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DIGITAL TECHNOLOGIES' IMPLEMENTATION WITHIN FINANCIAL AND BANKING SYSTEM DURING SOCIO DISTANCING RESTRICTIONS – BACK TO THE FUTURE

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ABSTRACT

In 2020, the pandemic socio distancing restrictions affect both individuals and businesses. Financial transactions become a little more difficult to be conducted with cash, and online banking transactions are called to help the good development of economic activity. Having in mind that the stance in bank digitalization in each country differs, the paper aims to estimate the level of digitalization of banking sector, as well as reasons and factors determining the actual movements of digital banking. In order to achieve the objective, the paper is structured as follows, elaborates the changes in demand and supply of banking services as result of socio-financial disruption caused by the pandemic situation, financial digitalization and digitalization changes in the banking sector on global level, and the benefits of digitalization for individuals and businesses at the same level. Such approach secures the solid base for determining the measures and further steps for increasing the level of digitalization of the banking sector together with educating the population in the use of new digital technologies.

Key words: Digital finance; online banking services; app-based banking

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1. INTRODUCTION

The structure and design of a business or a healthy and reliable social environment are inherent in each, with amazing complexity in all its aspects with a basic challenge of smart implementation of new digital challenges [1].

The evolution of technology has been developed in all industries. Banking system allowed initially the spread of credit cards, debit cards and the connected POS and ATM, nowadays all payment tools are shifting to mobile apps, PCs or tablets. Banks starts to offer more activities then lending or saving. Nowadays, banking products include insurance packages, asset management; investments on financial markets; services for issuing new securities on the market; or services like arbitrage, hedging, due diligence or international banking. Banking sector developed their business from lending and savings to investments, portfolio management and intermediation. Moreover, new currencies appeared – cryptocurrencies. The financial markets have been digitized, making the physical financial markets (where the bargaining was done verbally) disappear [2-5].

Informatization and computerization of the society is one of the most important process [6] in the last 3 decades, which show its importance during a social and financial crisis as present one, in 2020. Financial and banking decision-makers are increasingly focusing on information communications, digital systems and rely on internet, to provide products and services for businesses and individuals. Through digital channels of distribution moving rapidly and multi-channeling becoming increasingly widespread, financial institutions and clients will need to focus not just on understanding product choice, but also on understanding the reasons for channel choice [7]. This new (or not) approach reflects a general belief in the potential of new technologies to promote social and financial inclusion, based on the idea that fintech helps with digital distribution channels and can have a major impact on the quality of the socio-economic life of the population, by providing more sensitive and transparent governance, as well as by improving the reach and provision of the necessary financial and non-financial services [8-11]. The spread of financial and banking information technologies is undeniable, the impact of which has radically changed the financial system and the way of carrying out financial transactions [10].

Digital technology has already begun to change the banking industry's business operations. It is easy for customers, however still a challenge for some banks to compete in this digital space, first because of the cost of building out digital platforms, and second because a digital-only strategy take from them of an important advantage, which is the strong sense of local identity they project [12].

The lockdown imposed to avoid spreading the virus attack, at the beginning of 2020, affect all societies, from individual, businesses and governments. The severe impact was everywhere and, in all directions, – social, economic, financial, and political. And during all these social distancing restrictions, remoting work from office to home and operate online financial services, especially payments, become a common behavior. Disasters (natural, environmental, manmade, accidental and deliberate) have dominated the news recently, and impose organizational decision making to re-focus, redesign their organizational culture and

their business's structure [9,11]. Banking industry more than ever, as all we need to manage our payments. It has been necessary that the whole world to be lockdown to see and understand, from the micro to macro level, that digital finance and digital banking is a system which brings efficiency not only to banks or financial institutions, but also to us. According to Crosman, consumers' use of mobile and online banking has skyrocketed during the coronavirus pandemic as banks have limited in-person visits to appointments or drive-through service, or completely closed branches. In April 2020, compare with pre-coronavirus time, 30% of banking customers were using their mobile banking app more, and 35% were using online banking more [13].

All we need is to understand digital banking system pluses and take advantage of it. Having in mind the view that digital banking is part of our life, the present paper aims to present the evolution of digital banking and how we can take advantage of it, in a socio-financial crisis, as a personal and business financial management tool [14].

2. RESEARCH METHODOLOGY

The research explores distinctive strategies, applied on six banks, demonstrating how, under the digitalization era, the banking sector is extremely dynamic and how technological investment succeeds to fulfil the customers' needs, and, at the same time, it allows access to new operators, foreseeing that those innovative strategies are successfully implemented. It is a qualitative research using data from international database [15], analyzing the changes in demand and supply of banking services as result of socio-financial disruption caused by the pandemic situation, financial digitalization and digitalization changes in the banking sector on global level, and the benefits of digitalization for individuals and businesses at the same level.

3. RESEARCH ANALYSIS AND FINDINGS

Digital technology has the potential to entirely change the way that majority people handle their daily financial transactions, especially in a time of social distancing constrains. Digital technologies are innovating and changing the way we live and communicate, work, buy and sell goods and services. When comes about banking and financial institutions, examples include electronic financial transactions, the Internet of Things, advanced robotics, advanced analytics (including big data, artificial intelligence and machine learning), wireless mobility and more others [16].

In 2019, the economist Das stated that fintech may be characterized by technological change in three broad areas of finance: raising capital, allocating capital, and transferring capital. In other words, fintech is challenging and disrupting all financial and banking system, payments system is changed, robo-advising platforms are changing the way complains are solved, capital is allocated, and products and services are efficiently offered. Therefore, fintech maybe understood as any technology that eliminates or reduces the costs of financial intermediation [17], 2019), and as a global digital movement, where technology is used to support and implement financial services, special in banking industry.

Digitalization approaches banking system way back, in 1960s, starting with cards and ATM. Later, in 1980s, once internet appears, digital systems began to connect businesses to businesses, retailers with suppliers, and buyers with sellers. In the same age, Artificial Intelligence, robots, and big data started to be developed as a science and integrated with businesses, especially financial businesses.

In the last decades, banks realized that digitalization improve their customer relationships and generate more competitiveness, giving business effectiveness, cost saving, increasing accuracy, time and risk saving, enhancing security and reducing fraud and money laundering

[18-19]. Currently, within COVID-19 pandemic times, global quarantine measures adopted by several countries, have adjusted the economic activities of the entities [20], which made digitalization more than ever need it.

As a driving force of efficiency enhancement, the increase of investments in technology was simply trailed by banking products and services innovation. The increasing complexity of electronic banking products has led to the expansion of customers. However, satisfying more sophisticated customers' needs forced a constant demand for new technologies [21]. Nowadays, after more than 3 decades, there are many channels to distribute banking products and services, such as ATMs, and electronic communications. Besides, not only regular products and services distributions channels were changed, also the structure of banking products. As clients – individuals and businesses – needs are changing, more personalized banking products are required. Clients' needs and preferences for consumption are the main engine for banking developments. Then, in this regard, according with Gigov and Poposka [21], the digital banking will give priority to the needs of customers before product creation. More than this, the banking system availability will increase the efficiency of businesses [22, 23]. In the present time, all banking transaction from home without visiting and spending time in queues and all the services are available for 24x7 are the main attraction of the e banking system. Nevertheless, the customer perception differs in service quality issues [24]. Security, price and time saving makes the differences.

Despite many researches and writing about the evolutions of fintech applications, digitalization of finance and banking services have been considered mainly from a customer perspective, rather than a technological evolution [10]. Extensive literature on the online banking is based on the Technology Acceptance Model (TAM) [25], which was introduced by Davis [26] for the first time to assess the introduction of information systems into organizations. The approaches based on extended TAM models applied to the online banking industry focused on the following drivers: trust; usage constraint; ease of use; accessibility; intention to use; perceived usefulness; government support; risk; perceived credibility; customer awareness; and social influence. The study methodology was also widely used to analyze the evolution of the spread of online banking in general terms regarding security, service quality, at a country level application [10, 11, 27, 28, 29, 30].

Taking into account the most relevant existing literature related to digital banking [10], reference will be made as perfect synonyms to *E-Banking*, *Electronic Banking*, *Home Banking*, *Digital Banking*, and *Online Banking*, meaning those services banking that can be used through the use of information technology, with internet access. *Mobile banking* [31], can be considered as an extension of the online banking, since it is referred to the access to banking services through mobile phones, smartphones, or electronic tablets, rather than using a laptop or a desktop computer. Moreover, banks offer online services at different levels, therefore it is possible to identify as *online banks* [32] those banks that do not have physical branches, but that offer banking services to their customers exclusively online.

The present research aims to see how digital banking is precepted by customers, individual and businesses, and tried to answer to the following questions: easy to open a bank account (time savings); easy to use; credibility to use in time of social distancing restrictions. From time saving and friendly opening account perspective, especially with digital app-based banks which cut the branch services, and remote everything online, the present study noticed the following advantages:

- Cutting bureaucracy – to open a bank account with an app-based bank it is much easy. All you need is to apply online for it, register your personal details, you do not need to

pay an opening fee, and your account is already open. The bank did not require any income statement, or work contract, or other similar documents.

- Open for everyone - Accounts are opened for any nationality and have no residency restrictions.
- Cutting time – it takes 5 minutes to open the account, and 1-2 weeks to receive the card allocated to your account.
- Easy financial management transactions – competitive time for transfer funds, from sender to receiver, the financial balance is updated automatically, and exchange rate almost similar to the markets, no added commissions and fees for banking transactions.

In terms of figures, database Statista [33] shows a relevant movements banking clients' preference for new digital technologies.

Figure 1. Transaction value in 2020, [33]

Figure 2. Number of users of digital banking services, [33].

The study revealed that, compared with 2017, the volume of digital payments increased in 2020, with 25% (fig. 1), and we expect this volume to increase more. In terms of digital banking payments segment, the number of users is expected to amount to 4,636.34m by 2024,

(fig. 2). In the same time, in the Mobile POS Payments segment, the number of users increased with more than 50%, from 2017 till 2020, and is expected to amount to 1,745.9m by 2024 (fig. 3).

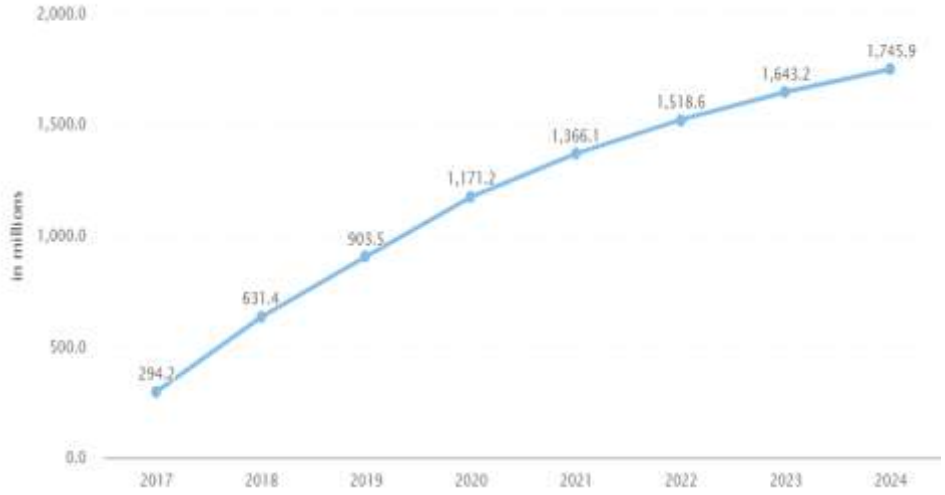

Figure 3. Mobile POS payment – users, [33]

When comes about app-based baking system, the research noticed that more than 45 million of clients choose to have an app-based banking account, which offers more flexibility and time saving for financial transactions, especially in times of social distance restrictions (fig. 4).

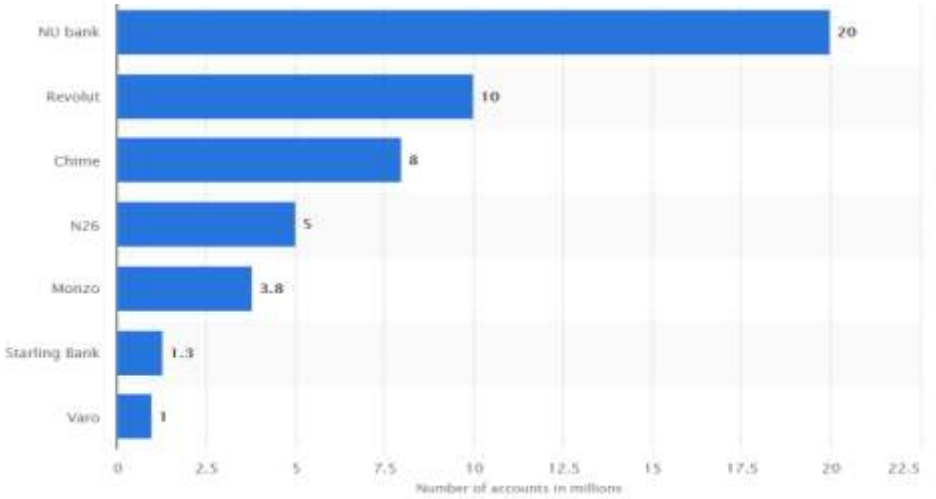

Figure 4. Number of customer accounts at select mobile app-based banks worldwide as of February 2020 (in millions), [33]

4. CONCLUSIONS

There is no doubt that the Covid-19 pandemic affect all of us. However, the research found out that, current social restriction rules helped business and individuals to learn and implement new communication technologies. Digitalization become more a necessity than an option [34]. The speed with which digital, mobile-first and app-based banks have managed to entice customers is nothing but short of impressive. London (UK) based Revolut have gone from approximately 1.5m customers in 2018 to over 10 million customers in 2020, with a similar growth seen with the Berlin based N26, [35].

If, at the beginning financial institutions, especially banking system were scared, now many services remote online, rather than face-to-face. Financial institutions are redesigning their operation structure, include digitalization, and respond to new customers 'requirements.

Researches, and businesses starts talking about new digital technologies and their impact way back, but implementation was reticent and slowly. Social distancing changed the course, hitherto considered normal, of economic and financial life, made us stop for a while, review what the true principles of good functioning are, and then pushed us to learn, to educate ourselves, and to adopt digitization faster than we would have thought. *E-Banking*, *Electronic Banking*, *Home Banking*, *Digital Banking*, and *Online Banking*, meaning those services banking that can be used through the use of information technology, all are clear for us, as long as we have internet access. Individuals and businesses, in the same share, starts to use app-banking services too, find the less costly and time saving. We are leaving today the future, that we talk about only couple of month ago. Is expected that all financial institutions and banks to offer their service only digital based.

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