The MB WAY case: in what conditions would customers accept paying for this service?

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Abstract

Title: The MB WAY case: in what conditions would customers accept paying for this service?

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Keywords: MB WAY, Money Transfer, Customer Acceptance, Customer Willingness

Peoples' expectations regarding how financial services are delivered is becoming increasingly demanding. One of these already formed assumptions is related to always being able to perform instant money transfers. In Portugal, the app MB WAY allows every user to make these instant money transfers free of charge. However, a fee is going to be implemented per transaction with the value depending on the bank of the user. The purpose of this research was to conclude if people are indeed willing to start paying for the same service that was once free and if so, how much and in what price scheme. Bank loyalty and the loyalty towards the app itself were also tested. Tests were also made regarding price predictors and willingness to purchase the app, but no major indicators were found to be significant. Primary data was obtained through a questionnaire that provided 319 valid responses from app users. The results have shown that users are not yet willing to accept the prices that maybe are going to be charged, as they view them as being overpriced. Despite that, the impact caused by the app is not sufficient to alter their bank loyalty, although the study suggests that the respondents are receptive to changing apps if a cheaper option is available. Due to the fact that it provides the consumer perspective about this matter, the present research may contribute to how banks assess the possible price setting of instant money transfers in the near future.

Resumo

Título: O caso MB WAY: em que condições os clientes aceitariam pagar por este serviço?

Autor: André Martins de Melo

Palavras-chave: MB WAY, Transferência de Dinheiro, Aceitação do Cliente, Vontade do Cliente

As expetativas das pessoas em relação à forma como os serviços financeiros são providenciados são agora mais exigentes. Uma delas é a de conseguirem realizar-se transferências instantâneas de dinheiro. Em Portugal, a aplicação MB WAY permite aos seus utilizadores realizar estas tranferências sem qualquer custo. No entanto, passará a ser cobrada uma taxa por cada transferência, estando este valor dependente do banco do utilizador. O objetivo deste estudo foi avaliar se os clientes estarão dispostos a pagar por um serviço que previamente não tinha custo, e em caso afirmativo, qual o valor a cobrar e em que esquema de preço. Foi igualmente testada a lealdade aos bancos e à própria aplicação. Foram ainda realizados testes relacionados com preditores de preço e com a disponibilidade para adquirir a aplicação, mas nenhum indicador revelou ser significante. Foram obtidos dados primários através de um questionário, que providenciou 319 respostas válidas de utilizadores da aplicação. Os resultados demonstraram que os utilizadores ainda não estão preparados para aceitar os preços que podem vir a ser cobrados, uma vez que os vêem ainda como sobrevalozidados. Apesar disso, o impacto causado pela aplicação não é suficiente para alterar a lealdade perante os bancos, ainda que o estudo sugira que os inquiridos estão dispostos a mudar de aplicação caso exista ou surja uma opção mais barata. Pelo facto de disponibilizar as perspetivas dos clientes sobre este assunto, a presente pesquisa pode dar um contributo para que os bancos determinem os preços a fixar futuramente nas transferências instantâneas.

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1. INTRODUCTION

One of the ways a society can be examined is through the exchanges people make with each other. It is also possible to analyze how these exchanges are made. Since money as a concept was invented, there has been an evolution regarding the way people use and exchange it between them. In current times, when it comes to transferring money, the most exciting technologies come from FinTech. There is a lesser need for cash and cards, people want convenience, easy use, and instant transactions but most important of all, there is a growing necessity for everything in just one place, or one device. This was a future that was long envisioned, ever since the early 70s where: "In this system every commercial establishment would have a small teletype device hooked into a large data processing facility, regional or national, where both the payer and the recipient had an account. After agreeing on some transaction both individuals would approach a terminal and cause an instantaneous transfer from the payer to the recipient, if the payer's balance is sufficient. The major advantage of such a system is that clearing would become a real-time phenomenon; float would vanish and no one could overdraw his account. Further, no paper would be generated through clearing" (Hester, 1972).

Payment and money transferring infrastructures are going through rapid change with the rise of next generation mobile networks and smartphone ownership. This means banks need not only to worry about the possible competition between them, but also with the new emerging FinTech companies that now have the possibility to threaten some of the same business models, offering services from mobile wallets to social payments to split receipts with friends (Acker & Murthy, 2018). One of the responses offered has been through the development of online banking, allowing customers to have access to every bank service through their mobile device. This computerization of bank services enables cost reduction due to less bank branches and employees being needed (Oliveira & von Hippel, 2011). All this development is being made through mobile apps. A mobile app can be defined as application software which allows the user to carry out an explicit task. Being usually designed for personal use, it can be installed, free of charge or for a price, and executed in different portable digital devices such as smartphones and tablets. The download of the app can be directly made through a centralized online marketplace, most commonly the App store and Google Play (Liu et. al., 2015). There is however, a third business model, freemium, a highly popular strategy utilized nowadays, where a product or service is offered free of charge, in the case of mobile apps, free to download, but a premium is charged to upgrade to the paid version, in order to

experience either new or more advanced features, better functionality, ad free and additional content or associated products and services (Liu et. al., 2015).

A mobile app and its success in the market can be explained in the context of a new product adoption process. In this process, consumers generally go through five steps: awareness, interest, evaluation, trial, and adoption (Webster, 1969). Many important factors such as product visibility and quality play an important role on each of these steps. Yet, it is also important to analyze the impact that the app's business model has on its adoption. Moreover, it is also interesting to see how this adoption is affected when the business model suffers any changes. The particular case that is going to be studied focuses on a Portuguese mobile app that indeed is going to change its business model. Portugal had a mobile banking adoption of 7.6% in 2015 (Marktest, 2015) which is projected to increase with the same happening to its Internet banking adoption, as in the past year of 2018 it had an adoption rate for individual online bank usage of 39%, 8% more than 2017 (Eurostat, 2019). However, the average in the European Union is 54%, with some countries having much higher values than these one, with the Scandinavian countries standing out. To take advantage of this increase and knowing the potential market, the app MB WAY was developed.

MB WAY, it is a service that allows the user to perform instant money transfers with users that also own the app, do online and on-site shopping, paying bills, it allows virtual card generation and withdraws of cash through any mobile device without the need of a banking card. To use the app you are only required to have a mobile number and an account in one of the 22 member banks (Appendix 1), all operating in Portugal. The instant money transfers are the motivation behind this dissertation. In order to attract the greatest amount of people to the app, since its inception, the app as always been free, from its download to all the services it provides. Due to the app's success, as it gain a very significant amount of users, plans are being made to start charging for each instant transaction with that cost depending on which bank the customer as an account on. This research focuses on how customers are going to react to the changes that are going to happen with the MB WAY app, more specifically how they are going to react to a service that was once free and could now have a cost, taking into account that the service is going to stay the same, no new service is going to be offered.

2. LITERATURE REVIEW

As the line between technology and finance starts to get increasingly intertwined, consumers and society itself will start to develop higher and higher expectations of what they are fundamentally entitled to. The focus will be centered in these expectations and if they can be efficiently met. More specifically, when it comes to a person's expectations regarding money transfers, their waiting period and cost.

This chapter includes a breakdown of the important concepts required to analyze, interpret and formulate a response to these issues. Previous works are resumed in the present chapter as they served as groundwork for the development and validity of this dissertation.

2.1 How Fintech is changing the banking sector

The world of finance, in particular the banking sector, has always been of the utmost importance to people's lives, as a result, it is an ever-changing environment where innovation is always present (Zavolokina et. al., 2016). Currently, the most innovative and emerging field in the financial sector is FinTech, which draws attention from the vast publicity it has received and the successive investments that were made in recent years. FinTech relates to the technological innovation that occurs in the financial sector (Gomber et. al., 2018). Such innovation can disrupt existing industry structures by enabling strategic disintermediation thus transfiguring how existing firms create and deliver their products and grant access to financial services (Philippon, 2016). Technology can also alter the availability of finance, implying that a parallel exists between the advancement of finance and technology (Rajan and Zingales, 2001).

The aggregation of traditional financial institutions has been happening throughout the last century. The successive mergers that happened in this industry have impeded the major banks to develop brand new systems, instead, outdated layers of legacy technologies still remain only even being partly integrated (Kumar, 2016). Startups created in this industry, have the advantage of not being held back by already existing outdated systems and can afford to take on more risk seeing that they are less compromised in terms of infrastructure and data (Kropp et. al., 2008). By not being bound to any previous default system, this gives FinTech startups the opportunity to build entire new and updated and simpler systems from inception (Lee & Shin, 2018).

The discrepancy observed between traditional banks and FinTech startups is also affected by the conditions and state of the country where this analysis is made. When economies are well-developed, with the necessary supporting infrastructure and flexible market regulations, it is more likely that individuals will have the need for services such as asset management and other financial tools (Haddad & Hornuf, 2016). Notwithstanding, in the FinTech world, the new and exciting technology being developed to rival traditional banks is not the only thing that is needed to be considered but also by its real life usage and security. Thus, the core competence of these new financial companies, need to rely on their ability to reach an extensive array of customers in a safe and efficient way, through KYC (Know Your Customer) and AML (Anti-money Laundering) processes, while assessing and managing potential risks at the same time (Chen, 2016).

2.2 Mobile Banking Services

FinTech startups can be divided into different categories. What is common for all cases, is that, in order to experience consumer adoption to this fast growing companies, the regulatory, legal and economic environment as well as the access and experience to previous related products, services and supporting technologies need to be taken into consideration (Merritt, 2011). One of the areas FinTech companies are interested in relates to possible mobile financial services that can be offered. The tradition channels have already developed mobile banking services which enables users to access their bank accounts through mobile devices (Harma and Dubey, 2009) in order to conduct transactions such as checking account balances, fund transfers between accounts, making and confirming payments, trading stocks (Alafeef et al., 2012). These mobile services are usually adapted from the website version of the banking services that are offered by the banks with architectures supported by numerous banking consortiums (Mallat et. al., 2004). When financial and non-financial transactions are conducted through a mobile device, such as a mobile phone, smartphone, or tablet they represent a banking alternative delivery channel (ADC), thus being considered as mobile banking (Shaikh & Karjaluoto, 2015).

Although automated teller machines (ATMs) and the Internet can be seen as effective banking delivery channels for traditional banking products, this new delivery channel is starting to have significant effects on the market (Safeena et al., 2012). The development of smartphones has increased demand for mobile banking services, prompting more institutions to offer this

innovative service in conjunction with new sets of products and applications designed to expand their client reach, enhance customer retention, augment operational efficiency, increase market share and competitive advantage (Shaikh, 2013). The main advantage that mobile devices have against any other channel is the instant capability they possess, as they allow everyone to obtain services and run applications at any time and any place, including while on the move (Veijalainen et al. 2006).

Despite financial institutions being the best ones positioned to engage in risk management programs that ensure regulatory compliance (Merritt, 2011), historically, they have approached mobile financial services with care due to apprehensions regarding the existing limited opportunities for revenue, the complexity that are revenue-sharing agreements with telecom firms and the eventuality of possible mobile payments cannibalization of already existing electronic payment services, thus providing a limited return on investment (ROI) (EDC, 2009), with research suggesting that a significant amount of investment is required not only for its development but also to support the hidden labor costs in their maintenance and use (Pritchard et al., 2015). At the same time, there is the opportunity to outsource the control of money transfers, thus lowering investment in physical infrastructure and facilitating customer assistance at lower transaction costs allowing for the focus to be shifted to more valuable services, such as, advisory services, them being either about wealth or risk management and the cross-sell of products (Kendall et. al., 2011). For these reasons, the delivery of financial services through mobile platforms is becoming an increasingly studied subject (Donovan, 2014), with research being made in order to explore the challenges and successes of mobile payment services (Hillman et al., 2014; Maurer 2015), where significant growth opportunities still remain (Shaikh & Karjaluoto, 2015).

2.3 Mobile Payments and Transfers

Focusing on mobile money payments and transfers, large institutions have evolved regarding how they manage these transactions. From the ATM to online banking and now by exploring banking services on networked mobile devices (Perry & Ferreira, 2018). The trend of these transactions is becoming progressively digitalized and steering away from cash (Pritchard et al. 2015; Maurer 2015) and is increasingly allowing consumers and end users to have access to services that were previously impossible. When these mobile payments (m-payment) are involved, a bank, usually, does not play the part of being directly involved in the active

instrumental gratification of the service that was offered (Cruz et al., 2010). Examples of this are payments made through overhead priced SMS, prepaid account loadings and a charge made to the subscriber's account. In these transfer of funds, a mobile device is required to be involved in both the initiation and confirmation of the payment (de Bel and Gâza, 2011). In most cases, it involves either a digital peer-to-peer (P2P) currency or a balanced ledger transfer, where a digital record of the transfer is transmitted from different bank accounts, with the example of both debit and credit cards or an electronic funds transfer system (Perry & Ferreira, 2018).

At the present moment, consumers are able to perform payments and P2P transfers, both domestic and international, proximity payments at the point of sale and remote payments. This is in part possible due to the cooperation of service providers with the major card networks as a funding mechanism and payment channel for P2P mobile transfers, this is especially observable in developed countries, where the improved functionality of smartphones allows for the potential development of new innovative payment applications, as demonstrated by recent business initiatives with traditional financial institutions (Merritt, 2011). P2P money transfers remain the central pillar of mobile money businesses around the world (GSMA, 2017). As such, the future tendency of this industry will most definitely be towards the availability of increasingly lower priced online P2P transfers (D'Silva, 2009).

When discussing payment systems, convenience and trust are crucial points to examine. As such, emerging risk issues need to be taken into account in order to maintain public confidence in mobile money. In comparison to cash based payment systems, m-payments diminish intrinsic risks by offering more transparency in fund flows, augmenting risk detection and mitigation by shifting payment systems to a more regulated environment. This is possible due to new authentication technologies such as voice recognition and fingerprinting to verify one's identity and to engage in appropriate KYC programs, particularly at vulnerable points of a transaction (Merritt, 2011). It is not only the concerns over the privacy issue that influence the design and adoption of mobile payment systems, (Maurer et al. 2012), but also the cultural environment of potential users (Arnado, 2012) and the tremendous pace of innovation and competition within the m-payment industry itself (Ondrus and Lyytinen, 2011). With this competition, regulatory climate and demographics, different m-payment business models have emerged such as, bank-centric, mobile-operator led, or partnership led (Boer and de Boer, 2010).

Transactions made to different accounts and holders can be done either directly if only two different bank accounts are involved or indirectly when there is the need for a third party to help perform the tasks of prefunding or redeposit the funds from the sending and the receiving account, respectively. These transactions can also be performed with nonbank accounts through e-wallets, where in order to transfer money from a nonbank transmitter there exists the requirement of having to have previously funded this e-wallet by means of card, either debit or credit, or through an actual bank account (Shy, 2012). In Europe one common example offered where you create a nonbank account is Mangopay and in Africa, the most famous company in this area is M-PESA.

In conclusion, the m-payments setting is quite multifaceted and continues to evolve due to the plethora of different elements around it (Pandy, 2014), from the different types of services offered (contactless, remittance), to the numerous technologies involved (QR Codes, mostly used in developed countries as it requires a smartphone, where a payment is made by scanning a QR Code from a mobile app and SMS, mostly used in developing countries, by companies such as M-PESA, due to it being a simple technology that does not require a smartphone to make full use of it) that are responsible for enabling the use and development of these services to the multiple stakeholders (financial institutions, mobile network operators, regulators) each with their own intrinsic and extrinsic motivations, expectations and competences (Au and Kauffman, 2008).

2.4 Customer Needs and Acceptance

The actual users of these mobile banking services do not only value the financial inclusion aspect of them, but also by how convenient it is, as it possesses effort and time-saving qualities giving the user geographical independence (Mallat et. al., 2004). Mobile banking's usefulness and compatibility with the consumers' lifestyles needs to convey the minimization of risk and cost that the consumer faces, seamlessly integrating mobile technology services and applications into ordinary banking activities (Yang, 2009).

Mobile devices and the Internet of things (IoT) allow users to have increased access to financial services anywhere, anytime. This accessibility also means that an unprecedented amount of information is available when analyzing customers' needs and risk assertion. The ultimate goal will be that, if any financial service should be required, then the delivery of this need can be met at anytime, anywhere, in other words, instantly. The conclusion that then can

be drawn resides on the fact that financial innovation success is dependent not on how intricate the tech behind the product is, but by which degree a real-life need is being satisfied (Chen, 2016). That being said, when it comes to P2P solutions, the "network effect" must always be taken into consideration. Not only the real-life need has to be present, but also a network of people supporting it has to be created to take full advantage of the service. Here, what plays an important part is the marketing that needs to be made in order to "feed" this network, by making the greatest amount of people aware of it.

To convey the strength established by this customer relation, consumer needs and experience are seen as essential by financial institutions to improve organizational efficacy, integration, and competitive advantage (Yu & Fang, 2009) as they are the ultimate key components and determinants of product or service adoption (Merritt, 2011). Consumers will always be eager to experience and adopt the newest products and services available in the market (Ram, 1987), as so, it is imperative for the success of financial and banking services to not only bring about customer satisfaction, but also providing excitement and trust (Jain, 2013) while doing so. Regarding consumer trust, despite the state of insecurity that is always present in this sector, generally, users seem to still be willing to use rather simple mechanisms of identification, such as MSISDN (mobile number) and PIN (personal identification number) to authorize any form of mobile banking services and m-payments (Mallat et. al., 2004).

These customers' expressed and latent needs, can be better approached by not only FinTech, but by all startups in general, since they can solely focus on exploring possible different and creative solutions, seeing that highly market-oriented small firms are in most cases, more successful in fulfilling this objective rather than larger competitors (Pelham and Wilson, 1996; Slater and Narver, 1996). This creates an environment where the creation of augmented products becomes higher, where even needs that were never taken into consideration by the customer are created, addressed and finally, met by these types of products (Slater & Narver, 1999). Knowing how a new product manages to penetrate the market both in terms of concept (Rogers, 1995), and features that determine the likelihood of adoption and its rate (Cooper & Kleinschmidt, 1987), has been well established. Moreover, if the product or service offered, possesses a high technological value, then its uniqueness to meet needs in different ways or yet unmet, is also required to be taken into consideration (Spencer & Klocinski, 2010).

The challenge comes when it is necessary to take the long-term perspective where, most firms, desire strong revenue and profit generating products or services through its diffusion to

an all-encompassing spectrum of customers (Hultink and Robben, 1995). Two types of possible problems can arise with this situation, focusing more now more on services offered that require a network to properly function, the utility of each paying user increases with each one who starts to use the same or a compatible payment network, in this case (Shy, 2012), where it can lead to situation where unwillingness exists to invest in the a system where lack of information about consumer demand exists. In contrast, consumers will not use these systems unless they are widely accepted (Contini et al., 2011; de Bel and Gâza 2011). The other example is more related to this dissertation, where the network is created and customer acquisition and retention is accomplished at the cost of the service providers baring all the losses that can occur by possibly either offering the service or charging too low of a fee for it, until it gains enough traction where user dependency was successfully created and now there is the opportunity to change the business model and take this long-term perspective.

2.5 Price-making Decisions

When considering the perspective of having to generate revenue, price will always have to be taken into consideration. Due to the Internet and the development of online marketplaces, which are becoming increasingly popular, not only has product assortment and offer risen for consumers, but it also allowed them to have more of a say when it comes to product pricing (Pavlou & Gefen, 2004). Not only price but also promotional strategies that are aimed at getting consumers to switch products or brands will, most likely be effective, due to the sheer amount of choices that are available (Krishnamurthi & Raj, 1991). The way of thinking that more choices being always desirable has been the subject of some evaluation (Loewenstein, 1999). However, when it comes to consumers deciding the most desirable price they can offer, often less flexibility and a more restrictive scenario allows them to better express their true willingness of payment. Consumer price-generation processes are moderated by the availability of reference prices, implying that firms can benefit from offering customers these reference price points to use as benchmarks in the price-elicitation process (Chernev, 2003).

It is clear that online customers have more immediate access to information and possible alternatives or competitors, which means that regarding the price sensitivity of online or mobile customers, it can be analyzed through the prices of both the site or application's that the customer pays and the leading rivals' prices as they can serve as the price-taking fringe (Chevalier & Goolsbee, 2003). What can happen with such a high level of offer is that

customers can start to feel overloaded with all the possible choices available which can lead to negative reactions (Dellaert & Stremersch, 2005; Scheibehenne, Greifeneder, & Todd, 2010) that prove to be even more accentuated in industries such as telecommunications and financial services, where possible present complex prices can also lead to choice complexity (Homburg et. al., 2014) and a high cognitive burden that results from different price plan designs requiring different levels of cognitive effort, thus leading to a tendency for firms to promote price simplicity (Kim & Kramer, 2006). When it comes to the market prices, as they are readily available and can be obtained inexpensively, they often serve as a reasonable surrogate of consumers' internal reference prices for frequently purchased products (Urbany & Dickson, 1991).

These concepts can be integrated when referring to mobile apps. One of the most relevant pieces of information to always have in mind is the number of users and potential users that the app can be capable of reaching. Initially, a decision that will affect this number is determining the price that is going to be charged for the application. Typically, it is easier to attract more potential customers if the product that is offered is free and because developers know this, several digital business strategies are developed around this fact (Singer-Oestreicher and Zalmanson, 2013). It is known that users usually prefer to experience a trial or free version of a paid app first to become familiar with its content and functionality, it is only after that initial experience that they then decide whether or not to purchase the paid version (Whitfield 2013). So, in order to explore this situation, app publishers instead of charging for the actual app instead can charge a fixed monthly subscription fee for premium services or derive their revenue from advertising or in-app purchases that unlock additional features such as advertisement removal or value-added content (Hsu & Lin, 2014). What is more intriguing is the way customers can react if an app that started as free with all its features presenting no cost and then a decision is made to start charging for some of these features without changing anything, i.e. paying for a service that was once free, without giving anything in return, this is the case of what is going to happen with the MB WAY app.

With the introduction of online and mobile banking services by traditional banks, a disruption occurred on how people manage their finances. Changes and developments were also implemented on money transferring services and how much would be charged for them due partially to the competition that started to appear regarding the offering of these services by nonbank money transmitters (Shy, 2012). When referring to these competitors that present a

P2P app for transferring money, it is possible to verify that several alternatives exist in the market. These alternatives can be divided into two different types of competitors, those who offer this service as their core business, and those who include this service as one part of their bundle of services that is offered, where usually low cost currency exchanges are the main selling point.

2.6 Breakdown of the Fintech Competitors

In developing countries, as it was already mentioned, the leading company in this area is M-PESA. It allows individuals to exchange cash for e-money and transfer it via USSD, running on a similar protocol to SMS, regardless of the country and network of the recipient even if he is not registered there. Notwithstanding, the focus of this work will be on a developed country with easy access to smartphones, so it makes the most sense to explore applications with more sophisticated capabilities, so besides MB WAY, the app that will be most focused on, three nonbank money transmitters alternatives are also discussed, them being, Revolut, PayPal and Lydia (Appendix 4).

The breakdown of these alternatives is presented in the questionnaire in order for people who are not familiar with said apps to have the general idea of what services they provide and in what conditions they are offered. What is more relevant to point out is that, although they can only be made between registered users, money transfers are always free of charge and there are no fees to fund the account, including opening, maintenance or transaction fees (Isac, 2016). Other examples include Vemno and Zelle, which are widely popular in the US and also do not charge any transactions fees, as well as, Google Pay and Apple Pay.

Other alternatives could have been included, however, in order to give a better perspective of the prices that are being considered, two companies can help in this matter, M-PESA and TransferWise. M-PESA only does not charge for transactions if it is between two users of this service and if the transfers are less than €1. Outside these conditions, every transaction has a cost that increases with the amount transacted. For €10, €20 and €50 the cost is approximately, €0.23, €0.36 and €0.68 respectively, with the highest that can be charged being, €0.92. TransferWise always charges for transactions and if they are not instantaneous, the cost will be €0.63. For €10, €20 and €50, if it is an instant transfer, the cost is approximately, €0.66, €0.70 and €0.80 respectively.

2.7 The MB WAY App

The app that will be mainly subjected to evaluation and discussion will be MB WAY, a financial app used in Portugal. The MB WAY app belongs to Sociedade Interbancária de Serviços S.A. (SIBS). With over three decades of existence, it provides financial services at a large scale, mainly in the payments area, covering all payment channels and instruments. With over 300 million users, in several geographic locations, being also an international reference and one of the largest payment processors of Europe and Africa, transacting nearly three billion financial operations with a value of over 4.5 billion euros per year.

The company is responsible for managing Multibanco and its multiple channels, from ATMs to mobile devices. Multibanco an interbank network in Portugal, establishes a network between the ATMs of 27 banks in Portugal, having fewer than 12,000 machines as of 2017, with this number getting lower since 2010. These bank members of Multibanco control the SIBS assuring the complete and total functioning of every transaction between emitters and acquires throughout multiple devices, protocols and networks such as Visa, MasterCard, American Express, UnionPay, among others.

As of February of 2019, around 1.44 million Portuguese use the MB WAY app, this corresponds to 17.7% of the residents living in continental Portugal that are over 15 and use a bank account. Age and social status significantly alter the results and statistics observed. The market penetration of this form of payment and transfers doubles in average value when analyzing individuals between ages of 15 and 34, presenting a 21.3% usage rate. The same happens between the individuals of middle and upper class. Great Lisbon is the city that presents the biggest percentage of usage (Marktest, 2019).

MB WAY, greatly thanks to the fact that presents itself as a digital solution, has been gaining significant attention especially with younger consumers. The simplicity and swiftness of this app, added to the fact that it can be used at anytime and anywhere and most importantly, it allows to make instant money transfers, opposed to the traditional channels where you have to wait a full day for a transfer to another financial institution be complete, in order for it to be free of charge. However, it has a maximum cap of 750€ per operation, with a limit of €2500 sent or received and 50 received transfers per month, being also limited to possessors of a card in the Multibanco network and a Portuguese phone number.

Around early February of 2019, news began circulating that the service provided regarding money transfers between users was going to start being charged. This expense would come not from the app itself but rather from the member banks, where the conditions and amount of payment would be applied differently as per each bank's conditions. SIBS announced that "at this moment, every adherent entity of MB WAY maintains exemption from charge regarding transfers made in MB WAY". Despite this, member banks are not forbidden to do it, seeing that "the commercial conditions of providing services to their clients are defined by the emission banks".

The first bank that received most attention during this period was BPI, where reportedly it would start charging 1.20€ for each transfer made through MB WAY. In actuality, all the major banks present in Portugal, have included on their price list the cost of these transfers, although currently, it is not being effectively charged by any. Despite this, even banks that have not included this cost on their price list or have it for free, do not exclude that future transfers via MB WAY start being the target of charges. According to SIBS, 63% of the transfers via MB WAY have a maximum value of €50 and 27% do not go over €10. In conclusion, the majority of transactions are of low amounts, which begs the question, if when determining these transactions costs, were these statistics taken into consideration, seeing that the cost of the transaction vs the amount that was transactioned may not appear to be considered fair by the consumers.

The trend or strategy developed by the financial institutions consisting of initially offering a service for free in order to increase its usage and then later starting to charge a certain value or commission for the same service has been used before. There are two recent examples of this situation in the form of homebanking and contas-ordenado. Homebanking are the banks apps that allow performing multiple services on the mobile device. Initially, instant or almost instant interbank money transfers were free but with time, like with what is going to happen with MB WAY, this service started to have a cost for performing these instant transactions. Contas-ordenado refers to bank accounts where a person's salary is directly debited into that account. When first created, these accounts were exempt of maintenance commissions and debit and sometimes credit cards without annuity. Yet, these perks changed, a minimum value of salary was established, exemption from annuities was no longer offered and a minimum had to be spent with the debit or credit cards.

3. METHODOLOGY

3.1 Methodology synthesis

In order to answer the main research question in the best way possible and to have the most pertinent data to do so, primary data was used. This data was collected via questionnaire.

Several tests were performed in order to analyze relevant information derived from the questionnaire. The two most important aspects to consider are the price points and the conditions they are going to be applied and the willingness of the participants to change either their current bank or the mobile app they are using.

3.2 Survey sampling

The questionnaire was carried out in May of 2019 and a total of 489 individuals responded to the online survey. Due to the necessary conditions required to use the MB WAY app, the target of this questionnaire was solely Portuguese people, as such, the questionnaire was fully written and presented in Portuguese and then translated to English in order to be represented in this dissertation.

In this questionnaire, the participant could either fully complete the survey or only get to section 2, depending of the answers of that same section. For this study, only people with a Portuguese bank account and phone number, which had already used the MB WAY app and were willing to continue to use the app depending on the prices charged were the subject of further valuation.

This means only a total of 164 participants completed the whole survey. Despite this, not only these surveys were considered, but also the ones that met every other condition except the willingness to continue to use the app if it starts having a cost, as they also provided useful information to analyze. When counting these mentioned not willing to pay surveys, the number that was subject to analysis goes to 319.

3.3 Data collection

Regarding data collection, Facebook was the most important tool in order to get the needed responses. The questionnaire was shared by a considerable number of people of different ages which helped to obtain a better demographic distribution. It was also shared in many

university groups which allowed getting more answers from students, one of the demographics that most uses the app.

3.4 Questionnaire development

The structure of the questionnaire is fully presented on Appendix 3. The questionnaire contained five different sections. The first section was related to the demographic characteristics of the respondents. The second section asked critical questions in order to understand if the participant owned the app and its willingness to still use it, if a cost started to be applied. The third section presented different price points and price schemes that possibly could be applied when using MB WAY. The fourth section explored banking alternatives in different conditions regarding how much they would charge for each transaction through MB WAY, and how willing would people be to change banks for that sole reason. The fifth section presented alternatives to MB WAY and how willing would people be to changing apps given the different conditions the alternatives would offer.

When it comes to price models, there is only one being considered by the banks on how to price the value of transactions made through MB WAY. This price model consists on applying a cost per transaction made. According to Appendix 1, it is possible to observe that besides the banks that still offer the service for free, the interval of prices per transaction goes from €0.15 to €1.50, with the most common price being €0.20.

With the elaboration of the questionnaire, one of the most important things taken into consideration was the price points that were made available as possible choices. The price related question regarding the cost of each transaction had the most information available to determine reference points and make the price point's decisions due to being the same price scheme that is in place at the moment. Despite this, every question had the objective of accurately measure the underlying value of money transactions as opposed to serving as a marketing tool of any product. This is why no "odd pricings" manipulations (i.e., prices ending in $0.99 or $19) were chosen in order to inflate demand (Gendall et al., 1997).

To simplify the progression of prices, strict mathematical relationships were considered in order to ease the decision making of the questionnaire respondents. As such, the progression of prices in this case, was done almost exclusively by adding a constant value. In the case of the transaction question, the prices charged by the banks were taken into consideration. The

mid-price was the most common price that is in place, €0.20. However, the minimum price was not the minimum price charged by the banks, the reason behind this was to see if the market is overpriced. As these charges are not currently in effect, there is no possibility to verify that this is the case. The best solution is to present lower values than the minimum in order to get a better sense of the consumer's price expectations. With this in mind, the minimum value started with the lowest realistic amount possible, €0.05 and increased by the same amount until reaching the mid-price. After the mid-price, the price points are presented in intervals that are more familiar to the typical consumer based on common denominations of EU currency, such as €0.50 and €1. The maximum price is equal to the maximum price practiced by the banks, €1.50 in this case. A value greater that this one was not considered as the public reacted negatively already to the price previously mentioned.

Usually when it comes to online services, one of the business models growing in popularity is the subscription based method (McKinsey, 2018). The following question in the questionnaire tries to explore this business model and how much users would be willing to pay for this service if it was subscription based, meaning a value would be paid each month. The minimum cost was 10x the most common value charged by one transaction, i.e. €0.20. A common known amount of €5 was added to each subsequent price point until it reached the maximum cost of €15, 10x the highest value charged for one transaction.

Last price related question put forward the option of a one-time buy for acquiring the app and all its features in perpetuity. The values presented needed to be higher than the subscription ones, where the minimum value was 50x the most common value charged by one transaction, i.e. €0.20. A common known amount of €5 was added to each subsequent price point until it reached the maximum cost of €25.

From the section regarding the price on, the questionnaire only tries to finds the answer to one question depending on several different conditions presented: How willing is the user to change banks or app, given the changes that are occurring with MB WAY? This was achieved by resorting to a 7-point Likert type response scale being the most negative description presented in the left side and the most positive in the right side ("1 – Would Change" to "7 – Would Not Change"). The seven-level Likert scale is used questionnaire-wide and ensures constancy in data collection and evaluation.

3.5 Descriptive statistics of Data

This sample was represented by 319 respondents. The majority was of the female gender (66.1%), with an age from 18-25 years (44.5%), possessed a bachelor's degree (47.3%) and was employed for wages (43.9%).

Table 1
Descriptive Statistics: Demographic Data of respondents (N = 319)

	N	%
Gender		
Female	211	66,1
Male	108	33,9
Age		
18-25 years	142	44,5
26-35 years	68	21,3
36-45 years	51	16,0
46-55 years	37	11,6
56-64 years	19	6,0
65+ years	2	,6
Highest Level of Education		
High School or Lower	88	27,6
Bachelor's Degree	151	47,3
Master's Degree	70	21,9
Doctorate Degree	10	3,1
Employment Status		
Unemployed	11	3,4
Student	73	22,9
Working Student	62	19,4
Retired	1	,3
Employed for Wages	140	43,9
Self-employed	32	10,0
Total Valid	319	100

3.6 Statistical tests performed

The statistical analysis involved descriptive statistical measures (absolute and relative frequencies, medians and standard deviations) and inferential statistics. The significance level in order to reject the null hypothesis was set at $\alpha \leq .05$. Several tests were performed including, the internal consistency coefficient Cronbach's Alpha, Pearson's correlation coefficient, the Student's t-test for a sample, for independent sample and for paired samples, the Anova Repeated Measures, multiple linear regression and logistic regression. The normality of the distribution was accepted with a sample size higher than 30, according to the Central Limit Theorem. The homogeneity of variances was analyzed through Levene's variance homogeneity test. The multiple linear regression assumptions, namely the linear relationship between the independent variables and the dependent variable (graphical analysis), residuals analysis with autocorrelation (Durbin-Watson test), normality of residuals (Kolmogorov-Smirnov test), multicollinearity (VIF and Tolerance) and homogeneity of variance (graphical analysis) were analyzed and found to be within reason. The qualitative variables, gender and employment status were turned into Dummy variables.

The statistical analysis was performed through the SPSS software (*Statistical Package for the Social Sciences*) version 25.0 for Windows.

These tests were performed in order to achieve a better assessment of the possible conclusions that could be drawn from the primary data that was gathered, the description of the points that were analyzed is as follows:

Table 2
List of points analyzed

Will users stop using MB WAY app
Preferred price scheme
Appropriate cost for each transaction
Appropriate subscription fee
Appropriate price to buy the app
Relation between price and employment status
Bank loyalty
Loyalty to the MB WAY app
Correlations between bank and app loyalty items
Price per transaction predictors
Intention to buy the app estimators

4. RESULTS

4.1 Descriptive statistics of Items

When questioned about whether or not users would stop using the MB WAY app if they started being charged for using it, more than half answered affirmatively, regardless of the price that could be charged. However, a considerable percentage (44.8%) indicated that it would have to depend of the value being charged.

Table 3
Stop using MB WAY app

	N	%
Depends on the value being charged	143	44,8
No, regardless of the value	9	2,8
Yes, regardless of the value	167	52,4
Total	319	100,0

The participants are divided between their preferred pricing scheme, where 50.3% prefer paying per transaction and 40.6% prefer to buy the app in a one-time payment.

Table 4
Preferred price scheme

	N	%
Buying the app	58	40.6
Paying for transaction	72	50.3
Subscription service	13	9.1
Total	143	100,0

On average, users are willing to pay around €0.10 per transaction. Over half of the sample is only willing to pay €0.05 (55.2%).

Table 5
Cost for each transaction

	N	%
€0,05	79	55,2
€0,10	37	25,9
€0,15	8	5,6
€0,20	15	10,5
€0,50	4	2,8
Total	143	100,0

If the payment was based on a subscription fee, the vast majority of people would only be willing to pay €2 per month (91.6%).

Table 6
Subscription fee

	N	%
€2	131	91,6
€5	12	8,4
Total	143	100,0

Regarding the purchase of the app in a one-time payment, 82.5% would be willing to pay €10 for it.

Table 7
Buying the app

	N	%
€10	118	82,5
€15	19	13,3
€20	5	3,5
€25	1	0,7
Total	143	100,0

In order to further analyze the price choices made by the respondents, the two most selected price schemes were crossed with employment status. Users that are employed for wages were shown to be the ones willing to pay less for each transaction (€0.084) and for the one time buy of the app (€10.82), not counting the unemployed that only take up a small fraction of the total number of respondents. Working students are the ones will to pay more in both cases, per transaction (€0.128) and buying (€11.80).

Table 8
Average cost of each transaction

Employment Status	N	Median	Std. Deviation
Student	31	,105	,086
Working Student	25	,128	,128
Employed for Wages	67	,084	,068
Self-employed	16	,088	,050
Unemployed	4	,100	,071
Total	143	,097	,084

Table 9

Average cost of buying the app

Employment Status	N	Median	Std. Deviation
Student	31	11,13	2,487
Working Student	25	11,80	3,189
Employed for Wages	67	10,82	2,236
Self-employed	16	11,56	3,966
Unemployed	4	10,00	0,000
Total	143	11,12	2,681

4.2 Loyalty tests

Bank loyalty was tested in order to see if it was influenced by the MB WAY app. It was done by confronting the respondents with 3 variations of the same question: "How willing would you be to change banks?". Different conditions were presented where a different bank would offer inter and/or intra bank transfers for free or at the lowest price in the market, keeping in mind that all these transactions would be made through MB WAY. Regarding table 10, the averages of not charging for a transaction to the same bank and charging the cheapest value in the market for a transaction are somewhat above the midpoint of the scale (4), which means that consumers are slightly more inclined to not changing rather than changing banks. The first option does not differentiate from the midpoint of the scale, $t(142) = 1.062$, $p = .290$. The differences of medians between these 3 questions are statistically significant, Pillai´s Trace = .080, $F(2, 141) = 6.099$, $p = .003$. The average of these 3 medians is 4.37, meaning that the inclination resides on not changing banks.

Table 10

Different conditions a different bank offered

Item		Condition	Median	Std. Deviations
Bank1	Did not charge for a transaction		4,17	1,96
Bank2	Did not charge for a transaction to the same bank		4,58	1,93
Bank3	Did charge the cheapest value in the market for a transaction		4,37	1,93

Although the median for these answers are all close to the midpoint of the scale (4), responses are more diverse as the option (4) was among the least chosen one consistently throughout these questions.

Table 11

Frequency of responses of Bank Loyalty

Scale	Bank1		Bank2		Bank3	
	N	%	N	%	N	%
1	14	9,8	11	7,7	9	6,3
2	21	14,7	10	7,0	19	13,3
3	27	18,9	29	20,3	31	21,7
4	13	9,1	17	11,9	13	9,1
5	23	16,1	21	14,7	21	14,7
6	22	15,4	21	14,7	22	15,4
7	23	16,1	34	23,8	28	19,6
Total	143	100,0	143	100,0	143	100,0

The reliability of the previous question, that measures client's loyalty towards their bank, was analyzed through Cronbach's Alpha, normally, a value higher than 0.70 is considered to have an "acceptable" internal consistency in most social science research. In this case it presented a value of 0.92 which is excellent. The categorization of the Alpha values follows Hill (2009).

Table 12

Internal Consistency

	Cronbach's Alpha	Items
Bank loyalty	0.916	3

Loyalty to the MB WAY app was analyzed by an initial question regarding a hypothetical app that simply did not charge for any transaction but would offer only this service. The represented median of this answer is the lowest of all questions in the questionnaire.

Table 13

Willingness to change to another app

Item	Condition	Median	Std. Deviation
ChangeApp	Changing to another app	2,77	1,78

This was also the question that gathered the most amount of "Would change" responses, where 38.5% of respondents would definitely change to this app.

Table 14

Frequency of responses of changing app

Scale	ChangeApp N	%
1	55	38,5
2	26	18,2
3	22	15,4
4	20	14,0
5	7	4,9
6	9	6,3
7	4	2,8
Total	143	100,0

Loyalty to the MB WAY app was also tested by questioning the participants about possible alternatives in the market, specifically Revolut, PayPal and Lydia. The 3 at the moment do not charge anything for a transaction. The median of the answers presented on table 15 are lower compared to the medians of the answers related to the banks described on table 10, which means that bank loyalty is stronger than app loyalty, $t(163) = 3.174$, $p = .002$. The differences of medians between these 3 questions are statistically significant, Pillai's Trace = .114, $F(2, 141) = 9.082$, $p = .001$. The average of these 3 medians is 3.79, meaning that contrary to the case of not changing banks, the inclination resides on changing app. The app most likely to be a substitute to MB WAY from the 3 is Revolut.

Table 15

Alternative apps to MB WAY

Item	Alternative	Median	Std. Deviation
Revolut	Change to Revolut	3,49	1,71
PayPal	Change to PayPal	3,78	1,73
Lydia	Change to Lydia	4,09	1,77

The median for these answers are all close to the midpoint of the scale (4), in this case, the option (4) was among the most chosen one consistently throughout these questions. As it relates to specific apps and companies, their notoriety and whether respondents had prior knowledge of them or had already use them could be contributing factors for this meaningful indecision.

Table 16

Frequency of responses of alternative apps

Scale	Revolut		PayPal		Lydia	
	N	%	N	%	N	%
1	16	11,2	15	10,5	12	8,4
2	34	23,8	24	16,8	17	11,9
3	26	18,2	22	15,4	24	16,8
4	30	21,0	37	25,9	37	25,9
5	14	9,8	16	11,2	16	11,2
6	14	9,8	19	13,3	20	14,0
7	9	6,3	10	7,0	17	11,9
Total	143	100,0	143	100,0	143	100,0

The bank loyalty dimensions are significantly correlated between them but not with items related to the MB WAY app loyalty, which will be further discussed on the conclusions taken.

Table 17

Correlations

	Bank1	Bank2	Bank3	Revolut	PayPal	Lydia
Bank1	-					
Bank2	,775**					
Bank3	,823**	,805**				
Revolut	,147	,020	,094			
PayPal	,122	,091	,084	,568**		
Lydia	,120	,140	,044	,569**	,645**	-

$* p \leq .05$ $** p \leq .01$ $*** p \leq .001$

4.3 Price Predictors

In order to identify significant price predictors, the payment schemes used for this investigation were, paying for each transaction and buying the app.

A multiple linear regression was elaborated with the variables gender, employment status, age, education, bank loyalty and app loyalty as independent variables and paying for each transaction as the dependent variable. The model explains 3.3% of the total price variance and it is not statistically significant, $F(13, 129) = 1.372$, $p = .181$. A low value was somewhat expected seeing that the main focus of this work was not to actively find price predictors when designing the questionnaire questions, but to do more of a descriptive analysis of users

intentions when confronted with different scenarios, payment schemes and prices that can possibly be associated with this service.

The variable employed for wages appears as a regression coefficient marginally significant (β = -.245, p = .059). Because the regression coefficient is negative, this means the respondents that are employed for wages are willing to pay less for transactions than people with other employment status as already previously observed (Table 7).

Table 18

Linear regression: price per transaction

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	,095	,038		2,514	,013
Female	-,013	,015	-,076	-,896	,372
Student	-,016	,022	-,077	-,697	,487
Employed for w.	-,041	,022	-,245	-1,905	,059
Self-employed	-,034	,030	-,129	-1,134	,259
Age	-,001	,007	-,018	-,170	,866
Education	,011	,010	,104	1,035	,303
ChangeApp	-,003	,005	-,065	-,710	,479
Revolut	,001	,006	,016	,136	,892
PayPal	,001	,005	,017	,150	,881
Lydia	-,007	,005	-,152	-1,318	,190
Bank1	,006	,007	,135	,864	,389
Bank2	,009	,007	,201	1,331	,186
Bank3	-,003	,007	-,079	-,469	,640

A multiple logistic regression was done with the variables gender, employment status, age, education, bank loyalty and app loyalty as independent variables buying the app as the dependent variable. The model allows for reducing uncertainty when classifying subjects that are willing to buy the app in 7.2% (Nagelkerke R Square), where the difference between the added model of the independent variables and the model containing only the constant is not statistically significant. This means, the independent variables turned out to be not significant estimators of the intention to buy the MB WAY app. This was also to be expected seeing that, once again, this was not the main objective of the dissertation, but seen as just a complement to the work and to add a possible topic for further exploration.

Table 19

Logistic regression: buying the app

	B	S.E.	Wald	df	Sig.	Exp(B)
Female	-,269	,374	,516	1	,473	,764
Age	,110	,163	,451	1	,502	1,116
Education	,079	,263	,090	1	,764	1,082
Student	-,568	,568	,999	1	,318	,567
Employed for w.	-,538	,543	,983	1	,322	,584
Self-employed	-,138	,747	,034	1	,853	,871
Bank1	-,177	,167	1,121	1	,290	,837
Bank2	-,011	,165	,004	1	,948	,989
Bank3	,095	,184	,269	1	,604	1,100
ChangeApp	-,042	,117	,130	1	,719	,959
Revolut	,011	,141	,006	1	,938	1,011
PayPal	,169	,138	1,506	1	,220	1,184
Lydia	-,008	,138	,003	1	,954	,992
Constant	-,402	,945	,181	1	,670	,669

5. CONCLUSION

The final chapter includes the most important conclusions that were drawn for all the analyzed data and the implications it can have for the MB WAY app users and its developers and owners. The limitations of this dissertation are also looked upon and recommendations are also made regarding possible topics that would further explore the impact that is going to occur due to the decisions that are going to be made regarding this issue.

5.1 Conclusions and implications

In today's world, it is safe to say that the ability to perform instant money transfers from a mobile device is already a reality available to anyone that has the need for this service. What is still yet to be decided is how much performing these transactions should actually cost. The study made in this dissertation tackles that precise question, as the needed conditions were gathered for analyzing the event that led to the start of this investigation. In Portugal, the app MB WAY was created for this purpose, as it allows performing this specific service and others free of charge. However, in the near future, that no longer seems to be the case, so it would be interesting to analyze how users are going to react to now having to pay for the same service that was once free.

By analyzing the answers given to the questionnaire, in a scenario where every user would have to start paying for this service, interesting implications can be inferred:

Of the approximate 1.5 million users of the app, it is expected that more than half of them stops using it completely. The vast majority of those who are still willing to use it, will only do so, contingent on the price that is going to be charged. Discounting the banks that are still presenting this service as free for now, the prices that intend to be practiced do not correspond to the fair value users are willing to pay, seeing that, the lowest value a bank is willing to charge is €0.15 (Appendix 1) and only less than 20% (Table 4) of users questioned are prepared to pay that or a higher cost. Over half consider that €0.05 is the fairest price and on average €0.10 is the price that should be practiced for each transaction. Although this is the preferred method of payment, the option of buying the app for a one-time fee also seems attractive. Roughly 40% prefer this payment scheme, and still, more than 80% of users are only ready to pay a one-time fee of €10 for this purchase. By comparing these 2 cases, it is possible to arrive to the conclusion that it would take 100 transactions at €0.10 each to reach

the €10 value. In March 2019 it was announced by SIBS that 3.5 million transactions are made each month through MB WAY, this means each user performs approximately 2.3 transactions per month, meaning it would take roughly 3 and a half years to reach the €10 mark, assuming that the number of users and transactions made per month remains the same.

The changes occurring in MB WAY, in no way affect users' bank loyalty, which means, regardless of the different prices charged by banks for each transaction through MB WAY, it will not be important enough to make participants change banks for that sole reason. When it comes to using other apps, the conclusions are different. Because participants value the transaction service of MB WAY the most, opposed to the other services offered, even if this is the only service affected, they are much more receptive in changing to an app that offers this service for free, where 50% of users would for sure or almost for sure make this change. If the question is made about specific apps and not theoretical ones, even if they do not charge for transactions, the likeness to make this change decreases. Brand awareness is a contributing factor (Hoyer & Brown, 1990), where an app such as Lydia is met with greater indifference due to not being recognizable, but Revolut and PayPal, more established players, are considered better alternatives, even if they offer other primary services and advertise according to it.

The biggest clash that this situation brings is between the viability of banks to provide a service for free thus baring the total costs, while also considering the positive consequences it can bring, such as cost-effectiveness due to possible less bank branches and employees being needed, or instead, opting for charging for this service in order to seek some form of revenue, even at the cost of losing considerable users. What cannot be underestimated is that when free acceptable alternatives are available, users often will choose the free substitute instead of the paid version (Campo et. al., 2000). What is even more important to highlight is that in this specific case, the paid version will offer the exact same service as the free version, so this transition will be even easier to make for the user. The next step banks will greatly influence users' loyalty, either by finding a way to reward them for acquiring or using the paid version, or reducing the expected cost thus retaining the majority of customers, or instead, opting to roll out the prices that are currently established and deal with the consequences of that action.

5.2 Limitations and further investigation

Regarding the limitations of this work, seeing that the primary source of data was gathered via questionnaire, it was found that the questions made were not sufficient enough in order to find significant price predictors and estimators of the intention to buy the MB WAY app, as such the only reliable data that was possible to analyze was consumers' perceptions of fairness.

Possible topics for further exploration would be pursuing the reasons why such inertia occurred when discussing changing banks, if the conditions and prices charged by each bank for a transaction through MB WAY is not reason enough to make this change, then what is significant when it comes to bank loyalty and if it also depends of process per se, as it can be too long or have costs associated with it. The reasons behind why employers by wages and working students are the least and most willing to pay for this service, respectively. Finally, what makes a customer be more willing to pay a one-time higher fee instead of a much lower one for each time it uses a service.

Because this is a recent subject that it is starting now to be debated, the most important objective of this study was to provide an initial basis for this discussion which starts by observing the general opinion of users and how it matches with the responsible price setters. The same study can be done after the charges per transaction come into effect to see the real impact that it had on the number of users and their perception of fairness regarding the prices that are being practiced.

6. APPENDIX

Appendix 1 - Bank List and Transaction Costs

Table 20

Bank List and Transaction Costs

Banks	Same Bank	Different Bank
ActivoBank	Free	1,50€
Banco Altantico Europa	Free	Free
Bankinter	Free	Free
BBVA	Free	1€
Banco Best	Free	Free
Banco CTT	Free	Free
BIG	Free	Free
BPI	0,20€*	0,20€*
CGD	0,20€	0,20€
Crédito Agrícola	Free	Free
Caixa Crédito de Leiria	No Information	No Information
Caixa Agrícola de Mafra	No Information	No Information
CEMAH	Free	Free
Deutsche Bank	Free	Free
EuroBic	Free	Free
Millennium BCP	Free	1,30€
Montepio	0,20€	0,20€
Novo Banco	0,15€	0,15€
Novo Banco dos Açores	0,15€	0,15€
Popular	Free	Free
Santander Totta	Free	Free
Unibanco	No Information	No Information

Collected data in the 9th of February of 2019 from the Folhetos de Comissões e Expenses of each institution.

* The commission will be 1€ beginning in May.

This table represents all the 22 member banks of SIBS as well as the cost that each one charges for each transaction done through MB WAY to the same and a different bank.

Figure 1 - MB WAY Main Screen

This figure represents the main screen of the app MB WAY with all the services it can provide presented in a simplistic way.

Section 1

Demographic Data

Q1. Age	Q2. Gender	Q3. Level of Education	Q4. Professional Status
18-25	Male	No level complete	Student
26-35	Female	High School	Working Student
36-45	Other	Professional Course	Unemployed
46-55	Prefer not to say	Some college credit	Self-employed
56-64		Bachelor's Degree	Employed for wages
65+		Master's Degree	Retired
		Doctorate Degree	
		Other	

Section 2

Critical Questions

Q5. Do you have a Portuguese bank account?

Q6. Do you have a Portuguese phone number?

Q7. Have you ever used the MB WAY app?

Q8. Have you ever used the option of sending or receiving money from the app?

These were YES/NO questions, in case of answering to any as NO, that survey would be excluded

Q9. If you already used the app, will you stop doing it if you start to get charged?

YES, regardless of the value	→	Survey ends
NO, regardless of the value	→	Survey ends
Depends on the value charged	→	Continue to next section

Section 3

Payment Conditions

Q10. Cost of each transaction	Q11. Monthly Subscription	Q12. One time buy of the app
€0.05	€2	€10
€0.10	€5	€15
€0.15	€10	€20
€0.20	€15	€25
€0.50		
€1		
€1.5		

Q13. Which of these three methods of payment is ideal for you?

Section 4

Alternative Banks

How willing would you be to change banks for the sole reason that, if a different bank:

Q14. Did not charge for a transaction (through MB WAY)?

Q15. Did not charge for a transaction to the same bank (through MB WAY)?

Q16. Did charge the cheapest value in the market for a transaction (through MB WAY)?

Q17. How willing would you be to change mobile apps, if another app did not charge for any transaction, but would only allow to make said transactions (MB WAY offers other services?

Every question is to be responded through a 7-point scale

Section 5

Alternative Apps

If MB WAY starts charging for each transaction, how willing would you be to change to the app:

Q18. Revolut

Q19. PayPal

Q20. Lydia

Every question is to be responded through a 7-point scale

Figure 2 - Questionnaire Structure

The structure of the questionnaire, composed of 5 sections, is presented here. In order for participants to have the best information available to answer the questions the best way possible, the changes that are occurring with MB WAY are briefly explained and the services and conditions provided by the alternative apps are also summarized.

Appendix 4 - Description of MB WAY's alternative apps

Revolut's app allows for, among other services, to perform free money transfers with people that also use the app. It provides a debit card that can be used in every spot that accepts Visa or Mastercard. Withdrawing money bares no cost until the maximum value of €200 per month. It allows for money transfers to the person's bank account, which becomes available from 1-5 days, opposed to MB WAY, where the transfer is instant.

PayPal's app allows for, among other services, to perform free money transfers with people that also use the app. It can be used as a method of payment in any place that accepts PayPal. It allows for money transfers to the person's bank account, which becomes available from 3-5 days, opposed to MB WAY, where the transfer is instant.

Lydia's app allows for, among other services, to perform free money transfers with people that also use the app. It provides a debit card that can be used in every spot that accepts Mastercard. It allows for money transfers to the person's bank account, which becomes available from 2-3 days, opposed to MB WAY, where the transfer is instant.

This information is available on the questionnaire in order for participants to have a better understanding of the different characteristics that each of these alternatives apps present vs MB WAY.

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