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The Struggle of Traditional Banking System in a New Era of Artificial Intelligence

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ABSTRACT

In a new era of artificial intelligence, taking into account a new behavior of the customers oriented to offline, the traditional banking system struggle with these challenges and has to update their regulatory frame and use digital technologies. The various forms of collaborations between banks and robo-advisers or fintech became a study of research. This article pointed out the benefits and the disadvantages of the traditional banking in comparison with the alternatives and concluded with the best combination on financial planning.

1. Introduction

Similar to Global Financial Crises (GFC - The global financial crisis is related to the period of dramatic stress in global financial markets, also in banking systems between mid 2007 and early 2009), the biggest economic shock in the modern history– the Covid-19 crisis generated changes in the banking system and provoked them to manage the crisis and improve their robustness. In the Covid-19 shock the digitalization has kept open the lending channel, in the meantime, the capitalization position of the banks has remained robust.(See Enria, A., 2021, pp. 2–3).These crisis have accelerated the transition to online services, which became the norm.

In our opinion we appreciated that, the success of the new banking business model, as it shows, is to combine digital intelligence with artificial one and human interaction. In this research, we underlined the importance of the classic banks in the post Covid -19 world, how they are nimble in a digital world, but we don't put in discussion the problem of survival of banking system as an industry. Digital transition is not the problem but the solution, which increases the efficiency, security and trust. Despite the widespread idea that Banks are like dinosaurs, which must disappear, the Robo-advisors are powerful tools when combined with personal interactions and the regulations of the banking system give clients new perspective and remodel the relationship with the bank.

The paper presents the characteristics of the new business model of banking in the new era of challenges, in the context of crises that accelerate the process of changing conditions of their operation, in comparison with the modern tools of artificial intelligence. It shows the need to assess the resilience of banking system in the context of the integration of digital solutions.

2. Literature review

The digitalisation process of the banking system involves delivering financial services like deposits, money transfers withdrawals, through the internet, cards, mobile phones, from the point of view of Peterson K Ozili, 2018. But, according to (Carmen Cuesta, M. R., 2015), this process is a way of communication between banks and their customers via internet or mobile phones. The term could be referred to transition from offline to online, giving the possibility to benefit of financial services like saving account, credit, bill payment.(Darryl Proctor, 2019). The new technology oriented banking services in the online medium and determinate the business model of banking.(Yoonseock Son, H. E, 2016).

Regarding the overall impact of technologies on financial sector, we can claim that technologies cause irreversible changes in the financial-banking system, integrating and gradually taking over the exercise of the traditional functions of this one.

We appreciate the generically named "blockchain" technology "Distributed Ledger Technology" seems to be the element that will revolutionize the financial field even more (and not only), thanks to the

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advantages it offers by combining three critical fundamental elements of the financial sector, especially the banking segment: high level of speed and security and decentralization of transactions.

3. Research Purpose and the Methodological Approach

The real purpose is to analyze the need of the banks in a digital world, appreciating also the new tools used in the financial technology and find out the right combination between the classic and alternatives in the fields of banking.

During the scientific approach, a series of research methods were used, from data collection and information processing to data interpretation and value assignment, closely related to techniques, like searching on-line information, analysis of bibliographic references, information synthesis, data correlation, own contribution.

4. Results and Discussions

Banks have proven their resilience- The Basel III standard aims to strengthen banks' resilience following lessons learned from the global financial crisis. The initial elements of the Basel III framework included increases in capital requirements, particularly for high-quality capital, the introduction of capital buffers and new standards for funding and liquidity. The final elements aim to improve the comparability and transparency of risk-weighted assets (RWA), which form the basis of Basel III capital requirements. Their implementation was originally scheduled for January 2022, but the timelines were extended by a year in response to the pandemic period.(See Budnik et al., 2021, pp. 1–2) and improve their robustness throw these characteristics:

- Migration towards digital revolution. Thanks to the IT infrastructures, the clients of the banks were served during lockdowns.
- Better risk management /de-risking policies
- Adequate asset quality management
- Greater transparency
- Lower leverage

Traditional banking system knew the lack of interest of the investors, while fintech reshaped the future of finance. Banking system had to reinvent their business models considering all the dimensions, like in the figure below.

Figure 1. The 5 dimensions of the new business model in banking

Source – Author s own processing based on the Purpose of Banking (A. V. Thakor, 2019, pp. 1–3) and Banks at the heart of the matter by Jeanne Gobat, International Monetary Fund(Jeanne Gobat, 2023, pp. 2–7).

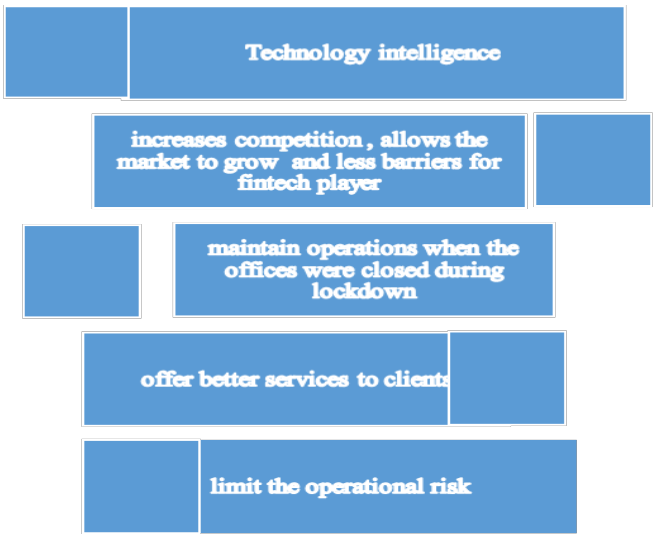

Figure 2. The impact of digital solution services

Source – Author s own processing based on the article issued by Amundi Asset Management - Banks in the post-Covid-19 world(Amundi Asset Management, 2021, p. 6).

This article highlights the alternative approaches versus classic one in the fields of banking. These crises have accelerated the transition to online services, which became the norm. The impact of digital solution service.

New and stricter regulations were imposed which reduced the banks flexibility. Many financial institutions have been improving their business models and rethink the way clients could be served in a digital age. It is sometimes said that the core business of banking is not lending but safeguarding of assets, manage properly the flow of information and the creation of money.

Choosing between robo-advisors and a traditional financial advisor on financial planning, because of the difficulties in managing investments volatility of the market and the retirement:

Table no 10. Investing and Money management options available in traditional versus modern models

ROBO -ADVISORS	**FINANCIAL ADVISORS**
Digital platform investing in a portfolio of assets, without human factor	Classic approach - Involving a human supervisor
The analyze is based on a survey consisting in a set of questions for identify the profile of the client	Take a look at all aspects of your financial life
automatically rebalance the portfolio of assets at certain periods of time	Manually make changes, analyzing together with the financial advisor
Lower costs	Higher costs

Source – Author s own processing based on the Study requested by the ECON committee- Robo-advisors How do they fit in the existing EU regulatory framework, in particular with regard to investor protection?(Philipp MAUME, 2021, pp. 10–13).

Fintech outpace banks in offering new services and products, but banks have multiple options to be attractive for the customers, that is why we think is important that banks has to collaborate with fintech.

Table no 11. Alternatives to the traditional banks

Traditional banks	**FINTECH**
Create and maintain relationship with clients, according to KYC policies for avoiding or limitting the risks	No policies KYC
Size is important, bigger - infrastructures, buildings	Size- is not important, smaller, but agile to thrive in a technological world
Key role in savings/investments/household financial protection offering legitimate advices for wealth management	Algorithms - efficient and safe experience, large number of clients
Fulfil regulatory requirements Has a governance role in credit creation –banks check the accounting rules in the lending process	Lack of regulations
Create money for the real purpose, but in the same time avoid money laundering	More nimble
Gather and protect client information – a key pillars of banks activities	Personal data stolen by cybercriminals
Good knowledge of households and national regulation (good data collect) Understanding local economy and social situations – important in lending process Confidendiality of data –important sourse of trust	Alternative operating model - to collect and merge data Large number of customer
ESG – new paradigm influenced investor behavior, changed frame work, new policy of banks include climate change, became a key competitive advantage	difficulties for new entrants (Big Tech –unfriendly ESG)

Source – Author s own processing based on the article Fintech and banking: What do we know?(A. Thakor, 2019, pp. 16–36).

In the digital era, the banks proved to integrate the strategy, technology and operational activities, became scalable for digital world, but creation of money (A. Thakor, 2019) are still prerogative of banks- See Philippe Brassac (Crédit Agricole CEO and President of the French Banking Association), "Money is a state prerogative which should be managed carefully managed in quantity, quality and security", Journal du Dimanche, 29 March 2021. Using the new open platforms or cross-selling (Amundi as of 20 May 2021) is significant challenge for banks to deal with unextend number of clients and offering a wide range of online services.

Role of banks:

- A main and specific economic role
- **Services -** management of deposits, payments, credit
- **Purposes-** safekeeping of assets, checking information- these 2 can be outsourced, but creation of money are prerogative of banks

Technological progress showed in the history of banking how the sector reinvented banking services and how these were transformed.

Crisis have accelerated the digital revolution and enforce banks to change their business model whereas they put the client in the center of their activities, changing infrastructure, employers skills.

In my (our) opinion I appreciated that, despite the widespread idea that Banks are like dinosaurs, which must disappear, the Robot advisors are powerful tools when combined with personal interactions, in other words, the success of the new banking as it shows, is to combine digital intelligence with artificial one and human interaction.

Alternative approaches of banking

To implement a dynamic business model, focused on the customer, technology and innovation, banks must adopt a more agile way of organization.

The traditional banking model, based on directions, departments and services, becomes an obstacle to innovation, to launch new products and services on the market. That is why the banks have implemented more dynamic models, with multifunctional teams, focused on strategic projects. The alternative approaches of banking involves important changes in financial system.

- Scalable for digital world, more efficient, security, trustee
- Extended number of clients using new platform- This is significant challenge for regulators/banks to deal with larger organizations and offer a wide range of online/mobile services
- Mergers and acquisitions - protect traditional banking. Banks will acquire fintech/neobanks to maintain their competitiveness and increase the number of customers
- Open platform – offer a wide range of services at competitive prices
- Banks will make cross-selling
- ESG savings/investment

In this research I underlined the importance of the classic banks in the post Covid -19 world, how they are nimble in a digital world, but I don't put in discussion the problem of survival of banking system as an industry. Digital transition is not the problem but the solution, which increases the efficiency, security and trust.

Banks seek a balance between legislation and market regulations, on the one hand, and risk and consumer management, on the other. The future belongs to digitized, standardized banks that understand and comply with legislation and regulations and value innovation. The Covid-19 period accelerated the digitization process and made possible the emergence of new online solutions and platforms. We point out that, at the level of Romania, banks try to maintain a balance between traditional and online banking, being prepared to provide more and more banking services through new technologies, but customers can still access these services in the units banking physicals.

5. Conclusions

Banks reshaped their business models safeguarding of assets, creation of money and lending in investment opportunities. Banks returns still remained below their costs of capital, because of lack of tighter regulation. The Covid-19 Crisis tested the resilience of financial system and the banking sector, especially, which were introduced new regulations. Despite the digital solutions that transformed the banking system, we recognize the value of banks in a digital world and bank branches are still important for customers, and also the power of banks to create opportunities to connect with the clients. From my experience in the banking system, I can say that the customers are still interested to communicate directly to a bank officer and to analyze together the best options for investing money and also to find the appropriate solutions for financing their projects. The current, standard operational activities like money transfer may remain in the online medium.

The sustainable development of the economy requires long-term similarities in level, dynamics and structure, at European and global level, these indicators having a lasting and important impact increasing decision-making power at the macroeconomic level. We can say that digitization has radically transformed the banking industry by bringing in the foreground new products, services and business models. This transformation involved time and led banks to adopt new technologies in order to develop a sustainable business strategy.

Technological evolution has brought with it major changes in behavior and customer expectations. As more and more people use the new technologies, business models are also changing, radically. Use of telephones smart mobile banking and investment services are examples of technologies designed to make banking services more accessible.

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