Challenges in Digital Product Development at Latvian Commercial Banks

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Abstract

Purpose of the article The purpose of the article is to determine what digital banking products are currently available to the clients in Latvia, to find out how clients assess the usefulness of these products, and to consider potential challenges commercial banks have to face while launching new digital products.

Methodology/methods The research is based on the analysis of the theoretical literature, synthesis and comparison of the Latvian banking sector data and the information included in the financial statements of particular commercial banks. Quantitative analysis based on two structured questionnaires was used to obtain empirical data. 150 completed client questionnaires and 43 expert assessments were used in the present study. Empirical data processing and analysis were performed with the help of Microsoft Office Excel software.

Scientific aim Scientific aim is to determine the most significant factors that have an impact on digital product launch and development in the financial sector. The current study contributes to the existing body of research on the challenges faced by the Latvian banking sector.

Findings Based on the research results, the challenges the banks may face introducing digital solutions have been identified. Insufficient level of client proficiency has a major influence on the application of digital solutions. Other essential factors that influence digital solution launch include client age differences and personal habits. These factors determine the differences in service use in definite client groups, as well as client opinions about service security.

Conclusions Remote client services will become more widespread and they will not be limited solely to the traditional internet banking; there will be a constant search for new methods to ensure more convenient and more efficient client service. However, to make sure the banks are able to successfully develop service channels, it is recommended to adjust them to client needs. In turn, insufficient client readiness for the application of digital solutions may both impede adoption of new digital solutions and limit client opportunities in service use.

Keywords: digitalization, technological solutions, bank clients, assessment, service channels

JEL Classification: G21, L86

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Introduction

In recent years, development of digital technologies has had a considerable impact on the financial sector, promoting improvement of the existing banking services and introduction of new financial solutions. In the last five years, Latvian commercial banks have significantly expanded their digital service range, providing their clients with the opportunity to try a variety of new technological solutions. Traditional banking services are being gradually replaced with newer and more technologically advanced ones, however, at present, client expectations regarding bank activities in the area of digitalization are not completely clear – either they expect development of yet more advanced services, improvement of the existing digital services, or there are other aspects that clients consider important.

1 Technological Development in the Financial Services Sector

Improvement of the selling process efficiency is largely connected with the management of relationships among the main stakeholders (Šimberová, 2014). Introduction of innovative financial technologies and process digitalization have become a customary management issue in the financial sector. It is the banking clients who experience it at its most, as technological development is changing the traditional banking model and the financial sector as a whole. Technologies have become an important factor in provision of financial services (Frame et al., 2004; Bons et al., 2012) and not only financial service providers but also clients should adjust to a new reality.

In a definite period, technological changes in the field of banking were mainly related to payment system transformation: cheques (1945), the first credit card (1958), ATMs (1967), Telex and SWIFT transfers (1977), debit cards (the 1980s), internet banking (the 1990s), crowd funding and cloud computing (2005), cryptocurrency, e-wallets, robotic automation and Big Data analytics (2010) (Ashta and Biot-Paquerot, 2018). At present, technologies have become an integral part of financial activities, and the work of commercial banks is greatly influenced by new market players – FinTechs (financial technology firms) (Alt et al., 2018).

It is forecasted that in the coming decade innovations in the field of financing may decrease the number of bank employees by approximately one third (Citi GPS, 2017). In turn, Accenture PLC (2014) consider that in order to succeed in the digital environment banks should be able to fully meet financial and non-financial client needs, which can be accomplished introducing innovative solutions and ensuring continuous and advanced services. Banks should evolve into “everyday banks”, that is, banks should provide their clients with the services that accommodate all their needs, even if they go beyond the traditional banking service model (Zhuming et al., 2017).

The aim of the research conducted by Accenture was to discover whether the clients were ready to use banking services offered by popular enterprises (PayPal, Google, Amazon, Apple, WalMart) in case they had been provided with this opportunity. Research results (3,846 respondents) demonstrate that younger generation clients are open for application of alternative banking services, whereas older generation clients are more likely to stick to traditional banking services (Accenture, 2015). Thus, developing technological solutions banks should primarily concentrate on younger generation client needs, as it is younger generations that are subject to a more pronounced influence of innovative technologies. In turn, the research conducted by DBR Research aimed at determining the most important banking trends in 2018 showed that the most significant aspects in financial organization forecasts were as follows 1) removing client friction in service application process (61%); 2) Big Data – improved data use (57%); 3) multichannel service delivery (42%); 4) “API – standard application pro-gram interface” (35%); 5) “building partnerships between banking and financial technology enterprises (FinTech firms)” (27%); 6) “expansion of digital payments” (26%) (Marous, 2017).

Payments are becoming more integrated, banks will develop comprehensive understanding of their clients and that will allow developing more competitive offers. At the same time, innovations provide clients with the access to the previously limited assets and services, as well as ensure better product awareness and control over product selection (World Economic Forum & Deloitte, 2015).

2 Trends in Digital Product Launch in the Latvian Banking Sector

In the first half of 2018, the profit of the Latvian banking sector amounted to 133 million EUR, which is a 19% decrease compared with the results of the first half of 2017. Of 30 May 2018, the aggregate banking sector capital amounted to 3.1 billion EUR. It did not change much compared with the 1st quarter of 2018, which at-tests stability of the banking sector. The results of the 2nd quarter of 2018 summarized by Finance Latvia Association show that on the whole Latvia is still in the period of economic growth. Characterizing the Latvian banking sector it may be

mentioned that much attention is paid to the international sanction policies, as well as Anti-Money Laundering/Combating the Financing of Terrorism issues and observing the principle "Know your client" (Finance Latvia Association, 2018).

The main aim of new digital solutions is speed, mobility, security and applicability of services. The data of the Latvian banking sector demonstrate that enterprises actively use the opportunities provided by financial technologies: 1) 99% of all payments are made using internet banks or payment cards; 2) 94% of bank clients have access to electronic bill payment facility; 3) Open Banking platforms cover 70% of clients and provide access to 11 million clients in the EU and Northern Europe (Finance Latvia Association, 2018).

The Alternative Financial Services Association of Latvia confirms that 2018 witnessed rapid development of financial technologies. According to the research on the FinTech sector, the most rapid development is expected in peer-to-peer lending platforms (70%), payment systems (53%) and e-commerce (47%) (Aboltins, 2018).

Already in November 2017 the Bank of Latvia introduced the service accommodating the instant payment scheme of the Single Euro Payment Area. Using instant payments, clients can make transfers to more than 1,000 banks in the EU countries. Currently, only three Latvian commercial banks provide instant payments (Citadele, SEB and Swedbank), but it can be forecasted that along with the development of instant payment technologies banks and other financial enterprises will offer a new service to their clients – an opportunity to make payments using a mobile phone number (Helmane, 2018).

Finance Latvia Association unites 28 financial sector enterprises. In nine months of 2018, five most profitable banks were Swedbank, SEB Bank, Luminor, Citadele Banka, and BlueOrange Bank. On the whole, the categories of offered services are similar, however, there are certain differences in the range of services. Authentication tools are among the most popular digital solutions, for example, Smart-ID (Swedbanka, SEB Bank). Other banks have developed their own solutions – the clients of Luminor Bank may use "Nordea Codes" app, at the same time, the clients of Citadele Bank may use innovative services authorizing with Touch ID (touch function), Face ID (face recognition function), as well as using Mobile Scan, which allows authorizing by scanning the "color code". BlueOrange Bank has developed a mobile Digipass Blue Key that supports Touch ID and Face ID functions. Technological solutions offered by these banks are summarized in Table 1.

Table 1 Technological solutions offered by Latvian banks

Technological solutions	Name of the bank				
	Swedbank	SEB Bank	Luminor	Citadele Bank	BlueOrange Bank
Mobile application and internet bank	+	+	+	+	+
Instant payments	+	+	-	+	-
Authentication tools	Smart-ID (Basic and Qualified), eID	Smart-ID	Nordea Codes application	Touch ID, Face ID, MobileSCAN	Mobile Digipass Blue Key (with Touch ID and Face ID)
Contactless payments	Contactless smart cards, payments by telephone	Contactless smart cards	Contactless smart cards	Contactless smart cards, payments by telephone, cPay bracelet, cPay sticker	Contactless smart cards
Other	-	Digital coin jar	-	Payment card with transport e-card functions, X-card, touchscreen ATMs	Contactless smart card ATMs, remote account opening

Source: own elaboration

All banks offer contactless payments to their clients, however, Citadele Bank offers the widest range of contactless payment facilities – payments by telephone, cPay bracelet (it is possible to make payments using the bracelet), cPay sticker (telephone sticker that allows making payments).

Several banks have also developed other digital solutions, for example, client of SEB bank may use digital coin jar (the sum of each purchase made using a payment card is rounded off and the difference is transferred to the

savings account), Citadele Bank offers its clients a card with transport e-card functionality. Citadele and BlueOrange banks have introduced specific functionalities also in their ATMs – touchscreen and contactless smart card ATMs. BlueOrange Bank is the first bank in Latvia that introduced remote client identification process that allows opening an account without visiting the bank. Onsite client identification has been replaced with video counselling (BlueOrange Bank, 2018).

According to the data summarized by Finance Latvia Association, of 30 May 2018, 69.9% of all clients used internet banking, whereas on 31 December 2017 this figure was 66.7% (Finance Latvia Association, 2018). The number of internet bank users keeps growing and that suggests that clients are gradually changing their habits and get adapted to process digitalization. Of 30 May 2018, Luminor Bank reported the largest proportion of internet bank users (87%), Swedbank (82%) was ranked second, SEB Bank (68%) was ranked third, Citadele Bank (50%) was ranked fourth, whereas BlueOrange Bank (42%) finished fifth.

Digital solutions come at a considerable cost. Citadele Bank stated that in 2017 it invested more than 3 million EUR in digitalization and development of innovations (Citadele Bank, 2018). In turn, BlueOrange Bank investment in technology exceeded 1 million EUR (BlueOrange Bank, 2018).

It should be pointed out that Citadele and BlueOrange Bank have invested considerable funds in the development of digital solutions, and it can be observed that these banks reported the largest increase in the number of clients in 2018. The number of Citadele Bank clients increased by 5% in six months, whereas the number of clients of BlueOrange Bank grew by 35%. It means that process digitalization facilities attraction of new clients.

From 14 September 2019, the European Union adopted Commission Delegated Regulation 2018/389 on the technical standards regulating secure user authentication came into effect. It has very serious implications. For instance, Swedbank should ensure that code card users switch to a more secure solution – Smart-ID – until September 2019, which poses a considerable challenge for both the bank and its clients.

3 Research Methodology

The aims of the present research are to find out client and expert opinions on the digital solutions offered by the banks, to determine the level of client preparedness and the role preparedness plays in the application of new technological solutions, as well as to collect expert opinions on whether banks provide sufficient support in educating their clients. In order to reach these aims, two survey questionnaires have been designed:

1) The first survey questionnaire consists of two parts – introduction and the main part. The introduction includes description of the socio-demographic profile of respondents (age, sex). The main part comprises eleven questions, including three matrix questions (Likert scale), one ranking question (with an opportunity to rank answer variants from 1 to 4), two multiple choice questions (including an option to suggest one's own answer variant) and five closed questions.

2) The second survey questionnaire is made of two parts, the first presenting the socio-demographic profile of respondents (age, sex, respondent's work experience in the financial sector). Employees with various work experience (more than one year) were includes in the survey to be able to appreciate the differences in opinions regarding process digitalization among employees depending on the duration of their employment.

Description of respondents:

1) Respondents of the fist questionnaire were invited using social networks – Facebook and Twitter, the main eligibility criteria to take part in the survey was the presence and regular use of an account in a Latvian bank. The survey was sent out to each respondent individually – 430 questionnaires were sent and 150 questionnaires were returned, i.e. by 35% from the total number of potential respondents. Out of 150 respondents, 70% were female and 30% – male. Distributing respondents by age group, 53% of respondents were aged 26 – 35 years, 22% – under 25 years of age, 20% – from 36 to 50 years, and 5% were over the age of 50.

2) 43 bank employees answered the questions of the second questionnaire (77% were female and 23% were male). Distributing respondents by age group, 20% were in the age group 'under 25 years of age', 50% respondents fell into 26 – 35 age group, 28% were in the age group 26 – 50 years and 2% were over the age of 50. With respect to work experience, the respondents were distributed as follows: 35% respondents

worked in the financial sector for 1 – 3 years, 25% – for 3–5 years, 5% – for 5 – 10 years, and 35% of respondents reported work experience in finance exceeding 10 years.

4 Results and Discussion

In order to reach the research aims, the authors have set numerous tasks: 1) to conduct a survey among bank clients to identify client needs; 2) to conduct the survey among field experts (bank employees). That would allow discovering the habits in the use of technological solutions by clients in different age groups, determining client education level and learning about the current client needs.

High ranking of the internet banking functionality may be explained by the fact that in Latvia this facility has been used for more than 20 years, and it has been developing gradually. In turn, introduction and development of mobile apps have been rapid and they have come into active use only in recent years.

Table 2 Frequency of application of remote bank client service channels (own elaboration)

Service channel	Bank service channel application frequency			
	Very often	Often	Rarely	Very rarely
Internet bank	45%	29%	13%	13%
Mobile app	42%	45%	11%	2%
Branch of the bank	6%	14%	43%	37%
Telephone bank	8%	11%	33%	48%

Source: own elaboration

It can be seen from Table 2 that application frequency of internet banking is 45% and that of mobile apps – 42%. Internet banking and mobile apps are the main service channels that clients may use to solve emerging issues independently, not contacting the client adviser. The majority of respondents rarely use bank services at bank branches and telephone banking.

Respondent answers to the question “In your opinion, which recently introduced digital solutions are the most useful?” are presented in Figure 1.

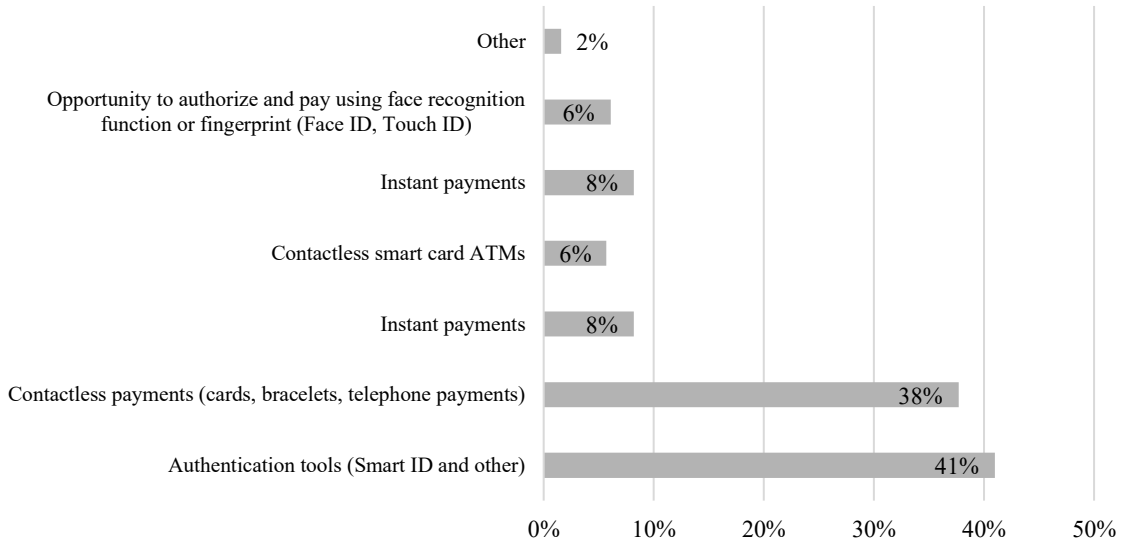

Figure 1 Assessment of the usefulness of digital solutions introduced by the bank (client assessment)

The clients ascribed the highest ranking (Fig. 1) to the authentication tools (41%) (Smart-ID and other) and contactless payments (38%) (cards, bracelets, telephone payments) – these solutions were recognized as being most useful by 79% of respondents. 8% of respondents appreciated the usefulness of instant payments, and 6% of respondents voted for the newest authentication functions – Face ID and Touch ID, as well as contactless smart card ATMs. 2% of respondents selected the option "Other", of which three people indicated that they did not use any of the mentioned services, and one person considered cash withdrawal facility as the most useful function. Authentication and payment functionality that is supported by Face ID and Touch ID is one of the newest functions, which is currently provided by only one Latvian bank, therefore, it may be assumed that only a limited number of clients have had a chance to try and evaluate this service.

Client willingness and readiness to use solutions offered by the banks is one of the determining factors while making a decision on the launch of a new solution. Clients consider authentication tools and contactless payment facilities as the most useful digital solutions offered by the banks. They mention service security, internet banking, mobile app functionality and remote service opportunities as the most important criteria in banking service use. The answers indicate that clients call for functional and user-friendly and at the same time secure financial service provision processes. The above-mentioned criteria are an inherent element of a high quality service provision process, and they should be ensured by every service provider. Client survey results demonstrate that clients do not feel sufficiently confident about service security and that may influence client decision to use a particular technological solution.

Expert answers to the question "Assess the level of bank client readiness to use digital solutions" are summarized in Figure 2.

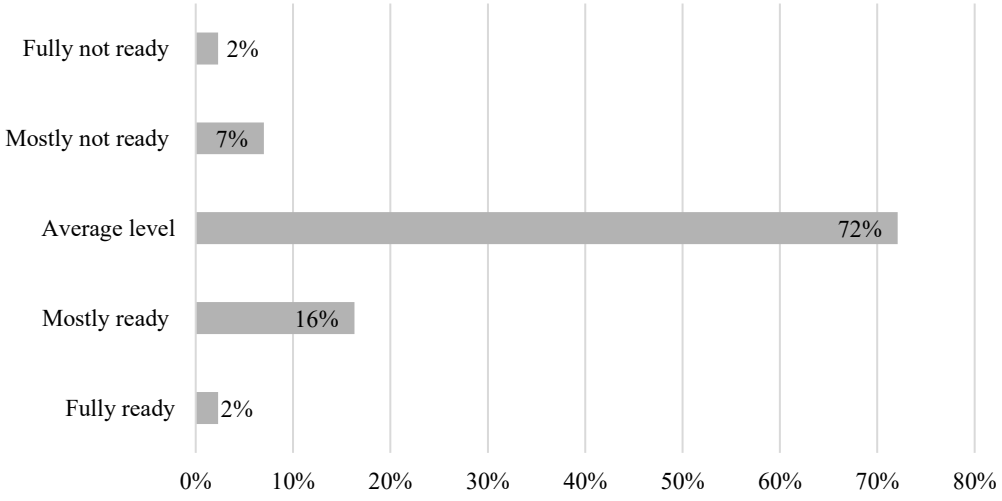

Figure 2 The level of bank client readiness to use digital solutions (expert assessment)

The majority of experts (72%) evaluate the level of client readiness as average, 16% selected the option "mostly ready", and only 2% answered "fully ready". 7% of respondents estimate client readiness level as "mostly not ready" and 2% as "fully not ready". It may be concluded that the level of client readiness is not sufficient taking into consideration rapid development of digital solutions and the essential role they play in the everyday activities of the clients, which in its turn calls for application of certain knowledge. It can be assumed that if banks intensify their involvement in educating their clients, the level of client readiness will also grow, which consequently will increase the number of users of digital solutions and motivate clients to use the newest solutions.

The experts were asked a question "In your opinion, which factor has the main influence on the scope and speed of digital banking technology development?", the answers are given in Figure 3.

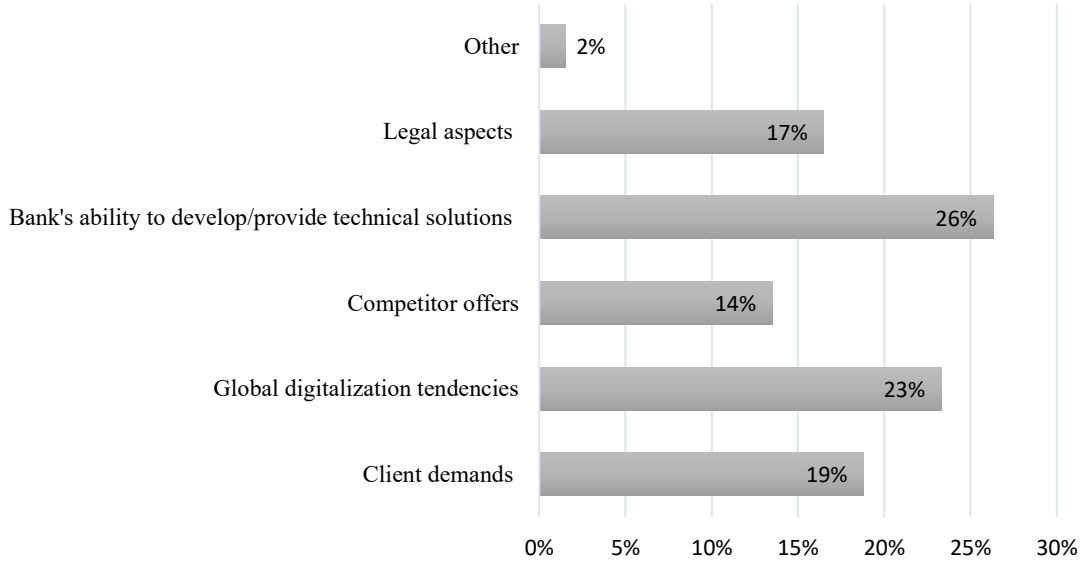

Figure 3 Correlation between the scope and speed of digital technology development and specific aspects (expert assessment)

26% of respondents selected the option "Bank's ability to develop/provide technical solutions", a slightly smaller fraction (23%) considered that introduction of new services depends on "Global digitalization tendencies", in turn, 19% selected the option "Client demands". A yet slightly smaller fraction of respondents (17%) selected the option "Legal aspects" and 14% selected the option "Competitor offers". 2% of respondents opted for the answer "Other", indicating their own answer variants – "Change of client habits" and "Bank's ability to handle security issues".

For example, code card exchange process planned by Swedbanka may be impeded by the following client-related factors: 1) poor client proficiency and low awareness of the new solution; 2) limitations in service use imposed on definite groups of clients (age, available infrastructure); 3) insufficient client confidence in the security of the used services. Despite the fact that the switching of the code card users to Smart-ID is another step to digitalization of banking services, it is important to stress that the main idea behind this move is concern about client security, and that is one of the topical bank priorities.

Customer equity is an aspect determining the total business equity, and within a business model, customer equity management is manifested as business decision-making (Kita and Šimberová, 2018). Business decisions may concern not only the clients, but also other stakeholders. A bank may outsource the functions related to educating their clients to its cooperation partners, for example, establishing cooperation with the Latvian mobile network operators guided by the following considerations:

1) mobile network operators have a wide client base and are well recognized by the clients, which distinguishes them from other service providers.
2) also clients from older generations attend service outlets of mobile network operators (mainly to settle telephone bills), and that provides the banks with the opportunity to reach this client group that needs special support in using Smart-ID.
3) sufficiently large number of customer service outlets in different Latvian cities will allow reaching a wide range of clients, and that is essential in order to ensure the necessary pace of code card exchange.
4) mobile network operators are characterized by sufficiently high level of awareness of the process digitalization, and that may become an important consideration selecting potential cooperation partners.

Mobile apps and internet bank are two most important service channels that have a large potential for development. The research attests that bank branches are losing their popularity, and digital solutions started to play an increasingly important role in client service provision. It can be mentioned that the majority of bank clients use internet banking services to settle their everyday financial issues. Mobile apps are slightly less popular, and that may be explained by limited functionality of the applications, as well as insufficient level of client awareness about functionalities of mobile apps.

It is essential to stress that a certain fraction of clients may face limitations in service provision using any of the newest banking solutions. This will mostly concern older generation clients, as well as people who do not use smart devices or those who have limited access to the internet. Service limitations may also be conditioned by insufficient client proficiency, that is, it may happen that a client does not know how to use a service and thus evades using it. Summarizing the client and expert survey results it may be concluded that bank employees face fewer difficulties adopting new digital solutions, whereas bank clients in the age group from 35 to 52 years old experience certain problems acquiring digital solutions. The above-mentioned considerations imply that irrespective of the level of digitalization of technological processes of a bank, certain groups of clients will still have the need for personal contact.

Only one third of bank clients state that digital services offered by the banks are fully comprehensible and user-friendly, at the same time, experts in their answers stress the importance of educating and informing the clients, pointing out that currently banks are not sufficiently involved in the client education process. Experts consider that provision of comprehensible user-friendly services may have a considerable impact on the client decision to use digital solutions.

It can be pointed out that assessing service criteria, experts indicated that the most popular and the most useful bank services were not considered complicated, in turn, the services in much lower demand were evaluated as complicated. This observation repeatedly points at the correlation between the demand for a service and its user-friendliness.

Conclusion

Several priorities set by the Latvian banks can be mentioned. First, if banks want to provide their clients with suitable financial solutions, it is necessary to analyze client needs. The second tendency indicates that banks will start using the newest and most advanced data collection and data processing methods and will turn their attention to automation processes and the use of artificial intelligence. The third tendency envisions development of service channels and their adjustment to client needs. It may imply that remote services will become more and more popular, and the process will not be confined to the traditional internet banking services; banks will constantly seek for new ways to ensure more convenient and more efficient customer service.

It may be concluded that the Latvian banking sector is technologically advanced and ready for process digitalization, and that is of utmost importance taking into consideration rapid technological development. Customer-centricity, needs analysis and creation of positive client experience are the main future priorities of the banks. Global development tendencies in the field of digitalization put pressure on the banks making them continuously develop innovative services, offering their clients solutions in line with the current tendencies. Banks should sustain their competitiveness not only on the local level, i.e. in Latvia, but also on the global level, therefore, they should invest considerable effort in developing and launching new services, at the same time adjusting them to the needs of the Latvian population.

The banks should also be aware of the problems they may face introducing digital solutions: 1) challenges in determining client needs – as the range of digital solutions is really wide, it may be difficult to determine which solutions and services would specifically meet the needs of the Latvian population (taking into consideration the differences in client age, personal habits and specifics of the local digital environment); 2) lack of client confidence – launching a new solution it is difficult to foresee client reaction to this solution and whether the clients will be ready to use it; 3) insufficient client preparedness for application of digital solutions – clients may experience difficulties learning how to use new digital solutions, and that may limit client opportunities to use the service.

The regulations adopted by the EU in 2018 (MiFID2, PSD2 and GDPR) definitely have an influence on process digitalization, which on the one hand promotes development of digital services, but on the other hand potentially limits service provision activities of financial institutions in case they fail to comply with effective laws and

regulations. Moreover, it may happen that process digitalization will develop faster than the legal framework regulating it and that will impede introduction of innovative services due to legislative gaps.

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