the dependent variable response to the change in the independent variable. Then, will put spot on pilot study which will show the others opinion and experiences a cross interview with public persons and executives in the same industry. Although, the study also will prove the hypothetical statements or discredits them to end up with an eventual result with a reasonable conclusion and recommendation. Then we will move to the methodology part, where an explanation of the desired objectives of the research, and then we will go into an explanation of the main problem around which the study was conducted and the variables affecting directly and indirectly on the dependent variable in the research. In the same context, the part related to the limitation of the research will be presented and explained. Then, we will move to the summary of the study. Finally, the references referred to the research topic will be presented.

2. Research problem

Egyptians are still holding on traditional payment methods and resist contemporary methods, including electronic wallets. This research study came to investigate the reasons behind such resistance

and offer managerial guidelines for banks to help advance electronic wallets as a more convenient and safer payment method.

3. Research methodology

The Research is considered an exploratory research that depended on literature review followed by a series of personal and phone interviews with both bank executives and bank customers.

48 bank executives were interviewed either personally or through phone interviews in addition to a sample of 62 banks' customers who already use electronic wallets regularly and a sample of 39 non-users of electronic wallets.

The validity of the research could be further improved by taking a representative sample of the population and employing statistical analysis, however the study could provide good insights into the research topic and a reflection of the Egyptian customer.

3.1 Research questions

3.1.1 Major question

Why do the publics in Egypt resist the acceptance of electronic wallets as a contemporary payment method?

3.1.2 Minor questions

- What is the effect of service quality on consumer behavior towards Electronic wallets?
- What is the effect of social influence on consumer behavior towards Electronic Wallets?

3.2 Study importance

3.2.1 Theoretical

- The study will shed the light on the nature of Egyptians and their handling of new innovation and this will fill a missing gap in scientific literature.
- The study assesses the effect of the social influence and quality service on consumer behavior.

3.2.2 Practical

- The main significance of the study is providing managerial guidelines for bankers to increase acceptance of bank's new products.
- The study provides insightful recommendations for bankers that could improve their success potential.

3.3 Research objectives

- Assessing the causes of people's resistance in Egypt, especially those who have bank accounts that insist on using cash instead of using the e-wallet service.
- Examining the relation between customer's demographics (Gender, Age, Profession) and consumer behaviour towards electronic wallets.
- Checking the impact of service quality on the Electronic wallet usage.
- Checking the impact of social influence on the Electronic wallet usage.
- Testing the effect of Covid19 as a mega trend on electronic wallet usage.

3.3.1 Research limitations

- Methodological limitations:

The research is considered an exploratory research and an extension with a descriptive study could better validate the results

- Time limitations:

The researcher did not have enough time to investigate the issue, especially with the COVID lock down that complicated data and sample accessibility.

- Sample limitation:

The researcher depended on a non-probability convenience sample, which does not allow for generalizations, yet provide an idea about the matter that can facilitate future research.

- Cultural limitations:

The study solicited Egyptian respondents which might have their own cultural values that might differ from other low context nations, yet could be beneficial for high context ones.

- Financial limitations:

Having a bigger sample or purchasing some secondary reports might have improved the quality of the researcher, yet as the research is non-funded that was beyond the researcher's capability.

4. Literature review

Firstly, we searched for the history and definition of the electronic wallet and an explanation of this new technology in the Egyptian market.

4.1 History of electronic payment:

The type of digital payments can be followed back to 1997, when Coca Cola dispatched a couple of vending machines in Helsinki that let consumers buy a can by text messages. Despite, the fact that altogether different from present day e wallet transactions, this accepted as the origin ([John Rampton](#) 17, 2016). {16}

Before long, cell phones turned into the way to purchase movies and travel tickets and ordering food. By 2003, around 95 million mobile phone users had utilized a cell phone to make purchases. Google was the first major company to publish a mobile wallet in 2011. With NFC (near field communications) innovation, customers could pay and redeem coupons. In spite of the way that it was used on just one cell phone model and was agreed exclusively by a small bunch of shippers, it end up being well known. In 2012 saw Apple's Passbook, which, however not for online payment, could be utilized for tickets and coupons. Apple Pay came two years after the fact. Published in the USA, it immediately spread to the UK and China. 2015 came to Android and Samsung Pay (Dan O'Shea, 2018). {5}

4.2 Definition:

E-wallet is an electronic card, which used for online transactions through a computer or a smartphone. Its utility is like a credit or debit card. E-wallet needs to be linked with the bank account to make payments. (The economic times-**E-wallets** 08 February 2021, 12:07 AM IST).{7}

In addition, Mobile or Electronic wallets are what could be compared to an actual physical wallet. Which would then be able to be utilized to make payment to people/merchants (Bagla and Sancheti, 2018)? These transactions could be by means of multi-channels like customer-to-customer, customer to business, customer to machine and customer to online (Shin, 2009). {7}

4.3 Descriptions:

E-wallet is a kind of prepaid account wherein a customer can store his/her money for any future online payment. E wallet is ensured and protected with a password. With the help of an E-wallet, one can make payment for some accessories, online buys, and all types of tickets, among others. E-wallet has fundamentally two parts, software and data. The software segment stores personal data and gives security and encryption of the information. The data segment is a database given by the customer which incorporates their name, shipping address, payment technique, add up to be paid, credit or debit card subtleties, etc. (the economic times-**E-wallets** 08 February, 2021, 12:07 AM IST). {7}

On the other hand, Traditional monetary communication frameworks commonly get financial data from an individual utilizing a devoted terminal device an Automatic Teller Machine (ATM), a point of sale (POS, a video display terminal (VDT) connected to a centralize financial computer. All Point of Sale (POS) terminals are supported by Visa and MasterCard to accept payments by January 2020 (Peterson & Wezel, 2016). Mobile payments are adopting the same standards as contactless cards that are Euro pay, MasterCard, and Visa (EMV) standards and NFC (Peterson & Wezel, 2016). {7}

Advantage of using e wallet
Convenience of online payment are Increased
Saves time
It provides more security than cash in wallets and it makes user to authorize all the payment and transactions.

Advantage of using e wallet
E-money is acceptable at most of all retail and online stores.
There are some rewards like cash back, change points and discounts.
Disadvantage of using e wallet
E-Wallets do not exist at every retail or service provider like cash is. In addition, it does not have worldwide acceptability.
It decreases the risk of theft but increases the risk of cybercrime.
There might be an additional fees or transaction charges charged by the E-Wallet company from the user.
It is not easy accessible by all as everybody does not know how to use this service on smart phones

Table 1 E wallet pros and cons

(Annual International Conference Proceedings; January 2020). {19}

Through the above about the history and introduction of electronic wallet technology, as well as through the advantages and disadvantages mentioned above, the researcher also adds an advantage that it limits the idea of queuing and helps to social distancing during the period of the Corona virus pandemic. From the viewpoint of the researcher in terms of the defect of this technology, which is that the phone must always be connected to the Internet, so this service cannot be used in places outside the coverage or when the battery runs out.

When anything new appears that calls for change or to abandon something that was previously used to change for the better or to facilitate things for people, this is always met with resistance, and in the beginning resistance to change is for change, but without trying to experiment and then impose technology itself and becomes the dominant one, therefore, we review the theory of resistance, which is what the idea of the research and the study is based on.

A study by (Abd al-Rahim Wahiba) entitled "Replacing Traditional Banking Payment Methods with Electronic" in Algeria 2005-2006 This study highlighted that the global economy has undergone major transformations by abandoning the traditional banking payment systems and moving towards electronic systems, as there has become a gap between customers and banks and bridging This gap was necessary to have quick solutions by modern technology. {21}

4.4 Innovation resistance theory:

Innovation Resistance Theory developed by Ram and Sheth in 1989. Innovation resistance is the consumers' reaction towards an innovation due to possible distinction from their status quo or on the ground that it clashes with their belief structure (Ram & Sheth, 1989). divided these conflicts into two classes which are psychological barriers and functional barriers. Psychological barriers incorporate tradition barrier and image barrier, though functional barriers incorporate usage barrier, value barrier, and risk barrier. Psychological barriers are because of a contest with customers' past beliefs. Functional barriers exist when customer see extensive changes from using new technology (Ram & Sheth, 1989). {6}

Resistance refers to users' opposing response towards changes in technology (Khan & Kim, 2009).{18} All barriers in Innovation Resistance Theory except for Traditional Barrier substantially influence consumer resistance towards mobile banking in Thailand and Taiwan (Yu & Chantatub, 2016).{18} Besides, (Chan et al 2015) concluded that all barriers in Innovation Resistance Theory except for perceived cost barrier, negatively affect mobile commerce adoption. The researcher believes that usage barrier, value barrier, risk barrier, and tradition barrier are significantly and positively connected to resistance towards e wallet. In contrary, Perceived Novelty has a significant and negative impact on resistance towards e wallet.

Researcher sees that there is a strong relation between covid 19 pandemic and demand on electronic payment. Digital infrastructure is witnessing a positive demand shock due to business shifting online and consumers working from home. However, expected to be lower in low and middle-income countries, where the informal sector comprises a wide share of economic activities, middle-income countries is purchasing online, with critical differences across gender, age and education.

The researcher shows that the role of IMC in spreading awareness of the use of electronic payment and the government's efforts to reduce cash payment and the use of the electronic wallet through television advertisements, on the Internet and social network sites had a major role to spread awareness among people and spread knowledge to use the electronic wallet.

Cisco [4] has also said that between 2016 and 2021, the number of internet users increased by 4 billion and will soon be 6 billion, 75% of the 8.5 million people will have smart phone and internet access [17] At the same time, customers will also be educated because customers will perceive technology as a factor that improves the quality of life [17] so that the phenomenon of technology adoption will grow very fast especially among young people who have highly connected characteristics. Around 56% of millennial use two or more electronic devices, such as smart phones and laptops. {11}

Currently, consumers have a high bargaining power because consumers can have a variety of options for shopping behaviour, purchasers can decide to shop via smart phone or offline. Not just online shopping has expanded, customers today likewise will be given a great deal of choices for shopping on a sort of products or administration contrasted with when purchasers have not been online, the selection of items for them to purchase around then was more restricted. In the present digital environment, customers reliably move starting from one channel to another, from online to offline, and the other way around. There is a setting proposed by Kotler and Keller [16], where the buyer is purchasing situation is separated into two, including show rooming and web rooming. {1}

The theory of resistance was the best example for the Egyptian society, as there are many people who have bank accounts and even now refuse to deal with this new technology for several reasons and variables that will be addressed in this study, which the researcher believes that they affect directly and

indirectly on customer behaviour towards E wallets. Hence, we turn to the study of people's tendencies to buy online.

4.5 Online shopping purchase intention:

Nowadays People can communicate with each other anywhere, any time through many of channels such as social medial platform for topics like social, educational, economics, and political very easily and without any problems. Therefore, Social media advertising is one of the most important pillars, which encourage customers to sell their products by online shopping pages (Yeo, et al., 2020).

There are many variables that affecting on the purpose of the consumers towards the concept of the online payment. (Saleem, et al., 2018).

While there is another point of view that focuses on the customer satisfaction in direct to his purchase intention that is affected by his behavior. This behavior is different from one to another. The online shopping and payment is a virtual service, the customer doesn't have the ability to test the service before purchasing it, according to that leads to a lack of trust (Ali, Ahmed & Absar, 2020). Morocco's reliance on electronic management as a mechanism for modernizing the public utility and improving its services came as an interaction and a high demand for public utility services, a doubling of administrative transactions and an increase in their wealth and a desire by the Moroccan state to overcome the deficiencies and imbalances produced by the traditional "paper" administration. As the process of moving from providing administrative services by traditional manual methods to an electronic method by taking advantage of the means and tools offered by modern technology aiming at an optimal use of time, effort and money (Dspace UMBM 2019). {4}

The researcher believes that there are a number of variables that affect the relationship between social influence and customer behavior, and the most important of these variables are demographics. Where, gender and age and the direct impact on customer behaviour towards using the e wallets.

4.6 Demographics:

Demographics (gender - age) are key moderators in user technology acceptance (Burke, 2002; Venkatesh et al., 2003; Sun and Zhang, 2006). In one such study on smart phone wallet selection in the Indian context, gender and age were accounted for to affect buyer satisfaction and usage rate (Singh et al., 2017). Gender orientation contrasts can radiate from psychological differences (Zhang et al., 2007). Gender will altogether influence deciding the intention of tolerating new technology, study discovered male is all the more technologically received compared with females. Explicit on online payment, males to be discovered bound to adopt online payment frameworks in regard of more usefulness, and females are inclined to apparent risk in adopting online payment (Goswami & Dutta, 2016). Therefore, the researcher is proposing to conduct the study on the direct effect of gender on adopting e wallet.

Concerning age, weakness and inconvenience were discovered to be higher in more old people respondents compared with younger ones (Demirci and Ersoy, 2008).and the researcher is completely agree with that. In this way, old people have a lower trust on technology that unfavorably influence their behavior. (Chawla and Joshi, 2018). conducted a study in India to look at if demographic characteristics impact client adoption of mobile banking services, trust and way of life essentially shifted across age groups. Steady with our discoveries, comparative proof has been found in an examination by Saxena (2018) wherein middle aged respondents were discovered to be more disposed toward the adoption of e wallets compared with their youngsters or old aged counterparts.

The researcher sheds light on gender and age as one of the most important factors and variables affecting customer behaviour, especially in a country like Egypt, where there is a big difference between the behaviour of men and women when buying online or using electronic wallet technology. The researcher also believes that the age stage is closely related to the trend towards the use of modern technology and is considered a strong influence on the relationship between the variables. The researcher also places the level of education as one of the most important factors affecting people behaviour towards using modern technology through mobile phones.

4.7 Education:

Prior findings showed that highly educated people were faster to adopt new technologies compared to lower education (Wozniak, 1987). Hence, finding from (Riddell & Song, 2011) better education has positive relationship in improving technology adoption and diffusion. Both of these are very important in promoting technology advancement. by (Astuti & Nasution, 2014). Additionally, find that people with advanced education level are willing to adopt new technologies as they can analyse and decide on positive and negative impacts. Research by (Abu-Shanab, 2011) had shown that education has critical moderation impacts with behavioural intention in internet banking adoption. While higher education level was found to have higher expectation to adopt internet banking. With higher education level are better both in tolerating and adopting new technology, thus we might want to avow if advanced education has positive correlation while adopting mobile payment as a transaction method.

Through studies that support the researcher's point of view about the level of education and its impact on the use of technology, which we see logically as that advanced education helps in the ease of dealing with technology, especially if it related to bank accounts, the low level of education is a barrier against dealing with modern technology. {24}

Customer satisfaction is one of the most important study factors on which the customer's response to the product or service provided is based and if he will use this service again in the future or not, as measuring the customer's satisfaction with the service provided is one of the most difficult factors that need many research efforts It is considered an important variable in the subject of study.

4.8 Customer Satisfaction:

Egyptian banking sector of 38 banks in June 2017 after the merger and liquidation of few banks, Egyptian banks are starting to focus on electronic services and Many banks have begun to bring to the electronic banking services to their clients through yet don't concentrate on sufficient attention to the quality of services provided their websites. Banking suffers from many restrictions that limit its development in the provision of e-services. The low quality of e-banking services was one of the principle shortcomings of e-banking services these make customers decline from using them although the banks are provided E-banking services; they are not dependable and not are the performance satisfactory for the consumers. This may be why bank customers rarely use e-banking services in Egypt (Abd El-Aziz, 2009). {12}

However, in India, Innovative changes affected in banking sector. Phone banking acquires a radical change the field of banking sector by the execution of mobile wallets. Study on customer satisfaction of electronic wallet service finds the satisfaction level of consumers in using different services of mobile wallets. From this study, unmistakably the majority of people know about the different services of e wallet and they use it in maximum extend In India, which is the contrast, here in Egypt, in comparison to the demand for using this service in a wide sector of those who have bank accounts and still prefer to attend themselves and use cash. Mobile wallet services definitely used among the younger people in India and progressively used by students for their transactions. Consumers are profoundly happy with the general service of e wallet. In this current situation, mobile wallet service is more valuable to the general public to decrease the cost and time evolved with making the transactions actually by going to their banks.(International Journal of Engineering and Management Research p-ISSN: 2394-6962 Volume- 9, Issue- 1, February 2019). companies need to guarantee the quality of the services offered to guarantee consumer satisfaction. (Hamzah et al., 2017). {2}

On the other hand, the payment market in Malaysia has been widely grown through the cashless or e-wallet payment service. The method for "going cashless" has as of late acquired ubiquity because of security concerns and crime issues, like robbery and pickpocket. The cashless payment services industry was expected to be the fastest-growing industry between 2019 and 2021. It was reported that the acceptance level among the customers increases at a compound annual growth rate of 53% by 2021, which was estimated to represent 16% of the Malaysian payment market share (Shamsudin et al., 2021). A digital wallet was the fourth most-used payment method (7%) in Malaysia (Shamsudin, Ishak, et al., 2020). {2}

The researcher use of examples from two countries such as India and Malaysia, which the researcher sees close to the same conditions in Egypt, despite this, the banks in these countries have reached customer satisfaction towards the electronic wallet service, which made the number of customers who use this service on the increase. It is worth noting that bank employees have a high degree of training

and experience that allows them to solve customer problems easily and quickly, which makes the customer satisfied with the level of service provided, and even becomes ready for any new service in the future. Here, there is a strong link between service quality and customer satisfaction. Therefore, the researcher touched upon the study of the quality of the provided service, which the researcher considers as one of the main variables that affect the customer's behaviour towards the use of the electronic wallet.

4.9 Service quality:

Quality addresses how much an entity satisfies its users' needs (Izogo and Ogba, 2015). Services quality can be characterized as accomplishing customer expectations. The evaluation directed by a business is well-delivered and meets customer satisfaction. Service quality assumes a fundamental part in the services industry's success because of the intangible nature of services (Shamsudin, Yazid, et al., 2020). Offering great service quality reflects a brilliant corporate image of the business performance and adds to positive consumer perception. Different types of service quality can influence business performance that comprises of productivity and efficiency of how well services are provided to consumers (Ramanathan et al., 2016). {15} service quality comprises of five dimensions: tangible, Reliability, responsiveness, affirmation, and sympathy. These dimensions of service quality are fused developed by (An et al., 2005). {5} The first element of service quality is tangible, which alludes to various types of physical facilities, equipment, personnel, and communication materials, with the staff's appearance. At the point when employees worry about their appearance and guarantee they generally look brilliant and clean, consumer satisfaction can be accomplished (Parasuraman et al., 1994).{3} In addition, Reliability alludes to a business' capacity to perform precise services as indicated by the standard policy and regulations. Reliability supports a business in the industry when fulfilled customer keep on using the service or make repeat buys (Famiyeh et al., 2018).{18} Thirdly, responsiveness is characterized as a business' effectiveness in playing out the services through staff ability and readiness to help customers (Shamsudin, Rasol, et al., 2020). For instance, they can assist customers with taking care of their problems immediately. The fourth dimension of service quality is affirmation, which is connected to a business' credibility delivery of useful services to acquire customer confidence (Kant and Jaiswal, 2017). For instance, employees have great information on the services and can assist customers with tackling their issues. In conclusion, compassion is characterized as employees' concern towards clients by focusing and eagerness to solve their issues (Lau et al., 2019). Service quality can be a factor that affects consumer satisfaction, where service quality drives consumers to repeat their buy or using a same service (Shamsudin, Nayan, et al., 2020a). Repeat buys prompts to customer loyalty and satisfaction (Han et al., 2018). {7}

Through the study of previous research and presentation of the five dimensions that were mentioned previously such as tangible, Reliability, responsiveness, affirmation, and sympathy, the researcher finds that the quality of the service provided is closely related to the customer's sustainability in

using this service, and even makes him satisfied with any new technology that the bank or organization proposes in the future.

5. Pilot study

According to the discussions that took place with 48 executives and team leaders working in governmental and private banks, 62 users who have bank accounts and 39 non users who have not bank accounts found the following:

Through the discussions that took place with 48 team leaders working in public and private banks and those responsible for electronic payment management, there is a consensus that the demand and embarking on the use of electronic wallets is on the rise, but there are still many customers who do not want to join the circle of banking technology that is advancing Great in Egypt and there were many opinions to explain the reasons for this, including There is a great relationship between the age of the customer and his acceptance of change and the shift to the use of electronic wallets, as well as the age group of young people that does not consume much effort to keep up with banking updates. Despite this, there is another opinion that links the level of education and the use of electronic payment technology. These leaders have unanimously agreed that the use of electronic wallets has increased in Egypt, especially after the Corona pandemic and staying at home for fear of getting involved in the crowded banks.

And through the size of the sample with which the interviews were made, the dialogue was about what is related to the demographics that there is agreement with the study and research that most of the customers who deal with the electronic wallet are from the age group between 20 and 40

years, as there was a consensus on that, and some of them reported that From his point of view, he sees that there is a great correlation between new technology and the age group. Others said that technology was made for youth to use and that banks are currently working to develop and facilitate these services to suit all age groups and that there is a large team of programmers who are doing the necessary development.

On the other hand, when conducting interviews with 62 users customer who have bank accounts in different ages, there was a majority for the young age group to use e-wallets much more than the elderly, and there are some opinions saying that this technology is like other technology, such as dealing with smart phones and social networking sites And many applications that users use in daily life.

As for gender, there were many opinions, but the majority tended to say that male clients were the most in dealing with electronic wallets. This is due to the obligations that men have, especially married men, and also given that the number of male bank clients is the largest, but there was Opinions also say that now the feet to open bank accounts are not the same as before, and there are almost equal proportions of males and females, and there has become a focus through the departments concerned with

marketing to attract all customers of both sexes and that one of the future plans of many banks is a technological transformation to keep pace with the government's goals and progress With it in the same direction and that all banks are now working to develop their electronic payment system as soon as possible.

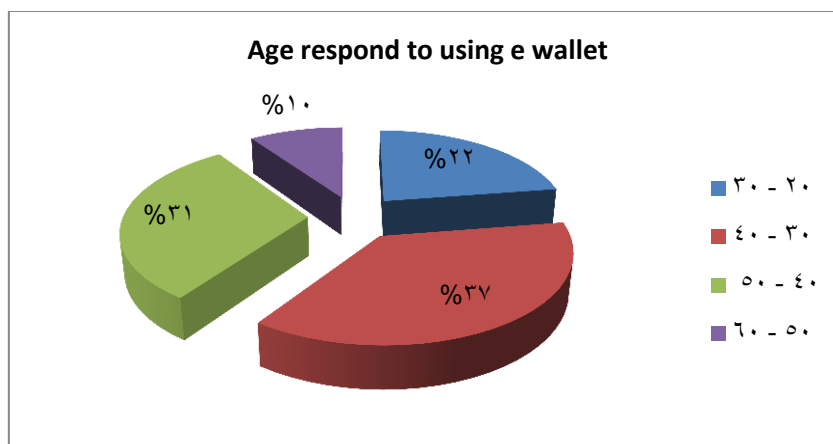


Figure 1 Age respond to e wallet

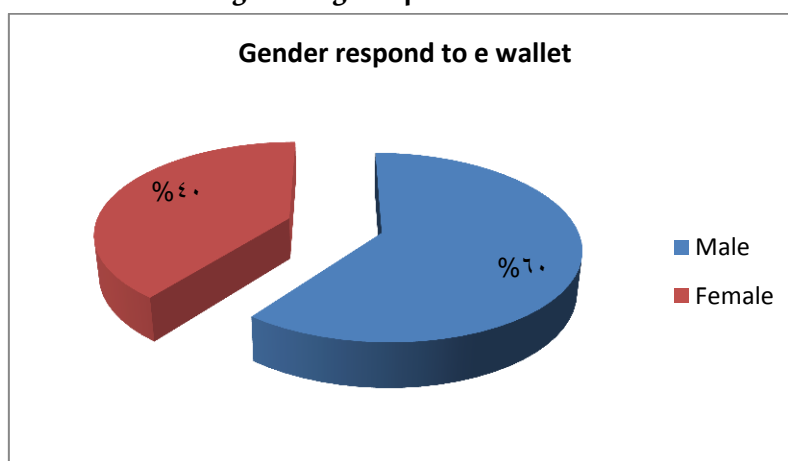


Figure 2 gender respond to e wallet

With regard to the question about the level of education, there is a consensus from all bank executives that those with a higher educational level do not have a problem in dealing with electronic payment technology and that the technical support department works hard with older clients and those with a lower educational level much more than young people or Those with an advanced educational level.

Regarding customer satisfaction, the team leaders in government and private banks from the sample with whom the interviews were made unanimously agreed that customer satisfaction is one of the most important points that are constantly being developed, and the development departments of banks seek to develop new methods always to measure the extent of customer satisfaction with the services provided that are not It is only related to the use of electronic wallets, but also all other banking services, and it is one of the main factors for the success of any new technology that is presented to customers and

that customer satisfaction is one of the pillars of the basis for the quality of the service provided, which will significantly affect the customer's behaviour towards the services. Through many discussions, it was found that there is another variable that has a strong influence on the relationship between social influence and customer behaviour towards using the electronic wallet, which is the safety factor. As there are many opinion polls for a bank on the use of electronic payment technology through customers stating that they are afraid of using this technology because they feel that it is unsafe compared to using cash as there are many who fear that an error will occur during the process or that he will pay a large amount or use Service other than what he mistakenly wanted and the cash back process would require more time or may not be refunded. This led to directing the researcher's focus on this variable, which is the safety factor.

Also, related to 39 non users whom have not bank accounts in different ages and genders we found that, the majority have no idea about bank facilities and Their knowledge about electronic wallets is through television advertisements and when conducting a dialogue with them by asking them about the possibility of getting bank accounts and using modern technology for banking transactions, so most of the responses were confused given that at the present time they do not have bank accounts and most of the young people do not mind using technology, even if it is for them are unknown once they are told that it will save them time and effort.

Finally, with regard to the Corona virus pandemic and the demand of many customers to use electronic payment services instead of coming to agencies and institutions to pay cash, the percentage of customers who used this technology has increased very significantly, as one executive said that the percentage had exceeded 50 present in 2020 compared to one year 2019, which called the Development Department to work quickly to improve electronic payment services. Not only that, but also a points program has been established for customers who use electronic wallets to encourage them to continue this service even after the end of the pandemic.

5.1 Research population and sampling unit:

The research population subject for this research is bank customers who are non-users of electronic wallet services, educated (has at least a bachelor degree) and lies within the age group of 20-40 of both genders. The reason for the selection is that it was found through both literature and the pilot studies that this category is the most likely to accept new bank services with a technological nature. Sampling unit could be any representative customer for the research population.

6. Conceptual model

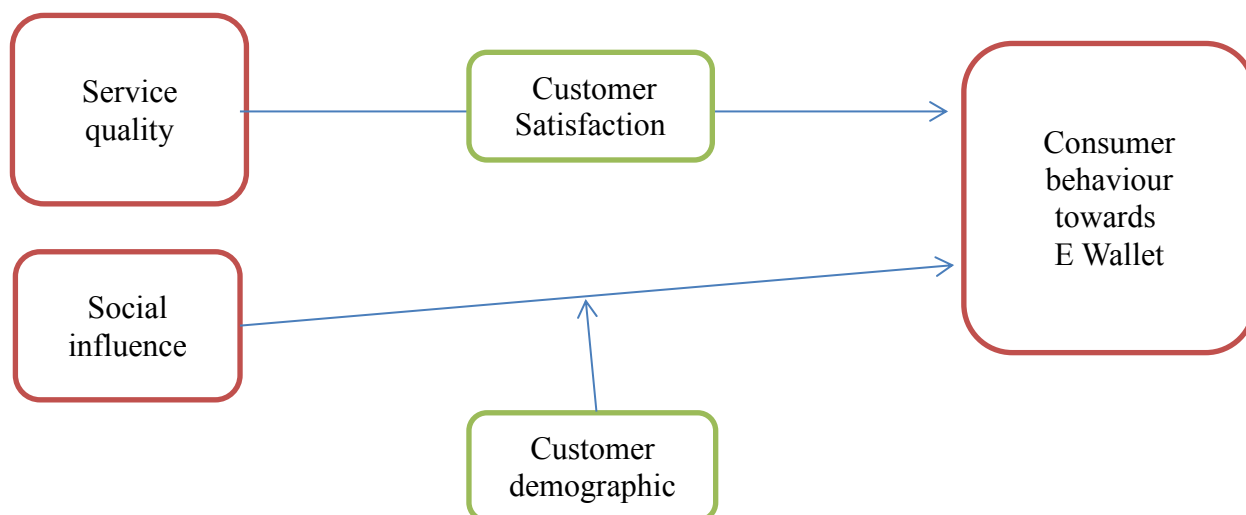


Figure 3 conceptual model

7. Findings and interpretations:

This research focused on the variables that affect consumer behavior towards using of e-wallets in the Egyptian market. The study mainly addressed the impact of service quality, customer satisfaction, social influence, and consumer demographics that affects directly and indirectly customer behavior towards e-wallets.

Customer satisfaction was found to mediate the relationship between service quality and consumer behavior towards e-wallets. In other words satisfied customers are more likely to accept new and more services from banks that perform in a consistently, high level. Social influence is a strong driver to further acceptance of electronic wallets among general public and particularly those who have bank accounts and deal frequently with banking services. It's most likely that more people are going to accept electronic wallets as it spreads in the society and are used conveniently and constantly by their family and friends.

Consumer demographics were found to play a significant role moderating the relationship between the impact of social influence and consumer behavior towards electronic wallets, particularly age and education level. Younger generations in general, especially the more educated ones, are more accepting for change and more confident using technological products. Some of the concerns that were brought up by older participants in the pilot study were about the difficulty in handling mobile applications. Such concerns are atypical for younger, savvy customers.

The sparking of the COVID19 situation and the claims that "cash money" could spread the pandemic further , especially with several mortalities in the Egyptian banking sector led to a better acceptance for the e-wallets as more hygienic and convenient payment method, mostly during lock downs or when opening hours for banks were reduced. People started looking for a more convenient method to solve their problem. E- wallets served as an appropriate solution.

The primary concern of Egyptian bank customers or general public who don't deal with banks was about the safety of performing monetary transactions via mobile applications. The concerns about performing wrong transactions or being subject to fraud were the main issues irritating individuals in general, chiefly the older generations. It's the bank job to improve electronic wallets to ensure higher safety and better user friendliness. Banks need to spread further awareness about using mobile wallets and to competently and promptly solve customer's problems.

Regarding electronic wallets awareness, it seems that most of Egyptians are aware about the new payment option, yet younger generations between the ages of 20-40 years are more motivated to use these E Wallets.

People with low education level were skeptic and less confident about adopting a new technology.

The limited sample indicated a slightly higher adoption rate among males than females, thus gender differences might be further studied in an extension of this research study.

The suggested relationships in the conceptual model were tentatively proved to be intact and the questions posed by the research study were answered as stated previously, in addition to that some of the main concerns that increase the resistance to adopting e-wallets are stated below so as to provide some insights to bankers in designing their mobile applications or when executing a marketing campaign.

The reasons stated by respondents are summarized below:

- Making a wrong payment that leads to loss of money
- The duration of the refund period to the account when making a wrong payment
- Mobile phone is out of coverage at a time when electronic payment for a service is required urgently.
- Some customers need to confirm and guarantee the safety factor for their accounts during electronic payment, which requires banks to spread this awareness among customers and to emphasize the highest safety factors and not theft of accounts.
- Some customers find it difficult to work with mobile applications and it is complicated.

New suggested research hypothesis is:

Safety is a significant moderator variable that affects the relationship between service quality and consumer behaviour towards E wallet.

8. Conclusion

Managerial implications:

The research study offers some guidelines that should be considered by bankers to increase the diffusion rate of e-wallets in the Egyptian society:

- A planned and systematic awareness campaign introducing government's efforts towards using electronic payment services.
- Training of the section concerned with technical support to service electronic wallets in all banks to solve all customer problems easily and quickly, which in turn makes the customer satisfied with the service.
- Simplifying and facilitating electronic payment applications on mobile phones to facilitate handling by elderly or low-education persons.
- Motivating customers to use e-wallets through loyalty program and sales promotions.

Recommendations for further research:

The research study could be the start for a more elaborative descriptive research that could better investigate the topic and support the data with statistical data.

It is highly recommended that any upcoming researcher who is interested to study and search in this topic to collect more information from Egyptian market and customers from various locations with different gender and age groups and different level of education to be able to define all the factors.

The research study could be extended to societies similar to the Egyptian society and check if culture is a variable affecting the acceptance of new technological products.

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11. Appendix

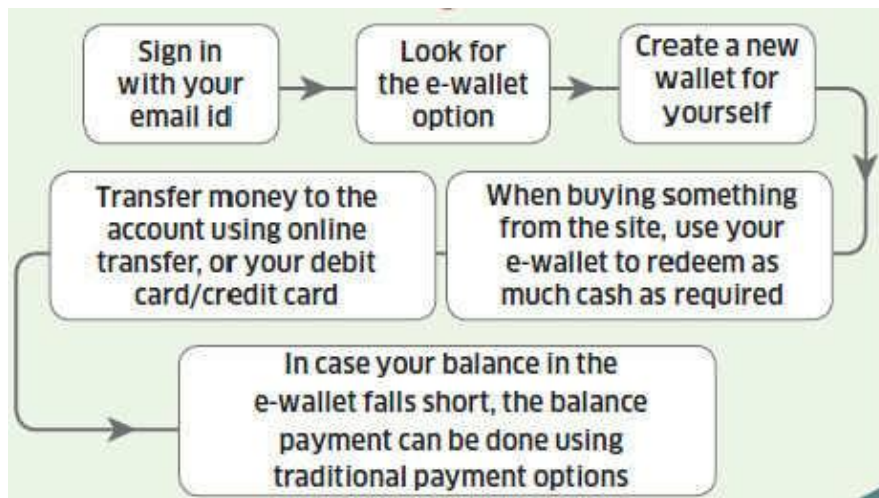


Figure 4 flow chart

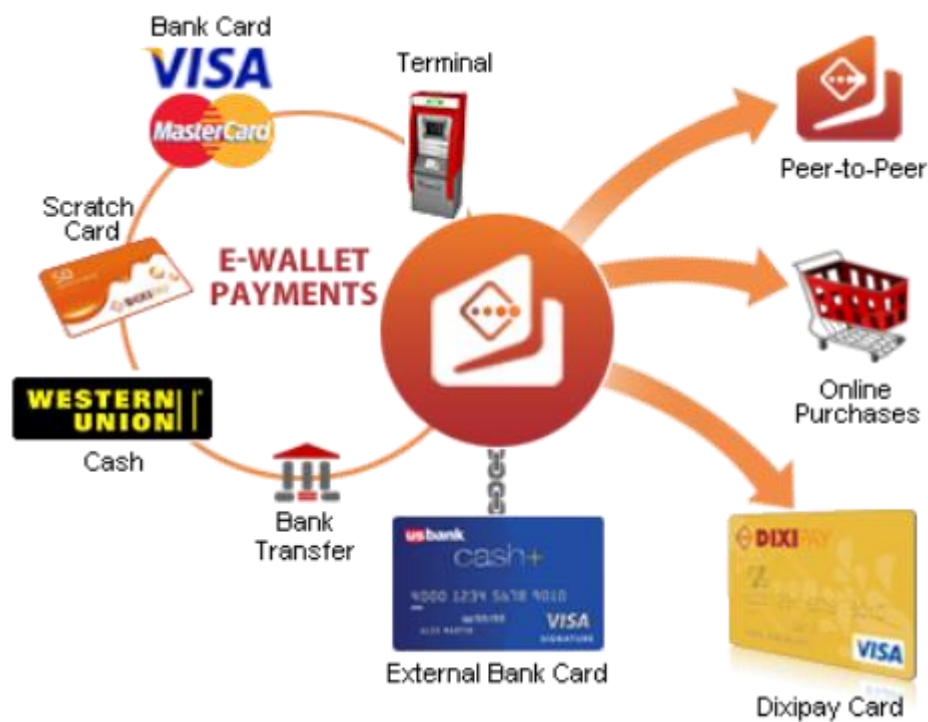


Figure 5 e wallet service

Limited technology saviness, 44% mobile internet users as a percentage of total population, low financial literacy (27%) and limited trust in digital financial services remain barriers to adoption. For this largely untapped customer base to become material, Egypt will have to invest extensively to improve financial literacy and digital saviness. Some of the incentives to spur FinTech

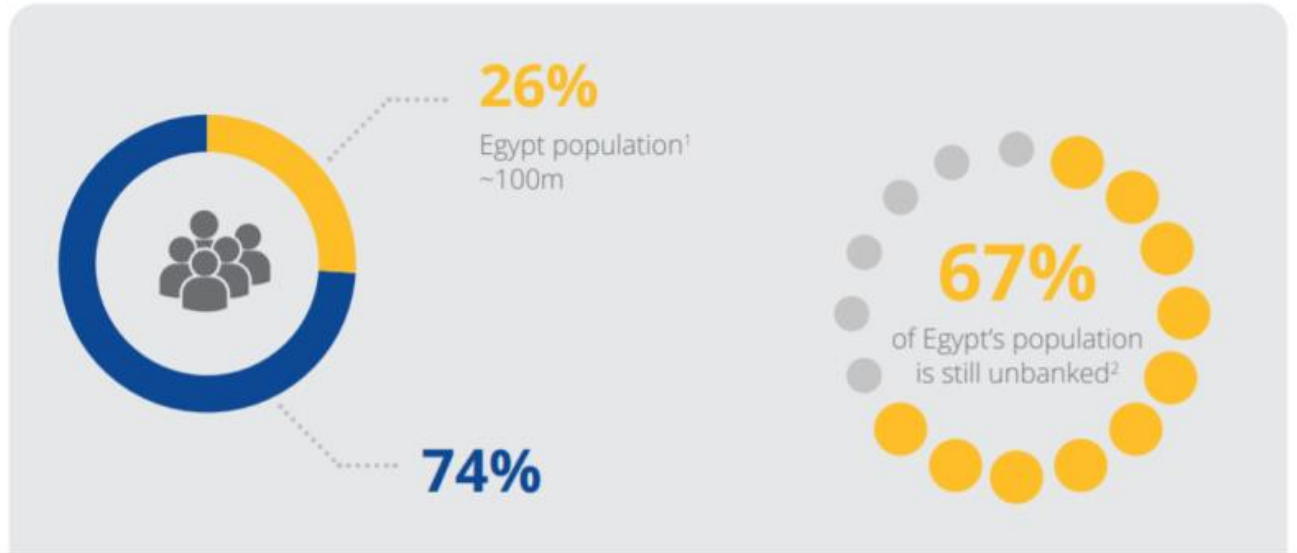


Figure 6 central bank of Egypt statistics

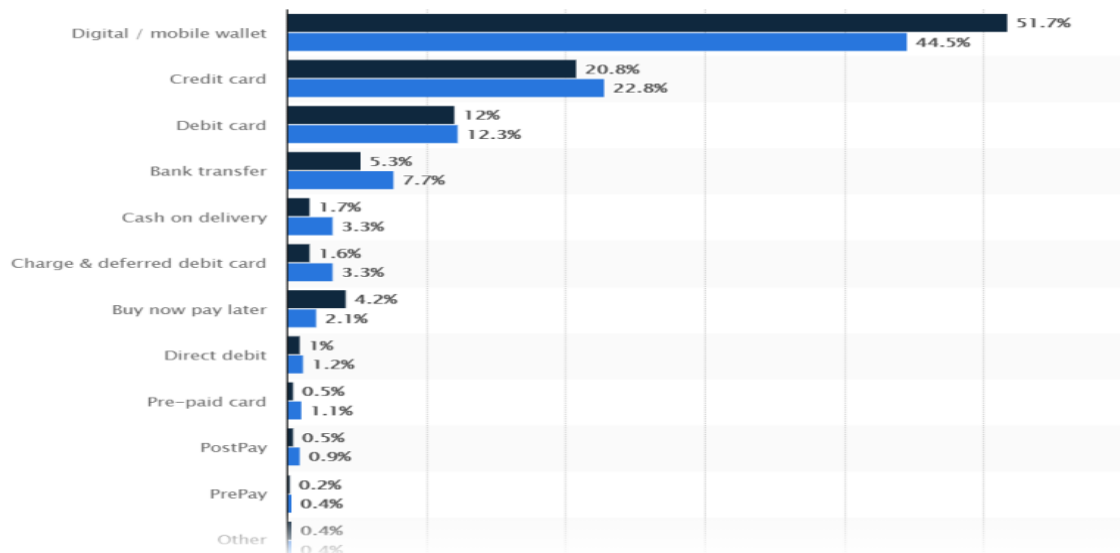


Figure 7 volume worldwide in 2020, with a forecast for 2024