Article

Technology Trends in Banking System and its Impact on Population of Different Ages

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Abstract. The paperwork aims to analyse the rapid advances in technology trends implemented in the banking system and how it affects the population of different ages, because, as it is known, we assist in a massive changing of demographics and lifestyle of people. To achieve this aim, the main points to be discussed are the traditional branch banking, which is giving place to electronic banking and, even more recently, to mobile banking and, how people are adapting to these ascending trends. The empirical research was done using Quantitative Method – Survey and Qualitative Method – Structured Interviews and provides important information on accessibility to mobile banking, relationships between age and usage of credit cards, going to traditional banks or going online and forecasts for the future of banking system. This study helped to understand the impact of digital banking on customers.

Introduction

Financial institutions serve as financial intermediaries between primary saving and borrowing sectors. In the current environment it has become critical for financial institutions to evolve strategies for competitiveness in the context of rapid changes with technological, economic, social, demographic, and regulatory environments. Also, globalization, regulatory compliance, risk management, technological innovation and demographics are the major transformative issues that determine and will determine soon the growth of global financial sector.

Consolidation and cross-border mergers and acquisitions (M&A) in the context of easing cross-border investment regulations are also visible trends observed in the financial sector [1]. Another key point is the technology that has transformed services offered by financial institutions into commodities. Information and communication technology (ICT) developments and trends in recent years have had great impact on the banking sector worldwide, increasing market scope and reducing transaction costs. In the main, banking institutions seek to gain competitive advantage by using ICT, including Internet technologies, to provide value added services to meet consumer needs at lower cost or as part of their corporate value proposition [2].

This topic is to highlight which are the most important changes in banking system due to new technology in some developed countries, like the United States, the United Kingdom, China, France, Germany and how these changes were adopted by people of different ages. Online banking is becoming one of the most popular payment methods in Europe, allowing customers of a bank or other financial institution to develop a wide range of financial transactions through their websites. Over time, Europeans' confidence in this electronic payment system has increased. Meanwhile, the use of physical cash is experiencing a significant reduction in some countries, such as Germany or Austria [3].

According to a survey in November 2019, 73% of respondents in Singapore, aged between 18 and 24 years claimed their interest in virtual banking. In recent years, there has been a growing proportion of the population in Singapore who use digital banking to pay bills or shop online [4]. While technology becomes more and more pervasive, an age-related underutilization of IT remains observable. For instance, elderly people (65 years of age and older) are significantly less likely to use the Internet than the average population [5]. This age-related digital divide prevents many elderly people from using IT to enhance their quality of life through tools, such as Internet-based service delivery [6].

Due to the era of digitalization, a lot of trends in banking sector were changed, for example the use of internet banking among the population of different states. In 2020, it was found that 96the strongest internet banking penetration in Europe, followed by Norway and Denmark [3].

This work underlines the novelties that arose in the banking sector and how the population reacts in accordance with age, mentality, and beliefs.

Increasing number of technologies, platforms and applications for the banking system may be a good alternative for certain population groups, while for others it could cause confusion and impossible to managed. Some problems (such as necessity to establish how these innovations have entered the banking sector in different countries and how different age groups of population reacted to the new changes and what should be done by financial institutions to satisfy peoples' needs) are under question.

The main aim is to analyse the online banking penetration in European market and how people reacted to it. To achieve this aim, the following tasks will be done.

1) to determine the most favourable countries for innovation in the banking sector;
2) to analyse the technology trends in the banking system;
3) to comment on the new technology trends;
4) to analyse population's behaviour towards changes.

1. Banking sector: *pro* and *contra*

1.1. Strategic trends in banking sector

Banking sector has always needed strategies to deal with different circumstances occurring in the world. With the imposition of more stringent capital adequacy and risk management, banks require to find the best solutions according to that specific issue.

Despite global challenges, the banking industry provides immense opportunities through expansion in new markets, technologies, and personalization to enhance customer relationship. For instance, the changing demographic profile has made it imperative for banks to develop specialized products and advisory services aimed for the older population.

The concept of banc assurance has huge potential to address the needs of older consumers. Insurance with its annuity features and tax advantages is well established in European regions because the trend observed is that the responsibility for retirement security is increasingly shifting toward the individual and away from government and employers [1, p.6].

Driven by the open banking revolution, retail banking has become an ultra-competitive sector. There is a huge demand for digital, easy-to-use services and fast processing of important documents like mortgage applications. People are more than willing to turn to other services if they feel they aren't getting the best service from their bank - for example, possibilities of Embedded Finance [7]. According to Finextra [8], the trends that are shaping the banking sector in 2021 are the following.

1. A renewed trend on customer experience. People want easy ways to manage their money, they want different apps, personalized services and banks that are approachable. The best way to do this is to start thinking in a "customer first" way. One is about selling a product; the other is about becoming part of a customer's journey through life.

2. The competition in the banking sector. Banks need to fight to attract and retain customers. With the advent of open banking, the rise of digital-native challenger banks and tech companies getting in on the payments business, traditional banks are operating in an increasingly competitive environment. Banks that introduce technology to make financial management easier across the board will find themselves in a good position to keep pace with these challengers.

3. Drive digital innovation. It is not just technological innovation that is important – banks also need human talent to get value from technology. They need brilliant people who can interpret and apply the insights derived from the massive amounts of data banks hold on their customers. There will continue to be an intense battle for talent, especially in technology departments.

4. Increase revenue. The retail banking sector has flatlined since the massive crash of 2008-2010. They have gone through the cost-cutting process, but most have been less focused on how to grow their top line. They need more customers, but they also need to earn more money from existing ones. The challenge is how to do this without alienating people. One way to do this is by personalizing products, understanding the individual customer's goals and how the bank can help them get there.

According to Celent [9], a leading research and advisory firm focused on technology for financial institutions globally retail banks should be considering their priorities across three horizons.

1. When it comes to digital customer engagement, efficient operations, or robust fraud management, banks should identify and close key gaps in capabilities immediately.

2. Banks need to make sure they have a clear strategy, such as cloud adoption, or how they will participate in the increasingly open ecosystem.

3. Banks should keep an eye on issues that are not yet urgent but are starting to receive a lot of industry attention, such as central bank digital currencies.

1.2. Technology trends

Business Intelligence and Digital Banking. Global technology trends indicate increased focus on next-generation remote banking solutions, business intelligence (BI) and analytics in transaction monitoring.

Internet and mobile applications have made next-generation remote-banking solutions a critical priority for banks. Banks could improve their personalized services for customers the use of online banking sites. Other technological innovations, such as cloud computing and virtualization, could improve the productivity and usability of web-based banking applications.

Digital banking can also be used as a tool to collect data and to facilitate the cross-selling of products and services. Many experts point out that the competitive position of banks could be further enhanced by their adoption of technology trends. Successful banks should need to have a system architecture that enables customers to have a full view of their banking services.

The role of BI and analytics is becoming more relevant in providing customized rewards, products, and investment solutions to customers. BI encompasses a comprehensive suite of dashboards, visualizations, and scorecards. New technologies like visualization, in-memory analytics, and service-oriented architecture (SOA) are facilitating the development and use of BI applications.

Smartphones became the dominant access point for online banking, but as consumers spend more time on their mobile devices than on computers, online banking is transforming into mobile banking. The mobile platform acts as a catalyst to electronic person-to-person (P2P) payments. Companies are making massive investments in P2P payment methods that enable to pay each other electronically.

Social media, including *LinkedIn* and *Facebook*, are now emerging as leading marketing channels used by banks to announce new products, services, or events and to receive personal feedback. In the era of increased use of technologies, it has become imperative for banks to make adequate investments in analytics and dashboards whereby meaningful analysis on real-time data gives bankers the opportunity to make daily decisions that influence their business.

In the context of increasing bank losses from cybercrime, banks must manage and have strong partners to handle security concerns across channels and devices. It has become vital for banks to use integrated systems to increase the ease and efficiency of streamlining delivery processes. Efforts ought to be aimed at streamlining channel systems consisting of branch systems, ATMs, credit cards, Internet banking and mobile systems into one cohesive process [7, p.8-10].

Another innovation is Savvy Banks, that are already looking at ways to use automation and AI to improve the customer and employee experience. They're starting to use automated services to help customers self-serve, while freeing up their teams to concentrate on where their skills can add the most value to the customer (in areas that need an empathetic and creative touch) [8].

Increasing Online Banking Penetration in Europe. In 2020, it was found that 96% of the Icelandic population access online banking sites, making Iceland the country with the strongest internet banking penetration in Europe, followed by Norway and Denmark.
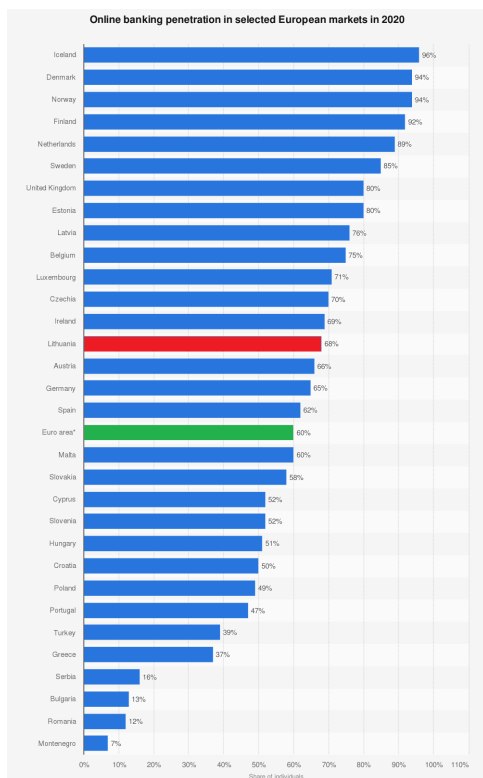
Fig. 1. Online Banking Penetration in European Market, 2020.
EU - green, Lithuania - red. Adapted according to Ref. [3].

Online banking is becoming one of the most popular payment methods in Europe, allowing customers of a bank or other financial institution to develop a wide range of financial transactions through their websites. Over time, Europeans' confidence in this electronic payment system has increased. Meanwhile, the use of physical cash is experiencing a significant reduction in some countries, such as Germany or Austria [10].

Mobile banking model and services.   The mobile banking platform combines payments, banking, and real-time, two-way data transmission for ubiquitous access to financial information and services. Mobile banking is the financial service innovation offered using Information and Communications Technology (ICT).

There are two ways in which people can access the services provided by mobile banking. The first way is when only customers of a bank can avail the mobile banking service from the bank and perform various banking activities. While, in the second one, unbanked customers can also perform banking transactions through their mobile service provider. Mobile banking services can be classified into SMS Banking, Application (Software) oriented, Browser (Internet) based model and Mobile Apps. The common activities which can be performed through mobile banking are balance enquiry, mini statement, money transfer, payment of bills and others [11].

1.3. Demographics: two opposite sides

 Effect of demographics on usage of mobile banking. It is usual to include demographics characteristics in models about technology use and their adoption. The impact of demographics on the adoption

of various electronic devices has been extensively studied. Howcroft et al. [12] revealed that younger consumers value the convenience or time saving potential of online and mobile banking more than older consumers.

These authors further found the educational levels of respondents did not affect the use of telephone or online banking. According to Crabbe [13], demographic factors play a significant role in adoption decisions. He found that social and cultural factors, such as perceived credibility, facilitating conditions, perceived elitism, and demographic factors, significantly affect adoption decisions for mobile banking. Also, both demographic and psychographic variables affect the adoption of new innovations such as m-banking – in particular, age, gender, personal income, and education. Mobile-savvy college students, who are using their mobile devices for services beyond calling and sending messages, will drive adoption of innovative mobility services, including mobile banking. If to think about mobile phone users aged between 16 and 34, they are most comfortable using mobile phones for financial transactions, while, for example, majority of people having 65 and above years will not be at all comfortable [11].

Customer's adoption of technology in banking sector There are various studies which highlight the customer adoption of technology in banking and map their satisfaction levels thereof. A study done by Polatoglu [14] indicates that early adopters and heavy users of internet banking were more satisfied with this service compared to other customers. Efficiency, convenience, and safety were viewed as desired end-state goals when using mobile banking. System and information quality significantly influenced customer satisfaction, while information presentation did not significantly influence customer satisfaction. Also, trust can play a crucial intervening role in the relationship between perceived value (system and information quality) and customer satisfaction [11].

Perceived usefulness has been found to have a significant positive effect on both attitude and usage intention toward use of Mobile Banking Services. Also, mobile interface usability (quick response time and easy navigation) and service has a positive effect on customer satisfaction. It is known that loyalty of m-banking customers was directly affected by satisfaction from m-banking services. Moreover, a positive relationship exists between attitude towards m-banking and intention to adopt m-banking, as consumers who enjoy wireless banking transactions and those who find mobile-banking services easy to use, display a positive attitude towards usage of mobile banking. Once service providers can deliver user friendly, and consumer-satisfying services, then Mobile Banking will be adopted by consumers [11].

Teenagers in using new technology of banking system It is instinctively known that mobile is a key channel for any number of things: from communications to gaming, on to navigation through to payments.

Existing studies covering a mix of demographics have shown that the use of mobile devices to bank is universally on the rise. According to the UK's Office of National Statistics, half of adults and more than three-quarters of 25-34 years old now manage their money online. With about one in five having made payments via their mobile phone and a quarter using it to check bank balances.

A strong enthusiasm is expected as teenagers are the first generation to have opened their bank accounts with tried and tested mobile banking applications already in place. Unlike their older siblings or parents, they have been able to dive straight into this platform without the need for a huge instruction, because teenagers are so familiar and intuitive then it comes to mobile applications [15].

Table 1. Onliners in the population of 65+ years in different countries. Adapted according to Ref. [21].

Country	Share of age group 65+ in population, %	Onliners in population, %	Onliners in age group 65+ in population, %
Japan	23.2	79	NA
Germany	20.7	82	43
Italy	20.2	54	12
Greece	18.9	46	4
Sweden	18.1	92	61
Portugal	17.9	53	11
Austria	17.6	75	29
Bulgaria	17.5	46	4
Latvia	17.4	68	12
Belgium	17.2	79	36

Research in the United Kingdom has shown that online and mobile banking among bank customers aged 11 to 18 has increased by 40% in just two years. The research also identified teenagers as now being far more likely to ask for a bank transfer from their parents for a trip or to go to the cinema than asking for cash. Half (52%) of under 18s who use current account are now doing most of the transactions online. On average teenagers' bank online 12 times per month – with 90% of log-ons coming via mobile phone. Just 10% of log-ons are made via iPads, tablets, or desktop. Russell Galley, Managing Director of Halifax said: "Today's children and teenagers have grown up with the convenience of the internet at their fingertips and so for many online banking is just part and parcel of how they expect to be able to manage their money." [16].

Elderly people and internet adoption for daily commodity usage Information technology (IT) allows members of the growing elderly population to remain independent longer. However, while technology becomes more and more pervasive, an age-related underutilization of IT remains observable. For instance, elderly people (65 years of age and older) are significantly less likely to use the Internet than the average population. This age-related digital division prevents many elderly people from using IT to enhance their quality of life through tools, such as Internet-based service delivery [6].

Among other groups, the elderly lag in using and benefiting from IT in general and the Internet in specific. Despite these benefits, a conspicuous age-related digital divide remains [17-20]. This digital divide means that despite all potential advantages, the elderly are less likely to have access to and to exploit the potential of Internet usage and IT in general.

As a result of demographic transitions, especially Europe is facing ageing-related challenges in creating an inclusive information society. Currently, nine of the world's 10 'oldest' countries (in terms of percentage of people aged 65 or over) are in Europe. While Japan leads this ranking with 23.2%, more than 20% of the population in Germany and Italy is 65 years of age and older.

The same age group constitutes more than 18% of the population in Greece and Sweden and more than 17% in all other European countries. Both Japan and Europe currently have so many elderly people and so few newborn babies that the ageing population has established a long-term trend that will continue for generations, see Table 1 [21].

While varying degrees of Internet adoption among the elderly populations of these countries exist (ranging from 4% in Greece and Bulgaria to as high as 61% in Sweden), we can observe an age-related digital divide in all of them. Notably, lower general Internet adoption is closely related to a stronger age divide. For example, in countries with low population – wide Internet adoption, such as Greece and Bulgaria, people aged 65 and older are more than 11 times less likely to be online than the overall population. Accord-

ingly, ageing populations and age-related e-Inclusion constitute fundamental European challenges.

2. Methodology

2.1. Data collection methods

The research purpose is to analyse the spread of online banking in Europe and how people of different ages tend to react to it. Whether the population is adapting their behaviour fast to the new changes in banking strategies or find the innovation suspicious, what is most important to the analysed population when it comes to banks' services, in which direction is used the online banking among people.

The aim of the research paper is to identify the main influential factors towards adoption of online banking: the age (if the teenagers are more sensitive than the elders or vice-versa), the preferences (if the customers prefer to go to a real bank rather than accessing the online version of the bank), actions done using online banking (what are the areas where people use their debit/credit cards) and important aspects (what is the most important thing when customers are thinking about banks).

To collect data, researchers make use of different data collection strategies. For surveys, using structured questionnaires are an important instrument for collecting primary data and typically involves collecting data on many variables from a large and representative sample of respondents. Also, within a qualitative research design, the data collection typically involves collecting a large amount of data on rather small, purposive sample, using techniques such as in-depth interviews, participant observation or focus groups [22].

Data can be obtained from primary and secondary sources and in this research, following primary and secondary types of methods are used to achieve the research purpose:

Primary Data. Primary data are data that are collected for the specific research problem at hand, using procedures that fit the research problem best [22]. Sources of Primary data are individual or focus groups, panels of respondents specifically set up by the researcher and whose opinions may be sought on specific issue or study. Collection of primary data is quite difficult as compared to secondary data, but it is quite reliable and accurate. For this research, the author has collected primary data using two different methods: Structured Interview and Survey.

Secondary Data. Secondary data are data collected earlier by other researchers or for other purposes than research, such as official statistics, administrative records or other accounts kept routinely by organizations [22]. For this research, the author has used an existing survey to be compared with the one conducted by the author.

2.2. Research Data Instruments

An important thing was to conduct literature review to create research data instruments suitable for the research topic and problem. With the information gained from reading and analysing the information from books, articles, statistics, blogs and websites, the survey questionnaire and the questions for the interview were designed. The survey was then distributed by an online tool – Google forms, and the interview was conducted via e-mail and Zoom platform.

Survey Data Instrument (Quantitative Method). A well-established primary data collection strategy is the survey. In a survey, a large and representative sample of an explicitly defined target population is interviewed. Characteristically, many standardized questions are asked, and the respondents are coded in different answer categories. A survey is carried out when researchers are interested in collecting data on the observations, attitudes, feelings, behaviour, experience, or opinions of the population [22].

The questionnaire was designed with seven questions according to the following technique: the gender of the respondent, the age (five categories of age groups), the fact if the respondent has or not a bank account and a credit card, the preference of the respondent towards online or real banks, actions done using online banking and important aspects when the respondent is thinking about banks. All the questions helped the author to solve the research questions about the usage of online banking among different age groups.

Interview Data Instrument (Qualitative Method). A popular method of data collection is the interview in which interviewees are given the floor to talk about their experiences, views, opinions and so on. This instrument is flexible and sensitive to social context [22].

For this research, structured interview was used to collect data from people having an economic background. The idea behind choosing this instrument was to collect information from interviewees with different age on the topic of Banking Technology Trends and how this sample of population sees the effects of technology in the banking sector.

A total of four questions were asked in a document sent via e-mail and then the respondents had to think of the answers and send it back to the researcher or to connect to Zoom platform and talk to the author. The starting question was about the selected population background and the field of activity. The second one was about the opinion on the new technology trend and especially online banking. The third question tried to highlight the point of view on the accessibility young and old people have to this facility. The last question collected ideas on possible new technology trends in the banking sector.

2.3. Sample Selection Strategy

For successful research, a researcher should understand the importance of selecting the suitable people, who have the required knowledge, experience, and ability to answer the questions in a right way. The survey is the data collection instrument that involves several respondents with different or similar backgrounds. The respondents were invited to complete the survey on the platform Google Forms, and it was available for a period of 10 days, starting from the 10th of November 2021 and ending on the 20th of November 2021. A total number of 71 respondents participated in this survey.

Structured Interviews are a method to gain maximum accountability and a clear point of view because the author focuses on targeted people with the right background to answer the questions. A brief introduction of the respondents is presented to validate that the respondents are reliable and have the knowledge and skills within the subject that author has chosen for the research paper.

The author believed that it is important for the reader to get feelings about the respondents that were interviewed, especially their studies and activity. The selection for the interviewees was based on very high knowledge and experience, i.e., teachers with a great academic achievements and students with high grades and activities in the academic community.

3. RESULTS

3.1. Results of Interview (qualitative)

For the empirical part of the research, the author used non-anonymous structured qualitative interviews. Such an interview method is advantageous, because it helps the researcher get the needed information from a primary source, which makes it easy to be implemented. On the other hand, the prominent disadvantage is that the respondents could not have the necessary background to answer the questions, or they can talk too much about the concepts they are trying to explain. The author considered this method the best to be implemented, because the author is in an economic environment and this made easy the process of finding suitable people, who have the experience needed for answering the questions so that the findings would be useful for the research.

A diverse range of people were interviewed, with different economic backgrounds and coming from different countries (Republic of Moldova, Romania, and Lithuania). Following findings were discovered by the author after analysing the answers of the four respondents:

3.2. Results of Survey (quantitative)

The survey was conducted for 10 days through the platform Google Forms and the author is going to describe the key findings from it.

As shown in the Fig. 2, having a bank account has a visible relationship with the age of the respondent. People aged between 19 and 25 are the ones having the highest percentage of owning a bank account (54.93%), being followed by people having between 31 and 45 years (12.68%), while the age group 45+ are having a bank account in proportion of 1.41%. almost half of the teenagers that answered the questionnaire have a bank account (9.86%) and the ones not having are of 8.45%.

As underlined in the Fig. 3, the relationship between the age and having a credit card is like the one between the age and having a bank account shown in the Figure, the age group trends being quite the same. The leading position of having a credit card is occupied by people having between 19-25 years (53.52%), being followed by the group of 31-45 years (14.08%) and 16-18 years (12.68%).

According to the Fig. 4, there are high differences of preferences between young and old people. Teenagers and young people, mainly tend to want to solve their issue online, being more open-minded to technology and comfort. On the other side, are the people having 45+ years, which surprisingly, would also prefer to do everything online and are not conservative as all the theories state.

The sixth question of the survey was with multiple choice to see what the most important aspects of a bank's perception are. The participants prioritized them the following, as shown in the Fig. 5: the most important things are Trust with 66.2% and Customer Service with 60.6%, being followed by Terms and Conditions with 50.7% and on the last positions are Digital Services (38%) and Financial Advice (32.4%)
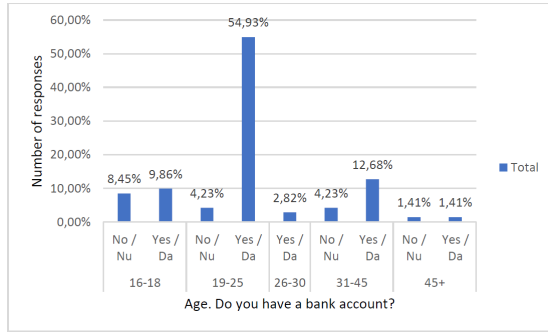
Fig. 2. The relationship between the age and having a bank account.
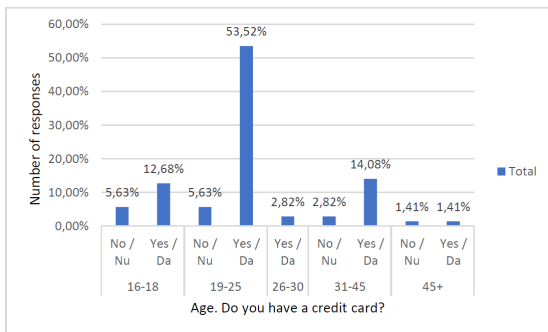

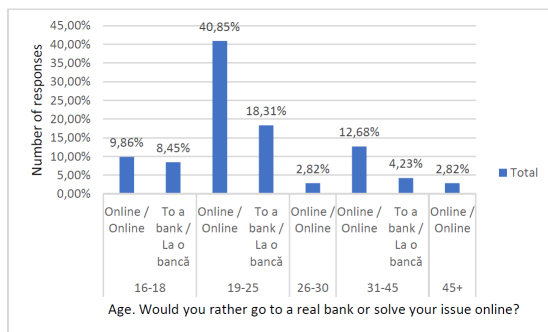Fig. 3. The relationship between the age and having a credit card.

Fig. 4. The relationship between age and preference for online or traditional bank.

A similar question was asked in a survey conducted in 28 countries from across the globe and for them the priorities are shown in Fig. 6. There can be observed that Trust is on the first place for both surveys, as well as Financial Advice being on the last place. In the worldwide survey, Terms and Conditions are on the second place with 18%, followed by Digital Services with 17% and Customers Service with 14%.

The last question in the survey was about the actions done using Online Banking and it was also a multiple-choice question. As stated in the Fig. 6 , it can be underlined that the population uses Online Banking the most for Shopping (81.7%) and for Transactions to other people (74.6%), being followed by the action of paying bills with 64.8%. Only a few respondents use Online Banking for other purposes (8.5%) or don't use it (4.2%).

Conclusions

The age influences the fact if a person is having a bank account or not, as from the survey, people aged between 19 and 25 are the ones having the highest percentage of owning a bank account (54.93%), being followed by people having between 31 and 45 years (12.68%). The age also influences if a person is owning a credit card or not, the proportions being similar to those from having a bank account. There are high differences of preferences regarding solving the issue online or by going to a traditional bank between young and old people. For this aspect, an interesting thing was observed by the author, especially the thing that all the respondents having 45+ years answered that they would prefer it online. The population analysed prioritize the most the trustfulness and the customer service at a bank. The actions done using online banking are mostly shopping and transactions to other people.

1. One of the aims of the study was to determine the countries where it is favourable to innovate the banking system. The United States, the United Kingdom, China and developed states from the European Union, like France or Germany are the ones where banking innovation is overtaking in the first place. Also, Europeans' confidence in the electronic payment system has increased, showing how the use of physical cash is experiencing a significant reduction in some countries, such as Germany or Austria.

2. The study provided the guidelines of technological development which is entering more and more spheres of our lives. The banking sector is not an exception and here are underlined some technology trends that all the banks are trying to follow and to align their policies with the requirements of people towards technology.

First, technology made everything easy and comfortable for people. Now, customers will look for those banks that provide electronic services and pay attention to their satisfaction through
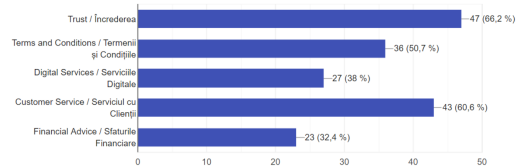

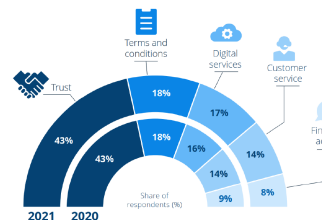Fig. 5. What is most important to you when you think of a bank?

Fig. 6. What is most important to you when you think of a bank? Adapted according to Ref. [10].
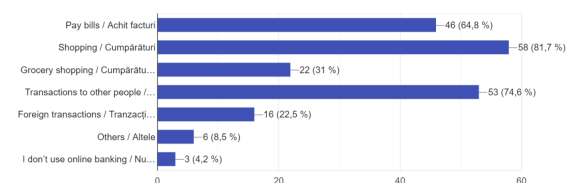

Fig. 7. What actions do you do in online banking?

different apps, feedback forms or even small talks with them. Banks have already implemented online and digital banking, artificial intelligence during peoples' transactions, as well as the opportunity to open a bank account online.

Secondly, the competition in the banking sector is now determined by the level of digitalization and will win those banks who invested in their technical development.

Thirdly, banks will need talented people to work in their IT department, where they will create the user-friendly apps and websites, will take care of customers' cybersecurity, and will solve every problem regarding technical issues.

Finally, it is also important to have revenue and to keep old customers, as well as to attract new ones. For this, banks have already thought about personalized services.

3. This study helped to understand the impact of online and mobile banking, which can be specified as digital banking. For the customers it is of a great importance to have good experience with the usage of banking apps and websites and to accomplish this, the banks have introduced technological innovations, such as cloud computing and virtualization. Besides the experience with the online banks, customers should trust the banks and that their money are safe during the transaction or in the savings account.

For this, the administration of banks is concerned with cybercrime and innovate the security of data storage, intercountry transactions and keep an eye at the issues with ATM machines. Another innovation is Savvy Banks, that use automation and AI to improve the customer and employee experience, especially through automated services to help customers self-serve.

4. Research analysed population's behaviour towards technologies and banking system. Interviews and survey data pointed the main aspects of different age groups and their beliefs according to banks.

Recomendations

It is considered that a lot of functions of traditional banks will disappear and there would be fewer employees. It is considered that banks should prepare for changes regarding cryptocurrencies. The banks should work a lot in the sphere of cybersecurity. Several recomendations could be formulated.

1. It is recommended for the banks to develop their apps and websites in a several number of different languages, to be accessible to a lot of people from different countries.

2. It is recommended for the banks to increase the level of trust by doing the update of customers' data once in several months or by having campaigns involving the cybersecurity department.

3. The banks should observe the trends of interest rates at different alternatives of financial institutions.

4. Regarding the old people, the employees at banks can develop some informational sessions for them, aimed to explain and help with the usage of new changes in the technological way.

5. Also, for young people, especially for teenagers, banks can organize sessions where to explain the main features, how to protect their account or what are the benefits of different banking instruments.

Abbreviations

BI	-	Business Intelligence
P2P	-	Person-to-Person
SOA	-	Service-Oriented Architecture

Authors' contributions

Keisha LaRaine Ingram chose the article's topic, methodology, formulated a strategic idea, analyzed existing technologies. Anastasija Ciubotaru reviewed the literature, presented the analysis, collected the data, evaluated the obtained results and formulated general conclusions. All authors read and approved the final manuscript.

Conflicts of interest

There are no conflicts to declare.

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