The new online payment landscape
An Analysis of the Italian e-wallet market

SUPERVISOR:
PROF. STEFANO MANZOCCHI

STUDENT:
CATERINA ROSSI
650081

CO-SUPERVISOR:
PROF. PINTO EUGENIO

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The following paper has the intent of analyzing the e-commerce landscape under a specific perspective, that of the online payment methods. The attention has been centered on the most innovative forms of online payments, those who have most captured the attention of international prints and industry’s experts. Among these, the paper focus on one particular form of online payment: the “e-wallet”.

The decision to concentrate the analysis on this specific instrument, as explained before, partially derive from the high interest that papers, prints and experts have demonstrated in the last years. In my opinion this is a consequence of a combination of factors. First of all “e-wallet” is still at a development phase, carrying with it all the uncertainties and curiosity of an innovative product. Moreover, many e-commerce giants have already moved steps in this direction, developing their own “e-wallet”, investing money, time and effort in this industry. We can now understand how the argument has captured the attention of many academics and experts.

The other motivation behind the decision of the topic, derive from a six months working experience matured in MasterCard’s Rome office. Here, I personally had the chance to participate to the commercial launch of MasterCard’s e-wallet: MasterPass. The focus of the paper is then intentionally shifted in the last two chapters of the paper, where the MasterPass case study is addressed both on the issuing side (analyzing the wallet owner point of view) and on the acquiring side, looking more closely at the online merchants dynamics and strategies.

In order to perform such analysis and being able to comprehend the investment strategies of an “e-wallet issuer” as MasterCard, a preparatory analysis was necessary. First of all, it has been fundamental to understand the trends, state of development and future perspectives of the e-commerce industry. Those topics have been addressed in the first chapter of the paper, where the different forms of e-commerce and the history of its development have been reported. Besides a quick macroeconomic analysis has been performed, determining how e-commerce has completely changed our world. Internet has reduced distances, widening the opportunities in B2C and B2B e-commerce transactions across borders. The analysis focused on the impact of e-commerce on international trade and employment, both for developed and developing countries. The results have revealed how e-commerce stimulates international trade in the same way as lifting other trade barriers would1.

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The second part of the chapter is mainly focused on the trend and development of e-commerce in the different part of the world. From this comparative analysis it has emerged how e-commerce is among the highest growing industry all over the world, showing double digits growth rates in almost every geographic area studied in the chapter. The increasing e-commerce revenues goes in parallel with many other factors of success, first of all the increasing digital buyer penetration, who is experimenting a steady growth as for the graph below. The graph is reporting a stable growth of 1% per year circa until 2017.

**Figure 1: Digital buyer penetration worldwide from 2011 to 2017 – Statista source**

From the analysis emerges how great is the potential of ecommerce and how its worth in the world GDP is increasing year after year. Notwithstanding the positive global trend just reported, who can be considered the common denominator among the different region of the world, the study has revealed how still a great disparity exists among the latter. The degree of maturity of the markets is still not homogeneous, even inside the same geographic area as it is the case of Asia Pacific, the most heterogeneous reality. Comparing North America, the most e-commerce and e-payment mature market, to Africa or Latin America, it is clear how the gap will require time to be bridged.

The chapter ends with a focus on the European continent and in particular on the Italian market, who will be considered in the central chapters of the paper. Europe mirrors the global heterogeneities just reported at a global scale, since it is divided in two speed of velocity. Despite the government efforts to harmonize the continent via a unique European legislation for online payments, the European e-commerce market is still highly concentrated since the top three e-commerce countries, France, Germany and UK alone represents more than half of all European e-sales, reaching the 60.9%. Moreover a net gap exists among the most mature markets represented

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by the North, West and Central Europe and the least mature represented by the South and East Europe. To the Southern European group belongs also Italy, who in line with the positive European e-commerce trend has registered a double digit growth rate in the last years with the only exception of 2013. The paper reflects on the causes of the slow down registered in the last year while on the other side analyze the phenomena of m-commerce who is having an extraordinary success in Italy. Netcomm analysis has registered three digit growth rate for the mobile commerce sector in 2013, with +255%4.

After having analyzed the e-commerce trend and development in the World, in line with the paper focus of analysis, the paper then introduces the electronic payment world. Sumanjeet’s study well explains the important role of e-payments in the e-business industry: “As payment is an integral part of mercantile process, electronic payment system is an integral part of e-commerce”5. The advent of this new form of commerce has generated new financial needs who, in the majority of the cases, could not be satisfied by the traditional payment methods. That’s why new type of purchasing methods have emerged during the last decades and new and innovative payment instruments are created every year in order to satisfy always new e-customers’ needs.

The chapter analyzes all the different types of payments methods, starting with the “offline payment methods”, those who have been applied to the e-commerce world despite they have always belonged to the traditional commerce. The latter category includes any instrument that has been used and it is still used in traditional commerce as it is the case of Cash-on-Delivery, who is particularly widespread in least markets, in particular in India.

The second part of the chapter deals with EPS - electronic payment system, a whole world of electronic transactions conceived and born to serve the electronic world. In this section the major forms of e-payments are introduced, analyzing for any of them their specific characteristics, pros and cons. The first on the list is surely one of the oldest and most common payment system worldwide: Credit/Debit cards. The main pro of this form of payment is its level of maturity and high level of penetration. Today it is the most used online payment method worldwide.

The second category analyzed is another common payment method: the EFT or Electronic Fund Transfer. It enables businesses and customers to exchange money electronically, avoiding the use


of checks or wire transfers. It consists in the transfer of money from one bank account, directly to another bank account via computer based systems, used to perform both transfer of funds within the same financial institution or across multiple institutions. EFT main advantages consist in its reduced administrative costs, simplified bookkeeping, high level of security and high efficiency.

The paper reports the case of “MyBank”, the Pan European wire transfer project, who has been launched in 2011 with the aim of providing a secure and reliable pan-European online payment method.

Moreover the chapter analyses new forms of e-payments, respectively known as e-money, smart cards, virtual pre-founded cards and platform payment systems. Even though such forms of payment were conceived specifically for the online world, they’ve played and still plays a limited role in the European e-commerce framework. The paper focused the analysis on the main obstacles to the success of these payment instruments. It ends with a comparison among these online payment instruments, who are all recognized by the governing authority, and the last phenomena of Bitcoin who for many aspects closely reassemble to the latter.

The chapter then face the brand new phenomena of internet start-ups who starts designing their own online currency to purchase on their sites, under the form of Gift Cards. Finally it ends the comparison with the mobile payment service industry. The latter is rapidly evolving, developing different mobile payment method technologies, but it is still very fragmented and at an infancy stage, since local and global technology standards have not been yet defined.

The analysis continues with a closer consideration at of each payment instrument belonging to the mobile category, respectively: the SMS based payment, particularly used in Africa; the NFC based payment, who is having a huge success worldwide in terms of number of projects launched; the QR code payment, who permits to pay just by scanning a barcode; and finally the WAP technology, who consists in paying from an online webpage accessed via mobile.

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In conclusion, the last part of the chapter is dedicated to an important topic in the online payment industry: the security concern. In the specific, the study has discovered one of the hardest dilemma in the e-payment field, liked to the security issue. The dilemma consists in finding the right balance in an online payment method between easiness of use and security. The dilemma has been at the hearth of many academics debates in the last years, at the point that the new online payment method, “the e-wallet” has been conceived having as reference this dilemma.

The third chapter of the paper gets in the heart of the topic, since a focus analysis on the “e-wallet” payment instrument is performed. This innovative instrument is born as answer to new e-world necessities, expressed both on the merchant and consumer side\textsuperscript{12}. Merchants were requiring lower payment processing fees, as lower shopping cart abandonment rates while consumers need to shop anywhere, anytime with a secure and simple shopping experience\textsuperscript{13}. Those who managed to answer those requests are alternative online payment platforms who are gaining market share to the detriment of the traditional player of the payment industry\textsuperscript{14}. Among the winners many e-colossus such as PayPal, Amazon, Google etc… who have exploited two factors, main drivers of their exponential growth: lower costs for merchants and the promise to consumers of “everywhere commerce” for online payments\textsuperscript{15}. The latter consists in the possibility for the consumer to checkout anywhere from any device just using a username and password.

The chapter starts providing a definition of what is intended with “e-wallet”, clarifying the difference that exists among m-wallet and digital wallet. Then it considers the industry’s experts opinion, divided between those who believe that “e-wallet” represents the future of online payments and those who see in this online instrument just another case of alternative payment method who will never reach the critical mass of success. Moreover, the chapter analyzes in detail the characteristics, pros, cons and innovative elements of this new form of e-payment. The analysis shows how e-wallet satisfy all the three main factor of success of a new e-payment method: convenience, trust and security. In fact, digital wallets were born with the necessity of making online purchases easier for their customer. In this sense, the first pillar inspired the creation of this


new form of payment\textsuperscript{16}. Consumers benefits from “the e-wallet” on multiple ways: this system enables them to perform online payments without the necessity of inserting payment information anytime; it stores shipping information to speed and simplify the checkout process. On the easiness of use side, it really benefits consumer who can checkout anytime anywhere from any device thanks to this system. For what concerns the other two pillars, which are in some way correlated and connected, it depends on the wallet owner and provider. The creditability and trust depends on the company’s reputation who is offering the service while the security issue depends on the technology and the layers of security employed\textsuperscript{17}.

The second part of the chapter deals with the MasterPass case study, the “e-wallet” developed by MasterCard. First of all, this section of the paper presents the Italian market, the possibilities, trend and opportunities who made MasterCard take the decision to launch its digital wallet in the market. At the light of the market analysis and opportunity assessment, some important findings have to be extracted in order to understand the strategic choice made by MasterCard in the first quarter of 2014. The Italian e-commerce market is steadily growing, the mobile industry on its side shows vertiginous growing rates and positive sign of acceptance on the consumer side. Mobile penetration in Italy is among the highest in Europe, reaching 150\% of the population\textsuperscript{18}. The result is that both the e-commerce and m-commerce sectors have a huge potential and represents a profitable opportunity to exploit. Moreover since the industry is evolving, the demand is changing too, showing different necessities who are not still addressed by the current offer in the market. There is a remarkable mismatch between the demand, who is evolving and is asking for new, simple and secure online payment methods and the offer, who is still anchored to old systems and business models. The opportunity arise from a growing demand with specific necessities, not still addressed by a particular offer. Consumers life is requiring them to do everything “on-the-go”, to be able to finalize a purchase from their mobile if necessary, with the same simplicity found from their Pc at home or in their office. The future success in the online payment industry depends on few factors. It depends on the ability to build an offer who is able to address three principal customer requests: convergence, simplicity and security. MasterCard’s offer, launched in the first quarter of 2014 address specifically and individually all the three customer’s requests. The product has been designed for purchases concluded in stores, online or on the go.

\textsuperscript{17} G.Fox, Using smartphones as digital wallets, available at: http://www.infomall.org/I399-12/Collection/2012/Group5_finalpaper.pdf [Accessed 22 August 2014]
Moreover in Italy, MasterPass has been launched in cooperation with financial institutions, via the Banks’ channel. The product represents a turn-key solution for banks, to enter the e-wallet market with a valuable product and value proposition, who carries the name of a trusted network as MasterCard. MasterPass has been launched by MasterCard in US, Australia, Canada and UK. Finally it was landed in Italy too, but with a different format. In all other countries, the product has been launched in the market both as the MasterCard e-wallet solution, in its “pure format” and in its “turn-key solution” for banks, carrying MasterPass and the name of the financial institution providing the service. In Italy, this pure format of MasterPass is not live in the market, since the strategy behind is completely different. PayPal has already reached a big share of the market, with a strong value proposition. MasterCard had to exploit the fear of the financial institutions, who were losing the opportunity to step-in in this industry and its strict relation with all major Italian banks. The product has now been launched as digital wallet, as simplifier and accelerator of online commerce. Soon, all the features designed for MasterPass will be implemented, making it land in the offline world. Once completed, MasterPass will completely replace the physical wallet, making every transaction, both online and offline easy, fast and secure. The path to such a radical change is never easy to achieve, but in this case is even harder, considering the cultural barriers and technology obstacles to overcome. MasterPass launch in Italy represents a first big step in the right direction, starting with the preside of the online world.

The chapter concludes MasterPass launch in Italy by considering the main competitors in the market. For the purposes of the analysis, the paper consider also a specific category of competitors; those who are not currently present in the market but that will sooner make their appearance, as is the case of Visa and Google.

Considering first the already live players, the main names to consider are PayPal, MyBank, Sofort Banking and the main mobile wallets launched in the first quarter of 2014 respectively by Vodafone and Telecom Italia.

The main difference between MaterPass and PayPal can be underlined in the operating model behind and of consequence in the different positioning in the market. PayPal is based on an Independent business model, who drastically reduces the role of banks, while MasterPass model can

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be defined as a Bank- Financial Institution Led Model\textsuperscript{21}. We can derive that MasterPass positioning in Italy is highly connected to its underneath model.

The third major competitors that MasterCard had to consider are two players in the category of online wire transfer: Sofort Banking and MyBank. The system underneath is the same. Both Sofort and MyBank are online instruments who facilitate the online wire transfer. Since both of them have been just launched in the Italian market, they are still on a first critical phase of “building the acceptance”. The success will mostly depend on that, so it is still too early to draw any type of conclusion.

Concluding the analysis of the already live MasterPass competitors in the Italian market, we should deal with another category, that of mobile wallets. As we have already introduced, a mobile wallet is “the e-wallet service” on a smart phone who permits the user to perform payments both online and offline, via the NFC technology. In Italian specific case, this difference is more remarked since mobile wallet providers are strictly positioning such products on the offline world, still not providing the possibility to use such wallets for online purchases. What is sure is that the two worlds, offline and online transactions performed via a digital wallet, will be unified by a unique solution. This is the future of “the digital wallet”. In line with this perspective, we should then consider in our analysis also those mobile wallets, who has just been launched in the Italian market, and that are mainly positioned in the offline transactions. This is the case of Tim Wallet and Vodafone wallet.

In conclusion, the chapter ends with the analysis of those competitors who are still not live in the market: Visa and Google. For what concerns V.me, the digital wallet distributed by Visa, it will have a similar positioning in the market to that chosen by MasterCard for Italy. The service will be “bank-branded” digital wallet, allowing banks and financial institutions to put their own name and branding on a service that is powered by Visa\textsuperscript{22}. We could then expect then that the two leader payment schemes will start a wallet war for providing the digital wallet service to Italian banks, at the end of the current year. Finally, we should consider Google, who thanks to its Google Wallet is leader in the micro-payment market. Considering that Google is the provider of the Android platform that the majority of the smart phones currently in commerce are using, we could imagine the strong positioning that such player has in this market. Google will combine his digital wallet for


the online world, with the NFC technology to enable its customer to pay in the offline world too\textsuperscript{23}. When the Google wallet will make its appearance in the Italian market, the distinction among offline and online world will be no more useful and every player will be force to review their current position and strategy.

The last chapter of the paper deals with the acceptance side. The paper analysis the importance that the acceptance network plays in the success of an online payment method. The analysis is always performed in line with the case study proposed in chapter three, considering the acceptance strategy developed by MasterCard for the Italian market. In MasterPass case, the provider of the service, MasterCard, had to build an attractive acceptance network who could assure the success of the brand new online payment instrument. The number of subscribers of the services and number of transactions performed via e-wallet will depend on the quality of the acceptance. An acceptance network, to be attractive, should reach a critical mass of merchants, that determines the widespread of the service. Moreover, within this list of acceptance big players’ names should be present, those who register the majority of online transaction in Italy. A quick overview of the main players in the Italian acceptance landscape has revealed an high concentration of the acceptance market, since in 2012, 69\% of the market was dominated by the top 20 e-merchants\textsuperscript{24}. The first 50 players reach almost the 90\% of the market, sign of a difficult market to operate in.

After having reported a snapshot of the Italian acceptance market, the last part of the chapter is dedicated to the study of MasterPass’ acceptance network, who has been built by MaterCard to sustain its commercial launch. The paper tries to spot and comprehend what are the logic underneath the “construction” of an acceptance network, and what are the main difficulties to be overcome. The paper analyzes the criticality of the acceptance network, who determines the success of the e-payment instrument. The latter consists in reaching both a critical mass and the acceptance of big names of Italian e-commerce landscape. MasterPass is doing a great job on both sides. In order to reach a critical size, first of all MaterCard had to forge a strategic alliance with one of the major acquirer bank in Italy, in the specific case Banca Sella\textsuperscript{25}. The latter has enabled its clients, Italian online merchants, to accept MasterPass in their online payment page. The synergy with such


an important acquirer has permitted MasterCard to reach even the smallest website, otherwise impossible to contact and enable to this new form of payment.

For what concerns the big names on the Italian e-commerce landscape, the logic underneath is different. The number of transactions that the PSP has to manage are much greater, as the complexity of the website infrastructure. This is the case of Vodafone who is the first big merchant who has accepted MasterPass. When dealing with the second factor of success, consisting in involving big merchants on the acceptance platform, the strategy implemented by the e-wallet provider has to be different. MasterPass is now accepted by big names as Vodafone, Media World, Esselunga, Monclick, Illumia, Meridiana, Salmoiraghi & Viganò, Venchi, Slow Food, Lush, Miss Blue Marine and many others.26 Trenitalia will soon accept MasterPass on its platform too.27 The following merchants do have the concern of providing to their customers always the best experience possible, but they still consider other factors ad complications that are typical of a websites with millions of access per day. The consequence is that the complications and considerations underneath the decision of accepting a new form a payment cannot be the same of that a small-medium merchant. On the big scale merchants, MasterCard had to build MasterPass acceptance carrying out individual negotiations and alliances. This is a much different approach from that applied to reach the critical mass through smaller online retailer websites.

What emerges from the analysis is that this new form of online payment has the possibility to involve million of active users and made the success of an e-commerce company. This industry is far away from dead. It has just started and it shows great potential in terms of future revenues. On the other side it is also true that “no one can do it”. The industry is difficult to operate, it has high barriers to entry, it requires high contractual force and a direct access to consumers and merchants, typical of the colossus of e-commerce. Moreover it will take many time before this form of payment will replace any physical form of payment even in the offline world. Patience and time will be required to change the consumer habits and to see “the e-wallet” became the most preferred online payment method worldwide. For the moment, the new born MasterCard’s e-wallet seems going on the right direction, differently to what the skeptics thought, but just the time will tell us if MasterPass will reach or even overcome the PayPal levels, who still has the primate of most preferred online payment method in Italy.

Bibliography


Websites


