LOAN REVOLUTION THROUGH NEW TECHNOLOGIES

Daria Maria SITEA[1]

Lucian Blaga University of Sibiu, Romania

Abstract

Digitalization is a phenomenon in an uninterrupted expansion, which becomes an indispensable element of people, but also of companies. Financial institutions are engaged in a renewal process, as a result of digitalization. Nonetheless, particular details of these radical changes should not be overlooked. Digitalization is not simply about introducing technologies. It also involves profound changes in the banking system, in the financial companies and, more than that, in the organizational culture of any single company. In the context of a constantly changing banking market, various financial technologies appear, while existing products and services cover extensive user needs. Though, there is the new method of having access to the money – with the help of social media and cloud computing, an entrepreneur can meet its crowd investors. The outcomes highlight that crowdfunding and peer-to-peer lending help those customers that are unable to take out a bank loan. However, banks are also launching the online lending option, which translates into less bureaucracy and increased competitiveness.

Keywords *Loan, Crowdfunding, Peer-to-Peer Lending, Financial Technology, Banking System*

JEL classification: *G20, O10*

1. General background of the digital transformation of the banking system and financial technology

FinTech companies compete directly with banks and other financial institutions. Thus, whether it is money transfer, peer-to-peer lending, electronic currencies or digital currency exchange platforms, FinTech companies use technologies that provide solutions for customers, under lower

[1] *Lucian Blaga University of Sibiu, Faculty of Economic Sciences, e-mail: dariamaria.sitea@gmail.com*

costs. Through financial technology, companies as Transfer Wise, PayKey, Paysera, Suade, DarkTrace, Revolut, Advice Robo and Monese were launched and are increasingly popular.

Probably the best known FinTech worldwide is Revolut. The startup was opened by two Russian citizens in London, officially launched in Romania in 2018. It has managed to attract quite a large number of users, being more useful for those who are travelling. It is known that by using the debit card, people may save up to 50 euros for every 500 euros spent abroad, money that otherwise would have gone to banks. The same procedure applies to money transfers. Thus, those who live abroad and want to send money home will no longer have to pay the fees that banks or other financial services companies (like Wester Union or MoneyGram) require. (Megaw, Crow, 2020) One source of income for Revolut comes from the customers who choose the premium package (with a premium debit card) and the second is a percentage of each payment made with the card. MasterCard and Visa impose a fee on every transaction made with the cards and the sum of money is paid by each shop that has implemented the card payment. On the other side, there are banks and financial institutions, including Revolut, who use Visa and Mastercard cards. These institutions receive a percentage from that commission.

However, it often happens that the funds for digital development go for the maintenance of the old systems. This does not necessarily mean that a bank cannot deliver an excellent digital experience to its customers, but the situation is not sustainable in the long run. Accordingly, the bank is inefficient, inflexible and lacks scalability.

As it can be seen in the figure bellow, there are five general divisions of the new products and services launched by financial technology companies: loans and deposits, retail, wholesale, investment and insurance. In fact, the adoption of the modern technology is a priority for the financial institutions. Banks are challenged due to the new regulations, technology development and changing customer expectations. There is a must to find new ways to stay competitive and relevant on the market.

Figure 1: Innovative products and services offered by the new technology

Source: Authors' sketching based on Thakor, A.V, *FinTech and Banking: What do we know?*, Journal of Financial Intermediation, 11th February 2019

In fact, regardless of sector, technological innovation is essential for the future of any successful business. Industry 4.0 represents the new wave in the technological evolution of production, pushing more and more companies to meet the new standards set by a constantly changing market. Adapting the entire production cycle to the digital age of industrial technology will make the distinction between businesses that want to remain relevant in the current economic context and companies that make major efforts just to survive. The digitalization of production brings manufacturers into an area of high competitiveness due to the transformation of factories into connected and self-organized units.

Based on these directions, a comparative analysis of the three well known financing options was made in this research paper – unsecured bank loans, peer-to-peer lending and crowdfunding. Both advantages and disadvantages were taken into consideration, regarding individuals, companies and financial entities. The outcomes reveal the strong impact of digitalization and the changing consumer needs in terms of financing.

2. Crowdfunding

Through crowdfunding, an entrepreneur requests money in the online environment. It should have an increased awareness in order to have large audience, in order to ask for money from a great number of people. The presentation of the project must be explicit, specific and well-defined. Frequently, the startup offers the product or service at a minimum price to obtain the amount of money needed from the first customers to launch the new product or service. In fact, crowdfunding is one remarkably innovative way of attracting funds for a business idea from a specific community, from borrowers or strangers, mostly from those who genuinely believe in the project.

In the past, if an entrepreneur needed capital to launch a business or develop a new product, he had to work on a well-documented business plan or a prototype and start looking for potential investors. Hence, people had to request money from banks or other successful companies. As a matter of fact, the idea is to raise awareness of the business. Nowadays, a kickstarter program, launched through dedicated online platforms, will give to the entrepreneur the chance to present the idea to a large number of users. Thus, the audience is higher. Indeed, crowdfunding can be seen in two dominant forms – profit sharing and pre-ordering. By pre-ordering, an entrepreneur set different prices, a lower pre-price for investors and a regular price for standard customers, who decide to buy the product after it is launched. However, through profit sharing, an investor provides money for the company and will receive in return a division of forthcoming profits or equity securities. (Belleflamme, Lambert, Schwienbacher, 2014)

There are several types of funding, as:

- humanitarian projects (the investors do not require a return for the money, it is seen as a donation model),
- lending projects (money is provided as a loan, paid back with an additional interest rate),
- reward-based projects (investors are rewarded with an early access to the product or service or with being credited). (Bi, Liu, Usman, 2017)

Globally, there are a significant number of crowdfunding platforms. Each of them addresses a different target market. If Kickstarter is dedicated to creators and funders from the USA, IndieGogo and RocketHub are appealing internationally. Also, important to note is that if the funding goal on Kickstarter is not completed, all the funds are returned to the investors and the creator will remain with no money. All & More funding model is adopted by RocketHub, in which the creator is allowed to keep all the money even though the goal is not reached. A similar model is adopted by IndieGoGo as well. (Gerber, Hui, Kuo, 2012)

Altogether, crowdfunding is a fierce competitor to banks, mainly in the case of companies and SMEs (small and medium enterprises). Among the advantages of these new and revolutionary platforms are: low-cost business model, the use of Big Data in risk scoring and the speed. The success of this type of raising money depends on the success of the campaign that is usually online, having a viral component. However, crowdfunding has created very popular products like Oculus Rift (VR headset for PCs configured for VR) or Pebble e-Paper Smartwatch. (Mollick, 2014) Likewise, an entrepreneur may observe the impact of the idea, whether it is worth the effort or not, as a market research. The awareness is increased too, so when the project is ready, the business may have potential clients.

3. Peer-to-peer lending

Peer-to-peer lending is related to crowdfunding, as individuals are looking forward lending small amounts of money provided by other individuals, known as borrowers. Before 2005, there were few websites for this type of lending. (Havrylchyk, Verdier, 2018) Traditionally, an individual or small company that is looking for taking out a loan, usually goes to a bank or a financial institution. Thus, banks analyze the situation of the debtor, deciding whether he meets the minimum necessary conditions. If so, the bank will establish both the value of the loan and the interest rate. However, peer-to-peer lending is a form of direct loan between a creditor and a debtor, being an alternative to the traditional banking loan. Through this, individuals and companies can access loans from individual investors who are willing to place their own money, with a certain interest rate, for a specific period. This type of activity takes place mainly in the virtual environment, through online platforms, where both investors and potential customers meet.

A relevant aspect of this new type of loan is that a client can access the necessary funds from several investors, not just from one, and the repayment will be made directly to each source. Peer-to-peer lending platforms mediate the transactions between a client and an investor, under a specific cost. Thus, lenders can be both individuals or companies, also allowing banks or other credit institutions to take part in the funding. The revenue of the investor is interconnected with the interest payments, depending mainly on the borrower’s risk of default and the period of the loan. Borrowers can be, as well, individuals or companies. They should go through a credit rating process, that shows if a person is able to take a loan and under what conditions.

There are risks that lenders are exposed to, when they decide to invest in peer-to-peer lending:

- The duration of the investment is long, as the lender has to wait until the maturity of the loan (up to 60 months),

- Lack of liquidity,
- Taxation of the income,
- There is not the same scoring process as it is happening in the bank, so the lender is not sure that the borrower can pay back the money (risk of default),
- Restraint of the minimum investment for lenders.

Figure 2: How does mintos.com work?

Source: Authors' sketching based on information from www.mintos.com, accessed on 24th April 2020

An example of a FinTech platform for peer-to-peer lending is Mintos, being known as the largest platform in Europe. It accepts the investments in RON, while other peer-to-peer lending platforms does not accept it. Money is not directed to individuals, but to financial institutions or banks that offer loans. In fact, the investor will offer the loan to a company, which is keeping in touch with the borrower. If he is not able to pay back the money, the credit company is responsible for giving back the investment. Certainly, although this greatly reduces the chances of losing money, the risk is still high. No one guarantees that those companies will not go bankrupt, but the chances of this happening are slim. Moreover, there are many companies that guarantee loans on Mintos. Thus, the investments can be arranged in such a way to be as diverse as possible, covered by many or by all the companies present on the platforms. In the very unlikely situation when one goes bankrupt, the losses would be reduced to minimum.

Through Mintos, there are many investors who contribute to cover the amount of money required by the borrower. Thus, if someone needs 10.000 euros to buy a car, this amount can be raised from 10 or even 1.000, 5.000 or more people. In other words, it is not required a large amount of money at the beginning. If a lender wants to invest 10 euros in a loan, it is possible. The money is transferred through a bank transfer or the investor can use other more modern instruments to transfer e-money, like PaySera, EasyChange, Currencyfair or Transferwise. Deposits can be made in different currencies, while an exchange service is needed as some loans are made in foreign currencies.

On the other hand, if an investor decides to get out of a loan earlier, meaning to recover the capital and eventually a profit, he can list the loan on a secondary market. If the price is fair, the lender has the chance to get out of it faster. This feature is not available on any peer-to-peer lending platform.

As it can be seen in the figure below, the amount of money invested grew gradually from month to month. In April 2017, the loans funded through Mintos were 188.792.997 euros, while in April 2020, 5.180.436.077 euros. (Mintos, 2020)

Figure 3: Loans funded on Mintos from April 2017 to April 2020

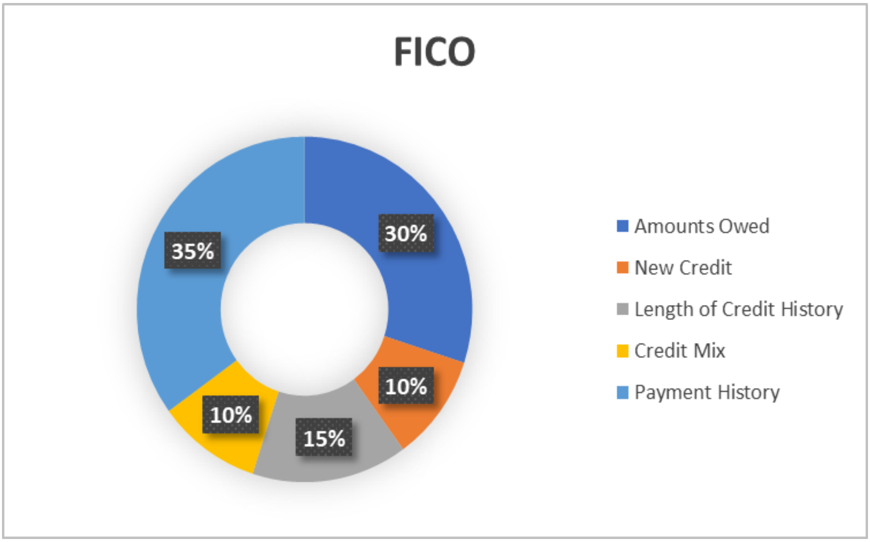
Source: Mintos, *Statistics*, https://www.mintos.com/en/statistics/, accessed on 25th April 2020

4. Bank loan

Banks, in order to keep up with technological progress, must adapt to customers and their needs. Of course, there is the challenge of competition, making banks always come up with something new and lower the commissions. Important to note is that lending online for companies is not yet possible in Romania. If peer-to-peer lending is intended mainly for individuals, crowdfunding comes as an alternative to a loan obtained in a banking institution for firms. Moreover, in Romania, the digitalization of banking processes raises legal issues on two main levels. The first concerns the procedures for identifying the customers, mainly regarding identification through video call and acceptance of a photography of the identity card. Secondly, there are limitations in accepting the contracts signed electronically.

However, a customized offer is calculated for a client based on the credit scoring, even in the online environment. FICO (Fair Isaac Corporation) is an internationally used algorithm that determines the degree of risk of a person that applies for a loan. Basically, the credit score is used to predict the behavior of a client as a future borrower. Thus, the banks calculate the probability of respecting the loan conditions and returning the money on time. The FICO score is a figure used to describe in a numerical way the quality of a customer as a potential customer of banks and the degree of risk that must be assumed regarding a loan. Both the score itself and the credit history can be found in the credit report. A major difference between the loans offered by banks and the alternatives found in FinTech's portfolio is this FICO scoring. An individual, new to market, will probably have a negative scoring, because he has no history with the bank, has never had loans, has never had a current account or has never received a salary in a current account. In this case, such a customer will maybe decide to take a peer-to-peer lending.

Figure 4: Importance of each category in determining FICO Score



Source: Authors' sketching based on myFICO, *What's in my FICO Scores?,* https://www.myfico.com/credit-education/whats-in-your-credit-score, accessed on 15th July 2020

Based on the previous figure, it can be observed that race, age, nationality, marital status or occupation are not taken into consideration when calculating FICO score. Nevertheless, of outmost importance is the payment history (35% of the final score). There are relevant elements that constitute the payment history:

- Details about the repayment of any kind of loan that the client had or still has;
- Number of days a credit was or still is overdue;
- Money that the client owes;
- Number of loans that are paid on time;
- Number of days since overdue loans, collection items or adverse public records.(myFICO, 2020)

On the other hand, a key element that can improve the credit history is the payment of utility bills on time. It may seem easy, but it has a crucial impact. In fact, a client that shows a high credit score is more likely to pay back a loan on time, while a consumer with a low credit score is considered at risk of default. Likewise, a client with a high credit score may be offered loans with lower interest rates and different terms and conditions, being in favor for them. Although the credit score is essential for enhancing the chances of getting a loan on favorable terms, it is not the only aspect that banks take into account when deciding who to lend to. FICO score does not include factors as current income, marital status, assets owned and employment. Still, these elements are relevant and banks pay attention to them when making a financial analysis.

Based on these, banks offer loans in a limited way, addressed only to customers with a good banking history. Lately, the credits have changed their appearance, meaning that there are no longer offered only in territorial units, but also in the online environment. Most banks in Romania offer customers the opportunity to take an unsecured loan online. Moreover, even financial analysis for a mortgage can be completed through internet and mobile banking. For instance, Banca Comercială Română has in its portfolio a mortgage known as Casa Mea. Customers may upgrade the way in which they buy their house, through a mobile application, where they can send documents online. Also, they are informed regarding the status of the analysis in real time, they may find out instantly when they have the credit approved and facilitate the communication with the bank through an online chat. (BCR, 2020)

There can be observed a marketing strategy in the activity of banks in the online environment, in terms of lending. Online loans have lower interest rates, lower than the interests that a customer is offered in the bank. This is due to the fact that banks seek to promote digital activity and eliminate unnecessary visits to branches as much as possible. However, these offers have a specific target market for users of different digital devices. Customers who do not own or use these means are encouraged to use them out of the desire to have a lower final cost of credit.

Finally, bank lending, online and offline, is still popular. Many clients do not trust other financial institutions. Yet, this is especially applicable to adult clients. Young people are open to novelty and do prefer digital financial solutions, which meet their needs and desires. Banks' popularity is likely to decline in the future, but the involvement of digital systems could be a lifeline for them.

5. Conclusions. On the way to a "new normal" – digital lending

The community is governed by technology, speed and efficiency. Certainly, the banking system must be responsive in terms of expectations of its customers. As a result, banks included in their portfolio four technologies for the customers: home banking, internet banking, mobile banking and phone banking. Banks have digitized their operations, but also the business model and the way they communicate with the clients. The banking system should offer speed, flexibility, agility and good interaction with customers, at any time and in any situation.

There is a question that is found in the mind of many people – financial technology and banking system, rivalry or synergy? It can be both, depending on the context. Indeed, FinTech companies have attracted certain bank customers, who preferred to close their accounts and all other banking products and services. They decided to open a digital account and take a loan online, at a FinTech company and started to enjoy the small commissions applied and the facilities offered. It is truly a new world. Customers gradually discover it. In addition, FinTech entities are following the digital revolution, launching new features frequently. However, there are also banks that have moved much of their business in the online environment. Maybe they did not manage to keep the customer retention fully, but still they did not lose such a large number of customers. There can be seen banks on the market that collaborate with financial technology companies in order to meet the expectations of the customers.

It is also necessary to point out the innovative products and services that are offered by the new technologies. They came to the aid of users in five directions: deposits and loans, retail, wholesale, investment and insurance. Why these five areas? Because these are the fundamental elements of the financial environment, worldwide. In this research paper, it was made an analysis of the loan market, revealing the cheaper alternatives for a usual loan – crowdfunding and peer-to-peer lending.

In the end, lending activity moves its place in the online environment. Altogether, the digitalization process of certain banking products is not impossible, but it involves significant effort, essentially for quantifying and understanding legal risks, correlated with the technical methods used. Thus, banks have managed to retain their customers by offering online loans. Although FICO scoring is inconvenient for new customers on the market and for those with a bad credit history, it protects banks for the risk of default. However, these non-eligible customers can also select one from various financing alternatives, through FinTech companies and crowdfunding and peer-to-peer lending services.

Hence, it is advisable for both banks and financial technology companies to frequently launch new digital products and services. Also, clients are encouraged to choose the right financing option for their needs, being focused on their long-term goals. Forthcoming, online financing options will be diversified and will be developed according to the clients' requirements.

Consequently, it is suggested to make a further comprehensive analysis regarding the impact of crowdfunding and peer-to-peer lending on the banking activity and the position on the market. In addition to this, it is compulsory to discover the new technological wonders for financing in order to be up to date with the current trends.

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