

Digital Transformation and Customers Services: the Banking Revolution

Luis Borges Gouveia, Marine Perun and Yousef Ibrahim Daradkeh

ABSTRACT. – Current innovation in information and communication technologies are changing consumers' behavior. Internet usage, in particular the use of smartphones, turns to be more apparent the lack of necessity to visit a physical branch whatever the good and service being present. Many of the available digital offerings turn our world a hyper-connected one. Such digital age forced the banks need to adapt their services to these new emerging needs. New ways of communicating with customers have appeared in the last few decades such as automation of services or customer service online. Brett King declares in 2013 *"Banking is no longer a place you go, but something you do"*. To compete with physical banks, banks online, then Neobanks appeared. These digital banks, sometimes 100% mobile, offers a smooth customer experience and free basic products. Development of technologies related to services aims to enhance the customer experience. One the one hand, we can wonder if these new competitors can offer as many services as those of traditional banks only with digital tools. On the other hand, digital transformation is a new challenge for customer service and customer experiences, even for traditional banks. How does physical banks react and adapt to this digital era? This provides a trilogy: Neobanks; generational changes; and mobile technologies – the future of banks goes through digital transformation.

Keywords – Digital Transformation, Customers Services, Banking, Neobank.

I. INTRODUCTION

Banking is defined as the business conducted or services offered by a bank. At its most basic, banking involves an institution holding money on behalf of customers that is payable to the customer on demand, it also provides loans to business and individuals. In some countries, they may provide investment and insurance services. Dealing with banking, the Cambridge dictionary present it as *"the activity of managing the money in your bank accounts"*. Digital transformation has shaken up banking habits and brought new competitors into the market. The direct bank (sometimes called a branchless bank, virtual bank, online bank or an e-bank) is a bank without any branch network that offers its services remotely via online banking and telephone banking and may also provide access via ATMs. The latest generation of online bank is called "neobank".

Luis Borges Gouveia, Science and Technology Faculty, University Fernando Pessoa, Porto, Portugal (email: lmbg@ufp.edu.pt)

Marine Perun, Science and Technology Faculty, University Fernando Pessoa, Porto, Portugal. (email: 32584@ufp.edu.pt)

Yousef Ibrahim Daradkeh Department of Computer Engineering and Networks, College of Engineering at Wadi Addawasir, Prince Sattam bin Abdul-Aziz University, KSA (e-mail: daradkeh@yahoo.ca).

That is a 100% digital bank and it reaches customers on mobile apps and personal computer platforms only. Founded in 2015, Revolut Ltd is an example of fintech based financial providers that challenges traditional banks. Other competitors to traditional bank operate over the Internet, Created in America, the platform PayPal serves as an alternative to payment by check or credit card. In Portugal MB WAY app offers a card less cash withdrawal process, and in France the app Lydia is specialized in payment by smartphone since 2011. These examples are just a small sample of the current digital banking offer. They respond to new needs linked to the change in lifestyle of the young generations who expect faster services, more connected to their smartphones, more attracted to international travel, and also aligned with their mobile and convenient lifestyle. According to I-SCOOP Online guide to digital business transformation, nowadays *"90% of consumers prefer online banking services, regardless of age, income, place of residence or type of bank"*. Thus, retail banks develop they own digital service to satisfy their customers. A review of their organization was necessary to compete with e-banks and fight the feeling of insecurity since the financial crisis of 2008. Regarding the current priorities of bank and customers' expectations, how does digital transformation serve and impact customer's services in banking field? The ongoing Covid 19 crisis will provide even a great boost on the emerging digital banking services as it provides a more convenient access to financial services.

Firstly, the objectives and priorities of retail banking will be introduced followed by the expectations and requirements in term of customer's services by the different generations. Then the digital services available on the market will be analyzed in order to determine if it suits the current needs of customers and bank. Additionally a discussion related with recent Covid 19 as a new setting for digital banking services is presented.

II. THE CURRENT CONTEXT OF THE BANKING SECTOR

To understand how digital transformation can serve banking, the priorities and objectives of retail banking must be identified. Like any business, a bank aims to reduce cost and increase sales. In branch network, banks are under pressure from many investors and government, their efficiency and turnover are closely monitored. To retain their customers and attract new prospects, banking establishments are optimizing the customer experience and enhancing customer service in a consistent way. Moreover, they are developing new offerings of products and services. Their research and development services create innovative and digital ways of banking: mobile banking, service

automation, optimization of customer database management. To ensure efficiency of digital marketing and customer service strategies, banks use segmentation and analytics to follow the life cycle of their customers. A good knowledge of customers and potential prospects is essential to offer a great customer experience and the right pricing. A major issue for banks is keeping costs under control while developing innovative and digital services to increase customer's loyalty. As new market entrants, Neobanks do not have the same challenges as the traditional banks. They attract their customers with low fees which represents a challenge for income generation. Due to low deposit, they need to grow and engage their customer base to secure and develop the business.

Retail bank are dealing directly with individuals and small businesses, they need to understand their expectations and priorities to adapt customers services. In a context of severe competition in the banking sector, customers have started to demand a higher quality of service and a more personalized relationship. Dealing with banking interactions, World retail Banking Report (2019) show that many customers do not report positive experience across many banking interactions, especially when it comes to complex or high-involvement areas. Research from Fenargo, a banking software provider, showed that more than one-third of banks lose customers because of inefficient or slow onboarding. In response to this need, we are witnessing the development of specialized agencies, customer relationship centers and agencies dedicated to the needs of professionals in niche markets, with more experts and a personalized vision of customer issues. Traditional banks have to deal with millennials without sacrificing their more traditional clientele. Banks try to seduce these new customers with technology but they are often outdated by neobanks. The study from World retail Banking Report (2019) declares that "more than one in five Gen Y and Tech-savvy customers said their primary bank's offering did not ideally match their needs or preferences". A truly Omni channel solutions is needed to harmonize the customer journey. Millennials are addicted to their phones and mostly know PayPal and Apple Pay. They are often customers of online banks and send money abroad with XE or Transfer Wise for instance.

III. DIGITAL CUSTOMERS SERVICES IN BANKING

There are several options for banks to apply digital transformation in the customers' services field. One of the most common is the use of website. When a prospect search online for banking service, first touchpoint with the bank is the bank's website. The first customer experience is on the website and it offer a lot of online service such as making an appointment, checking your balance or making a transfer. By extension of the website, banks have developed mobile app. In the World Retail Banking Report of 2018, survey, Generation Y respondents rate the web and mobile applications as both being more important than the brick-and-mortar branches. Customers expect to be able to contact their bank through a broad range of different contact channels to suit them, at any time even the week-end. The chat bot is attractive for banks, it automatically answers customer requests at any time and if the questions demand

more complex answers, a human customer service agent intervenes in the chat. The digital interface and the use of artificial intelligence allows the bank to reduce the operating costs and reduce customer problems solving times.

For example, Bank of America customers can ask virtual assistant Erica to give them account balances, transfer money between accounts or schedule meetings. Electronic signatures also have an impact in banking. It is now possible to create a digital agreement that's legally equivalent to a handwritten signature. The customer no longer needs to go to an agency and can save time in procedures. E-mail communication are also more popular and customers can choose to receive their bank statement by mail or online. Digital transformation can also help customer service agents to offer individualized product and services thanks to analytics and optimized interface. Bank develops a consumer-centric approach of the "next best actions" models.

Henry Koenai, Director of Bank Central Asia declares in the World Retail Banking Report 2018 that "Banks should be adaptive to technology development. Artificial intelligence could help us to get a better understanding of our customers". Data utilization an important issue for customer experience, as well as operational enhancements, workforce transformation, security and compliance. These digital services are vital for bank survival and customer retention but we are seeing a reduction in the number of physical bank branches.

Banks provide a lot of energy in digital transformation, but are customers satisfied with the digital services of banks? According to the World Retail Banking Report 2016, in over 85 percent of countries an improved banking experience was found. Some complaints still raise from the customers. They find advisers less available and regret the loss of the "human" side of their relationship with their bank. Even if chatbots are becoming very effective for general queries or problems, human help remains the most effective support for complex issues and customer advice. The older generations are less comfortable with technology and need more time to adapt to the new banking practices. Customer reviews are generally positive about the digital service. They have more visibility on their account, they can carry out operations independently and the wait in the branch is reduced.

Created in 2014, Revolut is one of the fastest growing neobanks with more than 8 million customers in 2019. They created an excellent customer experience through technology and a new banking business model. Revolut sees the bank as a platform and enables customers to pick from the best available services in the market. Thanks to their multiples integrated partner, customers have access to wealth, insurance & lending products are the most competitive price available in the market. The neobank imagined a service totally based on the needs of the customers. Revolut's customers receive real-time notifications with rich data to know exactly what they spent their money on. They provide spending analytics to their users to know how much they have spent in the month, in what categories and to which merchants. Customers can

save time and send to other users of Revolut in one click, without needing to input their account details. In case of loss of his bank card the user is able to freeze the card in one click. He can also view his PIN if he forgets it and set a monthly spending limit. For customers interested in cryptocurrencies, they can invest in Bitcoin, Litecoin and Ethereum straight from the app. Revolut has seduced travelers by enabling them to hold multiple currencies on their card at any one time and spend that money overseas at the real exchange rate, without hitting consumers with any international card fees. Revolut delightful customer experience is also due to its customer support. Revolut has FAQs, community resources, and a direct messenger in the app, user can quickly message a customer support agent to get his problem fixed. Revolut' sew banking model must still demonstrate long-term sustainability but its excellent customer service makes them the ideal banking solutions for millennials. Revolut is an example of customer service to achieve for some traditional banks who delayed their digital transformation for too long.

IV. COVID 19 IMPACT ON FINTECH

The recent outbreak of a world spread of Covid 19 as a pandemic impacts all economic sectors at a global scale. Fintech is no exception. In a recent survey conducted by Portugal Fintech [10] a number of concerns arise.

Figure 1 presents the Fintech Portuguese community position resulting Covid 19 that impacts revenues [10].

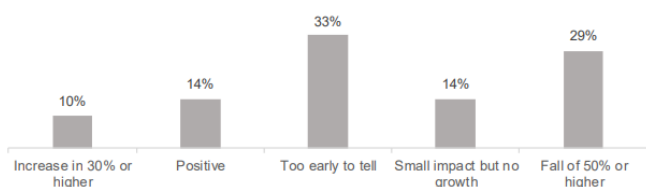


Figure 1: What has been the impact on revenue? [10]

At first glance figure 1 presents a mixture feeling from Fintech community as it provide a third with uncertainty, but also another third with a great impact on revenues (bigger than half, and also another third with no or positive impact. This means that the sector accelerates it transformation, with a current setting that turns the digital a very central issue on say-to-day life, as people stay at home and need to use a lot more, digital platforms to many of their activity.

In the same study, when asked on what the activity was most affected, the responses produce a clear answer (figure 2).

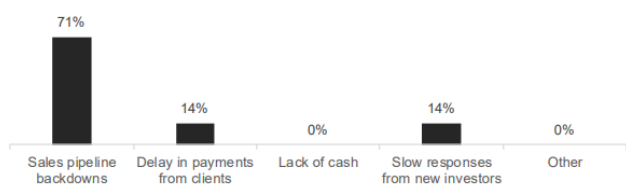


Figure 2: What has affected you the most? [10]

Figure 2 states clearly that the main effect is the disruption of the sales pipeline with 71% of answers. Just other to issues were reported, curiously with the same percentage (14%) and related with clients and invertors. As so, there is not a problem of money, but it seems to be a problem of the business itself as it goes for a disruption of the activity of the previous players.

A new trend is emerging concerning the potential of collaboration between Fintechs and established players. The study [10] presents a distribution by segment of activity related with Fintechs (figure 3).

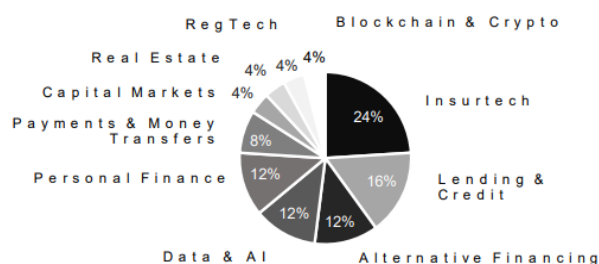


Figure 3: Distribution by segment [10]

Although there is a distributed activity around many segments, it is possibly to stress that insurances, lending and credit, alternative financing and personal finance will count for more than half of the responses. This seems to provide a convenient service for customized and personal support that will also impact the more traditional bank sector in a post Covid 19 world.

Those effects seems to be reinforced by results in the same study [10] that shows Fintechs as part of the supply chain rationale that links digital relationships between suppliers and clients (Figure 4).

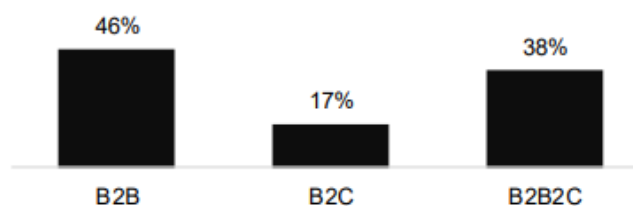


Figure 4: Distribution by business model [10]

When asked the preferred business model to operate, although they still act as a digital platform to support business interaction, the client end is becoming more expressive. Also, the idea to link business between them and with clients is also a trend and this also may impact the way in how money itself can evolve.

The Portugal Fintech shares a study on how existent players may provide solutions to Covid 19 challenges [11]. The Fintech solution list presents 44 Fintech use cases, which state how each help in Covid 19 times. As stated, Covid 19 outbreak causes a huge impact on the economy and the financial sector is no exception but also needed to be consider as part of the solution to outcome the present crisis. As defended by Portugal Fintech, "Countless support measures – destined both for people and companies – are being distributed through banks. Nevertheless, a huge gap

still exists between the digital journeys of various financial service providers. This is one of the reasons why fintech solutions are more useful than ever.” [11].

V. CONCLUSION

Branch banks find in neobanks a great competitor which pushes them to improve their services and optimize their organization. Traditional banks are less and less traditional to adapt to new market requirements. In the World Banking Report of 2016, 96 percent of bankers say that the retail banking industry is evolving towards a digital ecosystem and 65 percent of bank executives see FinTechs as partners. The market is evolving towards an approach centred on customer service and offers them a greater negotiation capacity.

In 2019, the banking sector goes further by introducing the concept of Open X in the World FinTech Report 2019. The era of Open X will give birth to an integrated market in which each player will play a specialized role. This new upheaval in the market is based on an approach centered on the customer experience, the seamless exchange of data and services, and on partnership rather than acquisition. Traditional banks still benefit from a level of customer trust built up over generations but their sustainability will depend on how they handle this new banking ecosystem.

One such example is Revolut, whose services are seen as one of the most popular between Fintech users. They call themselves as someone of transform the way money works. As an innovative, new kind of financial platform, it gives people the power to spend, invest and transfer money without the traditional higher fees charged by the business as usual banks. Since it's launching in 2015 in the UK, Revolut has expanded significantly beyond its origins as a financial service (FX) product, adding new features all the time, including Commission-Free Stock Trading, Cryptocurrencies, and Business Accounts among other. Headquartered in London, with 2,000 people in 23 offices, Revolut is now one of the biggest Fintech communities in the world, with over 10 million customers globally.

With Covid 19 outbreak, a number of opportunities arise for Fintechs. For example, Revolut sees opportunities by offering their customers help in four main issues related with the Covid 19 crisis [11]:

- *Virtual cards for safe online shopping:* Revolut has rolled out virtual cards for all Standard users, to allow them to safely shop online in these strange times; all cards are contactless, allowing to pay without having to touch ATMs, supporting Apple Pay as well;
- *Support to NGOs through fundraising campaigns:* Revolut has onboarded NGOs throughout whole Europe, UK and USA that are supporting health professionals in the front line of the combat against Covid-19 with fundraising campaigns in their platform;
- *Unlock cryptocurrencies:* Revolut has released cryptocurrencies to Standard customers as well to allow people to be exposed to crypto in a time

where the interest has gone upper due to unexpected lower incomes;

- *Revolut for SMB businesses:* Revolut has partnered with some local companies to offer three months of Revolut Business to SMB businesses, amongst many other measures.

But other services can be offered. For example, Easypay service is a paying institution. As stated by the company, Easypay has an online payment system easily integrable with any open sourced system, simplifying the process of issuing and providing the most used payment methods. Easypay's payment gateway has several functions that boost sales and payments with a simple reconciliation. They also report as Covid 19 opportunities to help [11]:

- *App for local commerce:* Easypay launched an APP – easypay now – that has been allowing the local commerce to receive orders by phone, make an instruction to ask for payment, and be notified when the payment is received.
- *Digital payments solution:* Furthermore, Easypay is also working with bigger companies, along with their partner BBVA. They came to a stage of understanding the need of a digital payments solution across all businesses. So Easypay is offering not only their gateway but also all added solutions, such as frequent payments, single payments, split payments, subscriptions, and some other.

This last example show up a relationship with a traditional bank and serves as a convenience digital platform to easy the relationship between both clients and business as also serves as intermediaries and suppliers for the traditional bank. The digital transformation is now fueled by the ongoing Covid 19 crisis and announces a banking revolution that is already taking place.

REFERENCES

- [1] Brett King (2013). Bank 3.0. Why banking is no longer somewhere you go, but something you do.
- [2] Capgemini and Efma (2019). World Retail Banking Report 2019.
- [3] Capgemini and Efma (2019). World FinTech Report 2019.
- [4] Tatjana Vasiljeva, Krsitina Lukanova (2016). Commercial banks and fintech companies in the digital transformation: challenges for the future. Journal of Business Management, No. 11, ISSN 1691-5348.
- [5] Fenergo (2019). Enable OmniChannel Client Onboarding with Fenergo Digital Client Orchestration. Available at <https://www.fenergo.com/solutions/digital-clientorchestration>
- [6] Jackie Vullings (2018). How Revolut is Re-Imagining banking. Available at <https://medium.com/airtree-venture/how-revolut-is-re-imagining-bankingb67d25c90554>
- [7] Ashley Cunnington, Rene Fisher, Olivier Plant, Philipp Bulis (2018) The current account conundrum, follow the money. Olivier Wyman. Available at https://www.oliverwyman.com/content/dam/oliverwyman/v2/publications/2018/june/The%20Current%20Account%20Conundrum_Follow%20the%20Money_Digital_Final.pdf
- [8] Caroline Hudson (2018). Bank of America rolls out AI Assistant Erica to all mobile customers. Charlotte Business Journal, May 2018. Available at <https://www.bizjournals.com/charlotte/news/2018/05/21/bank-of-america-rolls-out-aiassistant-erica-to.html>
- [9] I-SCOOP, Digital transformation: online guide to digital business transformation. Available at https://www.iscoop.eu/digitaltransformation/#Digital_transformation_in_banking
- [10] Portugal Fintech. (2020). Covid-19 Impact & Measures on Fintech, through the eyes of the founders, April. Available at <https://0e3c58aa->

ae86-4a28-91ad-c89aff716f06.filesusr.com/ugd/31a74f_fed17531fb
264110bccebca043ffd01c.pdf

- [11] Portugal Fintech. (2020). The Fintech Solutions List. April. Available at https://0e3c58aa-ae86-4a28-91ad-c89aff716f06.filesusr.com/ugd/31a74f_b0f6ccd19b864ae78215a34dfe00ebd5.pdf