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# Financial sector changes and technologies: a look at fintech in Latvia

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## ABSTRACT

**Purpose.** To research drivers and technological issues in the financial sector with regards to fintech companies in Latvia.

**Methodology.** Interviews with leading fintech industry experts in Latvia. The research team conducted nine expert interviews out of thirty potential expert interviews within the research: six C-level expert interviews, two expert interviews with heads of IT and two expert interviews with heads of HR.

**Findings.** Increasing competitiveness among incumbent market players has forced traditional business model modification; investor demand for continuous cost decreases has led to the dismissal of highly skilled and paid employees with the result that evolving and accessible technology has magnified entrepreneurial behaviour. Fintech companies are primarily focusing on customer-centric automatized processes that are designed based on descriptive and predictive analytics models developed by business analysts and data science teams. Fintech companies are not only changing the financial sector by offering more choices to their customers but also providing technology companies with new niches and possibilities to expand their business.

**Originality/value.** We empirically researched what kind of changes have arisen in the financial sector; what the main drivers are for those changes; what kind of technologies or platforms are used by fintech companies; and what kind of technologies or platforms are considered as prospective for the financial sector in Latvia. The answers to these questions could offer guidance for financial sector representatives, which could be helpful for development, taking into account that technology's correlation with social acceptance has driven digital transformation changes.

**Paper type:** Research paper.

**Keywords:** Digital Transformation, Competency, Financial Sector, Technologies, Fintech, Latvia, Platforms.

## INTRODUCTION

Metaphorically, financial sector change is compared by academic researchers with challenges faced by US manufacturing companies in the 1980s, and financial sector technology evolution is most observable in the taxi and hotel industries, where technology has transformed traditional services into decentralized online platforms just recently. It is mentioned in some literature sources that, since the financial sector is challenged by new start-up companies that combine finance and technology, thereby creating customer-centric disruptive innovations, the incumbent banking industry is experiencing a shift in its business model and processes (Li *et al.*, 2017; Schulte and Liu, 2017; Gomber *et al.*, 2018).

Alt and Puschmann (2012) argue that the financial sector started to experience steady changes after the financial crisis in 2009 due to tightened financial regulation and the innovative downstream of technological solutions, which caused major changes in customer behaviour. Anagnostopoulos (2017) agrees with Alt and Puschmann (2012) that changes in financial regulation together with rapid technological development in the finance domain cause financial sector structural change, transforming financial sector business models and process outputs.

Digital transformation is penetrating the financial sector. The financial sector is challenged by new start-up companies that combine finance and technology, thereby creating disruptive innovations.

Bons *et al.* (2012) reveal in their research that, historically, the banking industry can be considered as technology adaption pioneers with extensive investments in technology to support their business diversifications. Scott *et al.* (2017) continue to research the impact of investments in technology implementation on financial sector development from a historical perspective. The authors discuss observations of the 1980s and 1990s, when academic researchers were extremely concerned about the impact of technology adoption on macro and micro-level economic outputs. According to the authors, evidence collected by academic researchers over the last two decades has shown that technologies have yielded notable economic returns. Scott *et al.* (2017) discuss how innovative companies can gain a market share over their competitors by introducing new operational processes, new products and services or, in other words, overriding pre-existing market conditions with technological advances. The authors' research demonstrates that companies with intensively applied technology capital experience faster productivity growth.

The authors of this paper elaborate a concept of the impact of technology expansion on financial sector development, stating that technology promotes new product development and process improvements, and in fact, both aspects foster each other under continuous

technology development conditions (see Figure 1).

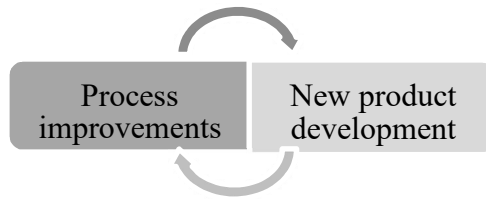


Figure 1. **Impact of technology expansion on financial sector development**

Source: Created by the authors based on Scott *et al.* (2017)

The authors perform a study of information technology's impact on the financial sector of Latvia to research changes and technologies currently used and considered as prospective in the financial sector. The authors carry out interviews with leading fintech industry experts.

## **THEORETICAL ASPECTS OF DIGITAL TRANSFORMATION AND FINANCIAL SECTOR STRUCTURAL CHANGE**

### **Digital transformation**

During the last decade, digital transformation has been penetrating the social, governmental, industrial and entrepreneurial domains. Academic researchers in the information technology, business and economic fields frequently explain digital transformation based on the following two main elements: new business model creation and process enhancement. There is no generally acknowledged definition of digital transformation due to its relatively short history and interdisciplinary nature.

Gray and Rumpe (2017) attempt to investigate the definitions of digital transformation by distinguishing between the concepts of “*digital*” and “*transformation*” for an extended understanding of the term. According to Gray and Rumpe (2017), “*Transformation*’ describes a general process that starts with some initial situation that moves toward a changed, and supposedly better situation”. The authors point out that underlying transformation within the scope of digital transformation is rather a continuous evolution of new business models and processes or continuous changes of targeted domains and most probably may never meet a stable end. Gray and Rumpe (2017) suggest that “*digital*” entails changes driven by information technology allowing one to process large amounts of data in real time to provide stakeholders with profound insights about their business

processes. Kotarba (2018) specifies that digital is the “*formation of new entities and relationships driven by application of information technology*”. Ebert and Duarte (2018) support the concepts discussed by Gray and Rumpe (2017) and describe digital transformation as a technology-driven continuous change process to increase productivity. The authors declare that digital transformation helps incumbent market leaders address customers’ future needs by adapting processes to the necessary digital changes in order to be ahead of the competition among other incumbents, but the incumbent market leaders are rather passive in disrupting or cannibalizing their core incumbent products; therefore, there is still an opportunity for new technology-based startup companies to explore and occupy gaps existing in the market (Ebert and Duarte, 2018).

The present authors agree that rapid technology development has enhanced multiple processes to evolve at the incumbent company level directly and indirectly. Increasing competitiveness among incumbent market players has forced traditional business model modification; investor demands for continuous cost decreases have led to the dismissal of highly skilled and paid employees with the result that evolving and accessible technology has magnified entrepreneurial behaviour. Figure 2 shows that, apart from completely new company and business model creation, it is possible that within start-up companies digital transformation is driving the replacement of the existing business model with a completely new one. The authors maintain that new business models can be run together with existing business models and recent trends also represent new business model acquisition and integration in addition to the existing business model. Moreover, the authors argue that the focus of start-up companies on sustainable business plans is related to their relatively short life cycle. Digital transformation entrepreneurs are creating new business models with the purpose of developing their business to the level where it is possible to seek acquisition deals from incumbent enterprise solution companies. After their business is sold, entrepreneurs look for a new start-up and new business model as technology evolves.

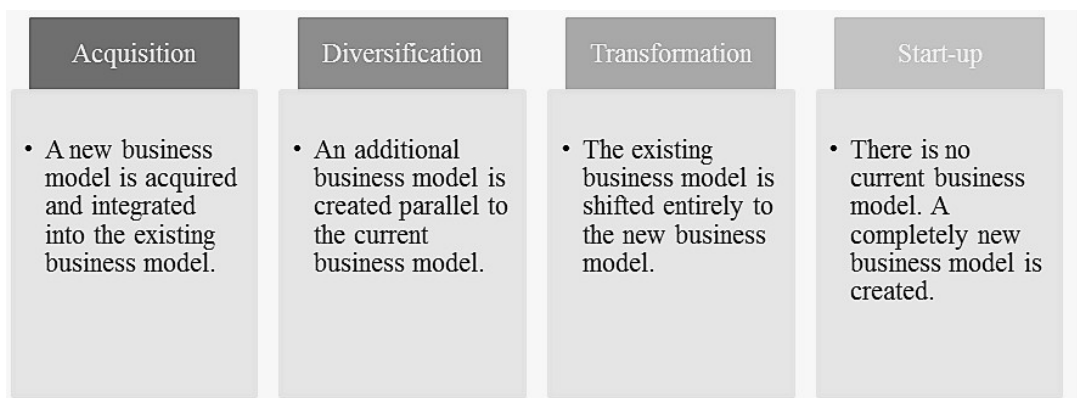


Figure 2. **Business model modification types based on digital transformation**

Source: Created by the authors based on Geissdoerfer *et al.* (2018)

Based on the above, the creation of new business models within digital transformation as an indicator of changes is widely discussed by many academic research authors, but there is a lack of in-depth research on new business model creation associated with digital transformation. Kotarba (2018) has conducted extensive research on the new business model created by digital transformation.

## Financial sector structural change

The authors of this paper argue that changes in the regulatory environment of the financial sector, increasing financial service costs through fees and commissions, customer lock-in business models and technology development for inside process-oriented improvements have forced entrepreneurs to fill in the gap of business opportunities. New finance and technology-based companies offer financial products to underserved customer segments and decrease the time, speed and costs for financial products using technology advancement in an era where social acceptance of technology has been achieved. There are significantly less customer lock-in business models for technology-based financial companies and processes developed by companies that are oriented primarily towards customer process improvements.

Companies that combine finance and technology are abbreviated as fintech in academic literature sources. Although fintech is a broadly used term to denote finance and technology companies, its definition is still ambiguous among academic researchers. Zavolokina *et al.* (2016) claim that “*fintech is a living body with a flexible and changing nature rather than a stable notion that is transparent and clearly understood*”. Alt *et al.* (2018) specify that fintech differs from the terms “*digital finance*” or “*e-finance*” used in earlier periods due to the following two key forces that are attributable exclusively to fintech: process disruption and service transformation together with technology innovation. The authors argue that there are three level differences between the fintech phase and the digital banking phase. Contrary to incumbent banks, fintech companies adopt core internal processes at the organizational level to be customer-centric and shift internal central competencies to data analytics and online channel management. Customer service and transaction handling competencies are secondary for fintech due to in-house automatized processes based on API connections. The authors reveal that fintech companies at the business network level are extensively networked with specialized external partners, who complement core in-house technology platforms and related processes. Competition among fintech companies tends to be high, and fintech customer retention is relatively low due to reduced switching service costs. In comparison to incumbent banks, the regulatory level of equity to be maintained by fintech companies at the external organizational level is lower and there is less supervision at the international level (Alt *et al.*, 2018). For fintech differentiators from digital financial and e-commerce companies, see Figure 3.

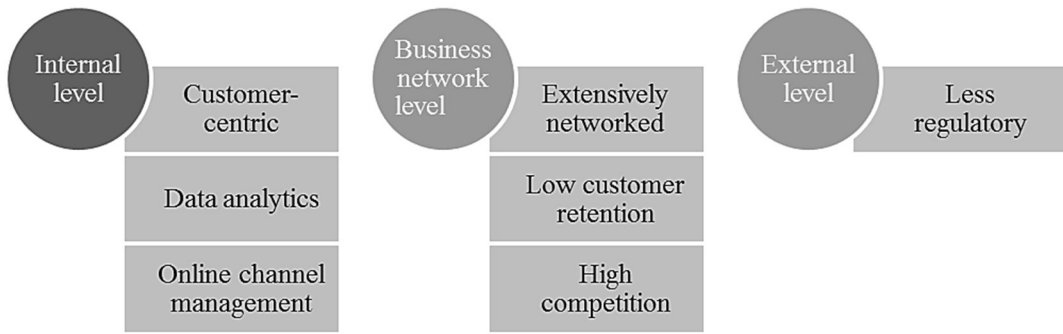


Figure 3. **Fintech differentiators from digital financial and e-commerce companies**

Source: Created by the authors based on Alt *et al.* (2018)

The authors argue that the main differences existing between the incumbent bank and fintech business models are firstly related to the internal level. Fintech companies are primarily focusing on customer-centric automatized processes that are designed on the basis of descriptive and predictive analytics models developed by business analysts and data science teams using advanced data analytics tools like PostgreSQL, Python or R. At the same time, incumbent bank technology improvement processes are related mostly to internal operational process improvements, analytical capacities are still developing as most banks face the issue that only 20% of customer personal and behavioural data are in electronic format (Schulte and Liu, 2017), and most incumbent banks are still managing offline channels with face-to-face recognition for customer onboarding and servicing due to business processes established a long time ago and in conformity with regulatory requirements.

Alt and Puschmann (2012) discuss how financial sector change is caused by changing customer behaviour. The authors point out that “*digitally native*” customers are seeking electronic channels and demanding more transparency and more technology-based and customer-focused financial service solutions, which typically are not established in the banking industry. The authors argue that this is changing the whole concept of customer service processes in the financial sector. The authors of this paper maintain that the statement of Alt and Puschmann (2012) is in line with the previously discussed observation that digital transformation has been driven by the social acceptance of overall technology development.

Also, Anagnostopoulos (2017) considers demographics to be one of the driving factors of financial sector changes. The authors accept the concept that “*digitally native*” customers have completely changed the perception of how customer processes will be designed for highly technically proficient digital clients and that fintech companies are created to meet the needs of people who have opted for financial services provided completely online, where speed, assistance on the spot and great reach are key factors, thereby no longer visiting offline branches. The present authors maintain that new financial sector players

who are delivering new concepts of how to serve customers' financial needs using technology are stimulating change throughout the sector.

## RESEARCH METHODOLOGY

### Type of research and design of the research instrument

The process of qualitative research was designed as face-to-face expert interviews and the definition of central interview questions for the research based on the literature review and related questions.

The expert interview study was constructed by asking a few open-ended interview questions, and the authors sought to collect detailed views and opinions from the interview participants.

The interviews were conducted on the premises of the company whose representatives were interviewed, and potential competition clauses were discussed and agreed on before the interviews were started to avoid collecting any harmful information.

Three central questions were defined to explore the central concept of the study performed by the authors: (1) What kind of changes have arisen in the financial sector? (2) What are the main drivers for those changes? (3) What kind of technologies or platforms are used by fintech companies and what kind of technologies or platforms are considered as prospective for the financial sector in Latvia?

The interviews took place from 17 December 2017 to 5 January 2018; one interview was carried out in English and all other interviews were carried out in Latvian. The expert interviews were conducted over a short period of time and the authors made sure that the questions were not reformulated so that the interview results were comparable.

### Profiles of experts

The authors conducted nine fintech expert interviews out of thirty potential expert interviews within the research: six C-level expert interviews, two expert interviews with heads of IT and two expert interviews with heads of HR. The experts represent Mogo, Cream Finance and Sun Finance, which are all fast-growing, technology-driven, international lending companies, as well as Twino (P2P investment/lending platform company), Monea (instant payments company) and Nordigen (customer screening services company).

The authors of the research analyzed the profiles of the experts based on information provided on their websites and in LinkedIn profiles.

## C-level expert profiles:

1. a bachelor of science in business and economics and worked for a leading online lending company, from 2009 to 2016.
2. an MBA degree and experience in the banking sector.
3. an MBA degree and has been employed only by Monea.
4. a bachelor's degree in business and economics and has broad work experience in marketing and project management.
5. a bachelor's degree in computer science and an MBA. The expert has ten years' experience in the customer service field.
6. an executive MBA degree and has been employed only by the fintech company he founded.

## IT experts:

1. CIO who has various licenses and certifications from Microsoft and six years' work experience in the management of software development in the online gambling industry.
2. CIO who has a computer science background and technical work experience with Exigen Services.

## HR experts:

1. a master's degree in business management and nine years' work experience.
2. a head of HR who has HR education and experience in a fintech company from 2013 to 2017 preceded by five years' HR experience with a production company.

## Profiles of fintech companies

By illustrating one parameter turnover per employee, it appears that fintech companies representing different business models have different business growth trends. See Figures 4 and 5.



Figure 4



Figure 5

### **Turnover per employee in platform-based companies, thousands of EUR**

Source: created by the authors

### **Turnover per employee in credit companies, thousands of EUR**

Source: created by the authors

At the same time, the analysis of these and other financial data should be carefully addressed because of the very short term that describes them. If individual credit companies have started their business at the end of the first decade of this century, in the wake of the global financial crisis, then the so-called platform companies started around 2014-2015. It is quite obvious that by analysing fintech in the financial intermediation services sector, the fintech credit industry and fintech platform industry can be distributed as separate sectors in the fintech segment.

The authors of this paper have chosen situational analysis and expert interviews as the most relevant research tool, enabling them to track processes in these industries and the financial intermediation services sector in general and to understand what is happening in the fintech segment.

## **RESEARCH RESULTS**

### **CEO interviews**

#### **RQ1: What kind of changes have you noticed in the financial sector (banks, fintech) and do you consider those changes to be fundamental?**

C-level experts of fintech companies agree that financial sector changes are fundamental for various reasons. The Sun Finance expert mentioned that regulatory changes have reached a point of extreme burden with regard to the regulation of non-resident services and AML. The expert highlighted that regulatory requirements will be even tighter, or the regulator will start the deregulation process. The Mogo and Monea experts also stated that regulation drives structural changes in the financial sector. The Cream Finance expert pointed out that today everything is happening much faster. According to the expert, most banks in Latvia have no ambition to develop, and the expert does not consider banks to be competition. The Monea expert shares the opinion of the Cream Finance expert that banks have little ambition to expand business beyond their current business model. According to the Cream Finance expert, banks cannot be regarded as competitors of fintech as they serve completely different client segments and have never positioned themselves as technology companies. The Sun Finance expert argued that the fintech industry is definitely competing and will continue to compete with banks as fintech credit companies are able to serve customer segments better by offering attractive finance products to bank customers through technology and data analytics development. The Twino expert pointed out that previously banks created products for customers and forced them to use those products, but

fintech companies are developing products based on customer needs. According to this expert, there is always an addressed customer need behind products of fintech companies. The Mogo expert argued that financial services are available from both banks and fintech, but the biggest difference is the ambition of fintech companies to run a business. The Monea expert mentioned that there are two types of fintech solutions: ambitious fintech companies that want to achieve something and fintech companies seeking to become digital banks or be part of established big banks.

The Nordigen expert noted that 4Finance and Ferratum offering online lending was the biggest milestone for the financial sector in Europe. The expert argued that their business changed the finance industry, since the market saw that online lending, digitalization and automatization can actually work, and pointed out that now everyone is moving toward digitalization and automatization. The expert maintained that only very prosperous banks will be able to keep offline branches. The expert referred to discussions with large investors who have invested in projects like Facebook and Dropbox and indicated that they see open banking as the financial sector's future and everything that can be built on top of open banking will be the future of fintech. The expert stressed that Nordigen has proved that bank account transaction data have real power, as much as credit bureaus.

### **RQ1-1: What are the main drivers for those changes?**

The Twino expert pointed out that competition is the main driver for financial sector change and stressed the importance of UX (user experience), which determines how a customer feels when using the product and whether the customer will return. This expert argued that technology is definitely not the primary driver for financial sector change and the winner among the competition will be the one who provides the best UX and service to customers. The Monea expert stated that the transparent structure of fintech service fees in comparison to the hidden banking fee approach is the driver of the change. The Cream Finance expert noted that the driver for financial sector change is that many fintech company products are designed like a game, which is attractive for millennials. The Mogo expert argued that financial sector change is driven by the ambition of young people to learn technologies and earn money. The Sun Finance expert pointed out that financial sector change drivers are regulation controlled by the EU and the US and technology development and mentioned instant payments as an important milestone for changes observed in the financial sector.

The authors of this research summarize that, according to the opinion of fintech CEOs, regulation, technology development, ambitions and competition are the main drivers of financial sector change.

### **RQ2: What kind of technologies or platforms are currently being used by your company and what kind of technologies or platforms do you consider as prospective?**

The Cream Finance expert shared their challenging experience when the company launched a business using a generic lending system bought from a Lithuanian company, which seemed to be a relevant approach for the quick launch of the business and subsequent rapid growth, but it soon became clear that the platform did not accommodate their need for growth. The expert explained that the company outsourced an IT team in Poland to develop a new lending system, which unfortunately turned out to be an unsuccessful project, and, in order to maintain business growth and sustainability, the company made a strategic decision to insource a technology team and develop an in-house lending system. The insourced technology team is located in Austria.

The Sun Finance expert said that they are constantly following new tendencies in the technology market and implementing innovative solutions in addition to the current technology solution. The expert pointed out that the system has to be sustainable and prematurely launched technology solutions can result in a business developing much faster than the prematurely launched technology. According to the expert, there are two main success factors for a fintech business to be able to grow and develop sustainably: technology and credit risk management.

The Twino expert argued that there are few requirements for a product launch from the technology perspective and pointed out that the main thing is to go into the market with the working product having only a front page, while running the back end of the business can be done in Excel. The expert noted that the back end of the product can be built after all necessary product modifications and that it is important that each product and process is built or modified based on credit risk and data analysis. The expert noted that the product-data-people concept is obsolete, and the new concept is people-data-productivity.

The Mogo and Monea experts maintained that the current technology platform fully supports the company's needs in running a business.

The Nordigen expert pointed out that Nordigen would not have been possible 15 years ago and highlighted that the non-banking sector is helping to develop and start cooperation with banks. The expert pointed out that Nordigen uses cloud services and noted that AWS is very comfortable to use and it has been recognized as a safe environment for technologies. The expert pointed out that the future driver for Nordigen is open banking development and emphasized that real open banking does not work anywhere in the world. The expert mentioned that big banks are trying to implement open banking and pointed out that in ten years open banking will be everywhere. The expert indicated that Nordigen's vision is to be an alternative solution to the credit bureau as there is not enough information about clients in the credit bureau to make creditworthiness decisions.

## **CIO expert interview**

**RQ1: What kind of changes have you noticed in the financial sector (banks, fintech) and do you consider those changes to be fundamental?**

The Sun Finance expert shared the observation that fintech companies are moving away from the use of a single programming language like, traditionally, Java or PHP and are building a multilanguage approach system, which consists of many different modules. The expert argued that in fintech each module can be written in a different programming language and the ability to work with extensive API-based network systems and manage connections between modules is becoming the main skill. According to the expert, the DevOps approach with a development team and infrastructure merged into one team makes it possible for fintech companies to scale their business, build a more effective business process and do more with less. The expert noted that the concept involving separate developer and infrastructure teams is obsolete because the technology team will run what has been built; the whole team will be aligned to be capable of delivering sustainable systems and products. The Mogo expert agrees with the Sun Finance expert that AWS, Microsoft Azur or Oracle cloud services give fintech companies necessary scalability and transparency through the “infrastructure-as-a-code” approach. The Sun Finance expert pointed out that fintech companies are looking for opportunities to use API-driven innovative technologies rather than the one-enterprise solution. The expert mentioned that the ability to measure process quality, code and technical team performance applying the OKR system forces the whole industry to think smarter and pointed out that, due to a rapidly changing technology environment, there will be a team assigned to constantly monitor market changes, and the technical team will be ready to replace the solution they are using today with a potentially better solution. The expert noted that process quality is becoming the core driver for customers and, accordingly, the ability to monitor and measure process performance and improve quality is the key driver for competitiveness. The Mogo expert expressed his view that there is no need for extensive programming language knowledge in the financial sector as there are many existing open-source solutions and only the ability to use those resources is needed to develop new products.

**RQ1-1: What are the main drivers for those changes?**

The Sun Finance expert noted that the DevOps approach is the main change because it has grown for the last six years, and not only in the work of such giants as Google and Amazon. The expert pointed out that unseparated development and infrastructure is becoming pretty common and argued that the main drivers are about scaling, being efficient, doing more with less time. The expert stressed that developers are expensive and Google’s SRE program is definitely the main driver in the engineering world.

The Sun Finance expert emphasized that it is very important which code you use, which infrastructure, tribes and guilds, to move everybody as one if you build it to run it and stressed the importance of developing with the operational mindset and product life cycle

management. The expert indicated that the company is moving toward more sustainable product development and mentioned as an example that to turn down quality of video to make the system more reliable is a major indicator and concluded that reliability is more important for customers than quality of video.

The Mogo expert pointed out that the driver is that there is no need to develop anything from the beginning and mentioned that systems are working on AWS; there is no need to worry when hardware memory is full. The expert emphasized that there are many ready services available, with no need to develop anything from scratch, and pointed out that infrastructure-as-a-code is a key element for today. The expert emphasized that everything is transparent and measurable and argued that this is very important. The expert concluded that desktop-as-a-service is available and pointed out that knowledge of how to use it is very important.

**RQ2: What kind of technologies or platforms are currently being used by your company and what kind of technologies or platforms do you consider as prospective?**

The Sun Finance expert explained that the company uses cloud platforms and pointed out that open-source technology is absolutely a future for Sun Finance. The Mogo expert said that current technologies are sufficient for today and the future needs of the company.

## **Head of HR expert interview**

**RQ1: What kind of changes have you noticed in the financial sector (banks, fintech) and do you consider those changes to be fundamental?**

The Sun Finance expert shared the opinion that when credit fintech companies just started to operate, there was high negativity around the sector, which was mainly caused by banks, as fintech companies were able to adopt technology quickly and to address client needs. The expert pointed out that today new specialists in the financial sector want quick growth, and career growth is often much more important for candidates than remuneration.

The Mogo expert mentioned that, as far as they have noticed, fintech companies disrupt bank processes and observed that it is hard for banks to change. The expert argued that the banking industry needs to change its competencies, skills and fixed mindset.

**RQ1-1: What are the main drivers for those changes?**

The Sun Finance expert noted that technology is definitely the main driver for finance industry change and mentioned as an example that today everything can be done over the phone or through the internet. The expert pointed out that technology also changes personalities and requirements for the work environment and emphasized that convenience and speed drive the development of technology and the company.

The Mogo expert noted that the financial sector is changing and adopting processes where speed, flexibility, dynamics, non-bureaucratic processes and flat organizational structures are core. The expert emphasized that entrepreneurship culture is changing the whole financial sector.

**RQ2: What kind of technologies or platforms are currently being used by your company and what kind of technologies or platforms do you consider as prospective?**

The Sun Finance expert explained that the company is using the latest technologies available on the market and pointed out that an opportunity to learn and apply knowledge in practice is very attractive for employees. The expert pointed out that for the future the company is moving toward a full self-service system and, as an example, mentioned self-service culture where each employee will be able to manage relationships with HR in an online system. The expert indicated that big data analysis and artificial intelligence are the future of HR, and HR data analysts will be in high demand.

The Mogo expert explained that currently HR is being managed using Excel and admitted that it is hard to convince management that there is a necessity for an advanced HR system and that those who have not used HR management through an advanced system cannot understand its value. The expert shared the experience that it is difficult to carry out HR data management if there is no HR system in place and pointed out the importance of analyzing HR data. The expert pointed out that data analytics and artificial intelligence are the future for HR decision-making during the hiring process.

## Analysis of responses

**Financial sector change.** All the experts have noticed that the financial sector is changing. Same-level experts have a similar opinion on financial sector structural change, but there are differences in opinion among different-level experts. The C-level experts consider that financial sector changes are driven by regulation, technology development, digitalization, automatization and the ambition to grow. The technical experts argue that the ability to scale business using technology is the key driver and point out that open-source services, multilanguage programming, DevOps and the ability to measure system performance drive financial sector change. The HR experts maintain that digitalization, speed of services and employees' ambition to grow quickly trigger technology sector changes.

The authors agree with the experts that the financial sector is experiencing structural change. The authors maintain that technology sector development started decades ago. Social acceptance of technology is an important milestone that accelerates technology development. The authors also maintain that technologies enhance processes, improve customer experience and scale the business owing to data available in electronic form, which facilitates the ability to analyze and process large amounts of data in real time. This

drive has increased analytical competency demand from companies that see the future value of the power of analytics.

**Main drivers of financial sector change.** The experts mention various drivers for financial sector change. C-level experts argue that technology is not the main driver of the change. The experts mention extensive venture capital availability, ambition and competitiveness as the main drivers of financial sector change. The technology experts and HR experts believe that technology is the main driver of change.

The authors agree with the C-level experts that technology is not the main driver of the change. The authors maintain that social acceptance drives technology development. This results in increasing competitiveness driven by the ambition of company leaders.

**Technologies currently used and considered as prospective.** The C-level experts agree that business will be run using an in-house system. The C-level experts expressed different opinions on the readiness of technology to be launched in the market. The platform fintech company experts strongly believe in the minimum viable solution, while the credit fintech company experts are against prematurely launched systems. Both platform and credit technology experts point out the importance of open-source technology and opportunities to use cloud services. The HR-level experts believe that technology is important for HR process management and point out that the current HR management practice using Excel sheets is obsolete.

The authors concluded that companies are undergoing continuous technology development. The authors argue that there cannot be a situation under rapidly developing technology conditions where a company is completely ready for the market system. The researchers maintain that the fintech industry has only existed since 2015 and, for this reason, not enough experience has been collected to be in a position to evaluate sustainability aspects.

## CONCLUSIONS

Digital transformation entrepreneurs are creating new business models with the purpose of developing their business to the level where it is possible to seek acquisition deals from incumbent one-enterprise-solution companies. Fintech companies are primarily focusing on customer-centric automatized processes that are designed on the basis of descriptive and predictive analytics models developed by business analysts and data science teams.

Digital transformation helps incumbent market leaders address future customers' needs by adapting processes to necessary digital changes in order to be ahead of competition among other incumbents. The paper points out that the incumbent market leaders are rather passive in disrupting or cannibalizing their core incumbent products; therefore, there is still

an opportunity for new technology-based startup companies to explore and occupy gaps existing in the market. The research emphasizes that digital transformation has triggered different factors that have magnified entrepreneurial behaviour. The authors conclude that fintech companies are not only offering financial products to underserved customer segments but also providing financial services to the entire pyramid of customers and point out that fintech companies are decreasing the time, speed and costs for financial products using technology. The paper argues that digital transformation contributes to financial sector structural change because there are significantly less customer lock-in business models and processes developed by fintech companies that are oriented primarily towards customer process improvements.

Financial sector structural change can be considered as fundamental. The main factors leading the change are social technology acceptance and entrepreneurs' ambition to establish fintech companies.

The creation of new business models within digital transformation as an indicator of changes is widely discussed by many researchers, but there is a lack of in-depth research on new business model creation associated with digital transformation. Increasing competitiveness among incumbent market players has forced traditional business model modification.

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