

# Intended benefits and challenges of cooperation between FinTechs and commercial banks

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## ABSTRACT

The financial industry has undergone several changes in recent years. One of these changes is the emergence of financial technology (FinTech) companies that are radically transforming the industry, posing a significant challenge to traditional commercial banks. In this study, we examined the responses of the Hungarian banks to the emergence of innovative FinTech startups and explored the benefits and barriers of the FinTech accelerator programs launched by banks. We conducted 27 semi-structured interviews with top executives of banks, FinTech startups and scaleups, investors and regulators to identify the potential benefits and barriers during the cooperation between banks and FinTechs. The most important results of our research show that during the partnership, several advantages can be gained by both parties. Still, the realization of these benefits is significantly hindered by the excessive exploitation focus of banks. Ambidextrous internal champions or suppliers of the banks are needed for successful cooperation between FinTechs and banks.

## KEYWORDS

startup, FinTech, scaleup, organizational ambidexterity, banking, digital transformation, cooperation, Hungary

## JEL CLASSIFICATION INDICES

G21, M00, O30, O32, P13

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## 1. INTRODUCTION

One of the most significant changes in the financial sector is the emergence of financial technology (FinTech) companies and innovations in parallel with the growth of digital transformation (Arner et al. 2015). Customer awareness is increasing, and there is a growing demand for flexible, more personalized products and services (Toit – Burns 2016; Gelis 2016). Regulatory changes also aim to develop a more innovative and competitive financial sector, e.g., through open banking (Wolters – Jacobs 2018). These changes require banks to react to stay competitive.

Banks respond differently to the emerging challenges in the market, but more and more of them have started to cooperate with FinTech startups and scaleups<sup>1</sup> in recent years (Horváth 2019). Through joint developments with these new companies, banks can target new customer segments and renew their business model, gaining several long-term benefits. To manage the partnership successfully, several consultants and banks have created FinTech laboratories (labs) as new independent entities (e.g. FinTech Innovation Lab) or corporate business units (e.g., MKB Fintechlab, OTP LAB). These new units aim to explore new activities and markets. The reason for a traditional commercial bank to establish a FinTech lab is to balance the exploration and exploitation activities, and therefore become *ambidextrous* as an organization. However, there are several barriers that may hinder the achievement of organizational goals.

Despite the growing popularity of this model, few studies have considered the issues involved. We, therefore, aimed to examine cooperation across several aspects to give a broader picture and provide support for the development of these partnerships. We conducted a qualitative study to identify the strategic response from banks to changes in the financial market and to examine the features of cooperation between banks and FinTech startups and scaleups, including the potential benefits, barriers and best practices in Hungary. We conducted a total of 27 *semi-structured interviews* with banks, FinTech startups and scaleups, investors and regulators.

This paper is organized as follows. In the next section, we define FinTechs, describe some types of FinTech companies and explain the reaction of banks. This section also considers the potential benefits of cooperation between banks, startups and scaleups, and the main aspects of organizational ambidexterity. The results section describes the benefits and challenges to cooperation and potential organizational solutions that enable successful integration of contextual and structural ambidexterity in a traditional commercial bank. The paper finishes with a summary and conclusions and some directions for future research.

## 2. BACKGROUND

### 2.1. Definition of FinTech

The origin of the term “FinTech” dates back to the 1990s and historically is linked to the Financial Services Technology Consortium set up by Citicorp to support the technology-based

<sup>1</sup>A scaleup company or just scaleup is defined by the OECD as a company having an average annualized return of at least 20% in the past 3 years with at least 10 employees in the beginning of the period. In other words, a scaleup is a “growth-oriented company that has already tested a scalable business model, gained market position and seeks investment to finance expansion” (D-G for Internal Market Industry Entrepreneurship and SMEs 2016: 24).



collaborations (Nicoletti 2017). “FinTech” is short for financial technology, but there is no agreed definition of this in the management or economics literature (Lee – Shin 2018). The concept refers to all IT-based digital financial technologies and disruptive business models that can make financial services more efficient (Gimpel et al. 2018; Gomber et al. 2018).

It is important to make a distinction between the various actors in the FinTech ecosystem. Diemers et al. (2015) and Lee – Shin (2018) suggested that it includes the following actors:

1. FinTech startups;
2. Technology developers (e.g., Big Data analysts, blockchain developers);
3. Government;
4. Financial customers (retail and corporate); and
5. Traditional financial institutes (e.g., banks, insurance companies).

According to Gimpel et al. (2018) “*FinTech start-ups are newly established businesses that offer financial services based on FinTech*”. Several authors have suggested that startups play a vital role in the FinTech ecosystem, but the large IT companies such as Google and Facebook, and some banks, are also working on very innovative developments in the financial market (Nicoletti 2017; Puschmann 2017). These established technology firms may quickly become competitors to traditional financial institutions (Haddad – Hornuf 2019). Chen et al. (2019) identified that the value effects on industry are more negative when new innovative solutions are developed by young, nonfinancial firms creating disruptive technologies. However, the industry leaders (e.g., banks) are less vulnerable if they have previously invested heavily in the research and development activities.

Romanova – Kudinska (2017) defined two types of FinTech companies. The first is the companies that provide auxiliary banking services. These companies (e.g., FinTech startups and scaleups) could be potential partners for banks. The second category is the companies that offer financial services that customers can find in banks. However, it is not clear whether banks consider these companies as potential partners or enemies, and what kind of reactions can be observed.

By analyzing the Innotribe data set, Gozman et al. (2018) identified how FinTech startups offer innovative financial products and services. They concluded that these companies develop new solutions through the syntheses of services (e.g., payments), business infrastructure (e.g., financial education) and component technological innovation types (e.g., artificial intelligence).

## 2.2. The reaction of banks to the emergence of FinTech companies

Different types of reactions can be observed in banks to the emergence of FinTech companies, including both startups and scaleups. Tanda – Schena (2019) concluded that international banks used a mixed strategy such as having shares in the FinTech companies, establishing partnerships with them and starting in-house developments in the areas that may be affected by technological innovation.

Zalan – Toufaily (2017) determined five possible strategic responses from banks to the emergence of the FinTech companies: (1) maintaining the status quo, (2) extending their digitization capabilities, (3) setting up their own FinTech organization, (4) investment in FinTech



companies and (5) developing partnerships and cooperation with FinTechs. They suggested that the development of different forms of cooperation will become dominant in the future.

Drasch et al. (2018) found four types of cooperation between banks and FinTechs: *acquisition*, *alliance*, *incubation* and *joint venture*. Anand – Mantrala (2019) also determined the banks' strategic responses, which were similar to those found by Zalan – Toufaily (2017). The first response is "hold" when a bank decides to continue business as usual with some adjustments to minimize any interventions. The "make" response is when a bank chooses to develop new solutions with their resources and capabilities. "Ally" describes the establishment of cooperation, and the "buy" reaction means the acquisition of the competing challenger and its incorporation into the organization. Last but not least, the "exit" reaction is when a bank decides to abandon the market that is threatened by the new competitor (Anand – Mantrala 2019).

At this point, it is necessary to distinguish between incubation and acceleration. Incubators (e.g., industrial parks, technology centers) provide a unique environment for small businesses that promotes faster development (Bajmócy 2004). Acceleration, however, is a fixed-term, group and cohort-based support program for startups where participants can take part in education and receive help from mentors for the duration of the acceleration program (Lovas – Riz 2016; Cohen et al. 2019).

The primary support for a bank-FinTech startup or scaleup cooperation is an acceleration program, where FinTechs get the opportunity to work with bank employees to develop innovative solutions over 3 months. In the final phase of the acceleration program, companies are selected to establish long-term partnerships with the banks (Horváth 2019). According to Ries (2011), startups aim to create new products or services under extremely uncertain conditions.

### 2.3. Potential benefits of cooperation

Studies have shown that cooperation between banks and FinTechs may result in many benefits to both parties. First of all, banks usually respond more slowly to environmental changes because of their legal obligations and risk-averse behavior. Through cooperation with FinTechs, banks can react more quickly to the emerging market changes and be more effective in product and service development (Salampasis – Mention 2017; Paleckova 2019). According to Homfeldt et al. (2019), startups usually have more innovative ideas than the traditional suppliers. Scott et al. (2017) showed that the adoption of digital innovations could have a large and long-term positive impact on banks' performance. Banks also may face challenges in implementing new developments because of their legacy systems. FinTech startups and scaleups offer banks new skills, languages and solutions to respond to customer needs, and are not hindered by legacy systems (Boratynska 2019). These innovative companies can test and develop their products and services more freely through agile approaches and innovative methods (Chishti – Barberis 2016). FinTechs can connect directly with potential users through social media, allowing them to continuously assess customer needs and incorporate feedback into new developments (Anagnostopoulos 2018).

Startups are also often less geographically concentrated. They mainly provide internet-based solutions, so their target markets are not limited to a single country or region. They can, therefore, offer standardized products or services worldwide at little or no extra cost. Cooperation with them allows banks to expand their target markets (Romanova – Kudinska 2017). Cooperation with FinTechs, therefore, allows banks to renew their value proposition or entire



business model through innovative financial technologies, bringing benefits including improved performance and competitiveness (Zott – Amit 2007; Poetz et al. 2015; Salampasis – Mention 2017).

The benefits are not only for banks. There is mutual learning potential for both parties, because banks have expertise in financial risk management, and retail and corporate lending, while FinTechs have innovative ideas for technology (Romanova – Kudinska 2017). There are several entry barriers in the financial services market, such as high IT system costs and strict regulations, so this area has previously been avoided by startups (Chishti – Barberis 2016). Customer acquisition can also be challenging and costly, but cooperation with banks allows FinTechs to reach a large existing customer base (Dapp 2015; Hill 2018). They can also benefit from access to the global payment systems of banks (Chishti – Barberis 2016). For reasons of the system and data security, customers prefer banks to the less well-known financial service providers. Cooperation with banks allows FinTechs to build trust among customers and prove their reliability (Vasiljeva – Lukanova 2016). Despite declining confidence after the global economic crisis, customers continue to have a positive attitude towards the products and services of banks, which may bring additional benefits for the cooperating FinTechs (Hill 2018). Finally, banks have a more extensive resource base (e.g. capital, human), so can more easily initiate large-scale projects, and provide investment opportunities and additional benefits during a period of cooperation (Bunea et al. 2016; Haddad – Hornuf 2019).

## 2.4. Organizational ambidexterity

March (1991) suggested that companies need to balance the *exploration* and *exploitation* activities to achieve a long-term success. Smith – Tushman (2005) defined *exploration* as revolutionary, evolving or existing changes providing new markets and opportunities for companies. *Exploitation* is incremental development and change processes that focus on current customers. Ambidextrous organizations can manage both exploitation and exploration: that is, to manage their existing activities and processes, and new business fields, products and services at the same time (Füzes et al. 2017). Long-term survival and success depend on the ability of a company to both make appropriate use of its internal resources and explore sufficiently to maintain its success in the longer term (Levinthal – March 1993). However, developing and managing organizational ambidexterity is a significant organizational and managerial challenge.

Achieving ambidexterity is challenging because managers need to make difficult and prudent decisions shaped by short-term interests and unforeseen factors, and some present benefits may need to be sacrificed for the future success (Ghoshal – Bartlett 1994; Smith – Lewis 2011). Brion et al. (2010) highlighted that focused organizations have lower performance than ambidextrous ones. However, those companies that successfully manage ambidexterity can achieve several potential benefits. Many previous studies have shown that there is a strong positive relationship between ambidexterity and corporate performance (e.g., Gibson – Birkinshaw 2004; He – Wong 2004; Kouropalatis et al. 2012). Günsel et al. (2018) found that intensive networking can further increase the positive impact of exploitation capabilities on firm performance.

Raisch – Birkinshaw (2008) defined contextual, structural and leadership-based ambidexterity. In contextual ambidexterity, managers are responsible for creating a supportive organizational context. The significant parts of the context are those systems, processes and cultural elements that determine the behavior of individuals in the organization. The central idea of



structural ambidexterity is related to the work of [Duncan \(1976\)](#). He argued that companies should create dual structures to allow them to innovate and realize new opportunities simultaneously. Structural ambidexterity describes the development of structural or architectural solutions to cope with emerging challenges ([Gibson – Birkinshaw 2004](#)). Top and middle managers and experts also have an essential role in the development of ambidexterity. The internal processes of the top management team can stimulate and create ambidexterity ([O'Reilly – Tushman 2002](#)).

Some authors suggest that the size of the organization dictates the most suitable type of ambidexterity. [Lubatkin et al. \(2006\)](#) emphasized that structural ambidexterity may be a better solution for the larger and diversified companies. Whilst the smaller companies – with a flatter hierarchy – may be better with leadership-based ambidexterity. According to [Gibson – Birkinshaw \(2004\)](#), contextual ambidexterity is more appropriate for the smaller companies or single business units.

### 3. RESEARCH METHODOLOGY

In reviewing the strategic response of banks, we explored how these responses appear in their organization. We used a qualitative research method, as we aimed to explore a new area where the number of previous researches is limited. Based on [Miles – Huberman \(1984\)](#), *qualitative research* is conducted through intense and/or prolonged contact with the participants (in-depth interviews with open-ended questions).

At the beginning of the research, we identified four main stakeholder groups to interview:

1. Banks,
2. FinTech startups and scaleups,
3. investors, and
4. regulators.

During the interviews, we used snowball sampling to find the key players in the Hungarian market. After reaching theoretical saturation in all affected groups, a total of 27 semi-structured interviews were conducted. Theoretical saturation refers to the point when the new data provides little or no further information for the research. From the banks' side, we interviewed all Hungarian players where there is a FinTech accelerator program, and we also interviewed the leading actors in the market among FinTech startups/scaleups. Interviewing different types of actors provided multiple views and opinions. The list of interviewees and types of their companies are shown in [Table 1](#).

We began each interview by asking about the interviewee's experience, current roles and the company's profile. We then asked them to describe the recent changes and challenges in the financial market, provide a definition and main elements of FinTech and set out the most important actors in the FinTech ecosystem. The remainder of the interviews mostly covered the banks' strategic responses, their future role, possible forms of partnerships with FinTechs, benefits, barriers and policy recommendations. The average length of the interviews was 60 min. All the interviews were recorded and transcribed, giving a total of 163 pages of information. Following the recommendations of [Patton \(2002\)](#), we triangulated our data by checking company websites, reports and other available materials (e.g. presentations and previous interviews with CEOs).



**Table 1.** The list of interviewees

Interviewee ID	Category	Role
1	FinTech (scaleup)	COO and Deputy CEO
2	FinTech (startup)	CEO & Co-founder
3	Regulator	Former president
4	FinTech (startup)	CEO and Co-founder
5	Commercial bank	Former CEO
6	FinTech (startup)	CEO and Co-founder
7	FinTech (startup)	Founder and CEO
8	Commercial bank (FinTech Lab)	Managing director
9	Investor (venture capital)	Managing partner
10	Regulator	Director and his staff
11	Commercial bank (Incubator/accelerator)	Manager
12	Investor (capital fund)	Portfolio manager
13	Incubator/accelerator	CEO
14	FinTech (scaleup)	Co-founder and Managing director
15	FinTech (scaleup)	CEO
16	Investor (venture capital)	Founder CEO
17	Incubator/Accelerator	Mentor and Advisor
18	Investor	Freelancer
19	Commercial bank (FinTech Lab)	Head of Innovation
20	Commercial bank	COO
21	Commercial bank	Head of Digital Channels
22	Commercial bank (Incubator/Accelerator)	Head of Innovation HUB
23	FinTech (start-up)	CEO & Co-founder
24	Incubator/Accelerator	Head of Entrepreneurship
25	FinTech (start-up)	CEO & Co-founder
26	FinTech (start-up)	CEO & Co-founder
27	Commercial bank	Head of Strategic Management

We analyzed and coded the interview data sentence-by-sentence using the QSR NVivo software. The first version of the codes was based on the analyzed sources (e.g., scientific papers, consultancy documents). New codes were added to NVivo when interviewees mentioned aspects that did not fit any of the pre-determined categories. This phase provided 486 references.



# 4. RESULTS

In recent years, many banks have launched acceleration programs to build partnerships with FinTechs. Our interviews suggested that these involved both startups and scaleups. A typical response from banks is the establishment of a central FinTech laboratory within the organization, which is responsible for attracting innovation through the support of the FinTech companies.

## 4.1. Benefits of cooperation

Our findings suggest that there are several potential benefits to both parties (Table 2). Some of these were found by previous researchers, but we also found many new aspects.

**Table 2.** Potential benefits of cooperation

Benefits for banks	Benefits for FinTechs
Faster reaction to environmental changes (e.g., the threat of BigTech companies)	Reduced entry barriers
Opportunity for business model innovation and increasing competitiveness as well as the distinctive power of the bank	Exploiting the market knowledge of banks
Achieve new innovative solutions	Access to the customer base and database of banks
Expansion of the product and service portfolio	The exploitation of opportunities arising from the banks' social capital and brand
Reach new customer segments, markets and increase the commitment of current segments	Exploit the benefits of the banks' infrastructure
Enhance customer centricity	Use the benefits of the larger resource base (e.g., financial) of banks
Direct feedback from potential customers	Learning potential about business and banking processes
Reduced reputational risk	Reducing the challenges of the traditional sales processes (Acceleration program)
Developments based on agile approaches and methodologies	
The exploitation of the domain knowledge of startups and scaleups	
Flexible, cost-efficient solution (free demand generation, consultancy activities as pre-sales processes)	
Financial benefits	
Avoid potential future rivalry	





Like previous studies, we found that cooperation with FinTechs enables banks to react faster to market changes. It also makes it possible to mitigate threats from the big technology companies (such as Apple and Amazon), which are becoming more and more powerful.

Through cooperation, banks can renew their value proposition or even their whole business model, increasing their competitiveness and distinctive power over competitors. The partnership may also provide banks with new innovative solutions to expand their product and service portfolio. FinTech startups and scaleups conduct specialized research on customers, so have insights into niche segments. FinTechs allows banks to reach new customer segments and markets that were previously unavailable and can increase the commitment of current customers as well as customer-centricity. *“FinTech startups can serve new customers with new services and opportunities. For example, in capital markets, they may open up new markets to clients who wish to invest in capital and equity markets internationally.”* (Interviewee 15) *“In this hybrid model, the startup provides a well-usable, customer-friendly solution that is built on a banking backend system and is sold as a banking product. This may be a good hybrid solution.”* (Interviewee 6)

Startups and scaleups are more directly connected to their target customers, and can therefore access the development suggestions and feedback on new products. By contrast, banks cannot afford to give customers a product for testing purposes that may contain errors, because of the potential reputational damage. Cooperation, therefore, reduces the reputational risk to banks of innovating. *“Due to reputational risk, the bank doesn’t have the opportunity to roll out a product and tell the customers that there are some errors in the product and give us feedback. A bank can’t do this, but a startup can. Potential customers are happy to give feedback to startups.”* (Interviewee 26)

FinTech startups and scaleups apply agile approaches and methodologies during their development and testing processes, so the developments are not based on rigorous IT specifications as with traditional banks, but on an iterative approach using conscious feedback. FinTechs usually offer easy and fast implementable products. These startups and scaleups have expertise in the FinTech industry, design methodologies, techniques and the target segments, so banks can exploit their specific domain knowledge through cooperation. *“The mentality and learning that the startups bring into the company is extremely beneficial.”* (Interviewee 19)

FinTech startups and scaleups are very flexible and often consider consultancy activities as their (free) pre-sales processes, because they want to formulate closer partnerships with banks. They, therefore, offer a much more cost-effective and focused solution than the large IT suppliers or consultants.

The realization of the financial benefits can also be considered as a potential advantage. Banks want to decrease costs and generate extra profits as a result of cooperation. *“I think the most important thing is to come up with digital developments that our startups have made for the bank, either through which the bank has realized extra revenue or has saved costs by making it cheaper.”* (Interviewee 8). *“Over time, the investor perspective has come out that we might be investing money in something that will make a big profit.”* (Interviewee 20)

Last but not least, banks consider that cooperation mitigates the threat of potential future rivalry. Some banks decide to work together with the FinTech companies that are currently growing but have the potential to emerge as competitors in the future. *“For a while, I think fear dominated us to start cooperating, because then maybe we will be in less trouble if we are in it and if we will be part of it, and then we can see better what is going on.”* (Interviewee 20)



FinTech startups and scaleups can also gain benefits from cooperation. The traditionally high barriers to entry to the market can be significantly reduced because banks comply with strict regulations and other essential requirements in the financial services market. *“We had a vision of working with a financial company right from the beginning, so we didn’t have to get a license because it is time-consuming and has a lot of regulatory obligations. For us to enter the market, we needed a partner.”* (Interviewee 23)

Banks have significant knowledge about the traditional financial industry and are well aware of the market conditions, including the strengths and weaknesses of large financial institutions and competitors. The economies of scale of banks provide several other advantages for FinTechs, including reducing the customer acquisition cost by giving them access to the banks’ extensive customer base and databases. The number of potential customers is further increased by the multiple marketing channels used by banks. As a result, startups and scaleups can target the new customer segments and market, and accessing customer databases enables the development of more personalized products. *“Companies that come to the bank get a substantial customer base through which they can test their services.”* (Interviewee 21)

The banks’ social capital and trustworthy brand name provides several other benefits to their partners, such as the formulation of new partnerships and acquisition of investors. Banks also have a complex infrastructure and large resource base, which provide additional opportunities (e.g., financial, large-scale marketing campaigns). Some banks provide investment opportunities to the FinTech companies, which can significantly support their growth.

Banks also have expertise in financial operations (e.g., lending, risk management), business and banking processes, providing mutual learning potential for startups and scaleups. Finally, if banks and the FinTech companies start to work together under an acceleration program, the challenges of the traditional bank sales processes (e.g., long evaluation process, high expectations) can be reduced or eliminated. *“Like more and more startups, we are trying to participate in as many banking accelerator programs as possible. The great advantage of these programs is that the generally 12–18-month bank sales cycle can be greatly shortened to 3–6 months.”* (Interviewee 26)

Overall, our findings show that cooperation provides many benefits to both parties. However, the weight of the identified advantages may vary for different players, and the challenges of cooperation can severely undermine the realization of benefits.

## 4.2. Challenges of realizing benefits

Several factors may hinder cooperation between FinTech companies and banks. Table 3 summarizes the intended benefits for FinTechs and banks, the challenges in realizing these benefits, additional benefits and learning points. Like the potential benefits, the weight of the factors hindering cooperation may vary.

Closer cooperation between banks and the FinTech startups or scaleups usually develop during or after the acceleration programs. Traditional sales tenders of banks could also be taken into consideration, but bring many challenges. For banks, the first problems are related to sales and administrative processes. One of the main strategic goals of cooperation is often for FinTechs to sell products to banks and banks to renew their organization. FinTechs may also want to launch their product to the market through the bank, and the banks want to renew their product and service portfolio. However, the sales and administrative processes in banks are



**Table 3.** Drivers and challenges of cooperation

	<b>Main drivers and challenges</b>	<b>Acceleration program-related drivers and challenges</b>
Intended benefits for FinTechs	Selling products to banks, launching products to the market (through the bank)	Learning and development through acceleration programs, reaching financial sustainability
Intended benefits for banks	Renewal of the organization, renewal of the product and service portfolio	Aim to increase the bank's reputation, involving a facilitator organization in the program to get support, potential investment target
Challenges for FinTechs in realizing the intended benefits	Lack of understanding of how a large organization works, human resource-related factors e.g. weak sales, different organizational culture, attitude problems, promise too much at the beginning, not prepared for regulations	No drivers for accepting investments from the bank because of better investment opportunities in the market
Challenges for banks in realizing the intended benefits	Strict requirements in traditional sales tenders, slow and bureaucratic procurement, sales and administrative processes, the tension between IT and business fields, problems with the core IT system and other IT related problems, different organizational culture, communication problems, lack of clearly defined needs and expectations, lack of understanding of development goals, resource-related problems (exploitation-focused human resources)	Excessive PR focus, waste of resources, conservative company valuation
Additional benefits and learning points for FinTechs	Building new relationships, getting to know the suppliers, development of change management skills, development of communication skills, building good relationships with internal champions	Participation in networking events, building new relationships, letter of interest from the bank: acquiring new investors
Additional benefits and learning points for banks	Renewal of suppliers and supplier portfolio, lower bargaining power of suppliers, development of change management skills, development of communication skills	Learn how to fail fast and cheap and become more resilient

usually very bureaucratic and slow, so significantly slow down the contracting process, resulting in delays of several months. Traditional sales tenders also set expectations with potential suppliers that startups cannot fulfill (e.g., a high number of references, employees). However, banks need to comply with a number of requirements, mainly IT and legal, and negotiate agreements with many departments, so they argue that FinTechs do not understand how the



large organizations work. Startups and scaleups often have good ideas, but may not possess appropriate sales skills.

*“The timeframes are completely different at a bank. Bank FinTech project integration takes one year, which the bank feels a speedy process. In a startup’s life cycle, one year is the question of survival.” (Interviewee 25)*

*“It consumes a lot of resources for such a company to understand banking regulations and bank operation. Because of this, we often did not start working with them.” (Interviewee 21)*

*“In many cases, FinTechs have a good idea and a good product or product initiative, but there is no good sales representative in the team. Especially when it comes to big corporate sales, they do not understand, but it is understandable because it is a very difficult, very long process.” (Interviewee 19)*

During the sales process, startups and scaleups often have to negotiate with suppliers and partner companies of the banks (e.g., about IT specifications), resulting in the formulation of new business relationships. An additional benefit for the bank may be to renew its supplier portfolio and reduce suppliers’ bargaining power.

Many other factors can hinder the sales and integration of innovative financial solutions. Most bank business areas are not aware of the limitations of their IT systems, and IT departments look for secure and easy-to-implement solutions, resulting in opposing interests and significant tension between the two fields. Problems with the core banking IT system (e.g., outdated system, database structure and integration issues) also lead to further difficulties, and the lack of transparency of the systems carries many risks. In these cases, the FinTech startups and scaleups often have to consult with the IT suppliers of the bank, which results in the expansion of their network.

Cultural differences (a small, innovative and very flexible company versus a large, bureaucratic, inflexible organization), and communication problems form serious barriers that slow down cooperation processes. There may also be attitude problems from scaleups. These issues can have a positive effect on the development of both parties’ communication and change management skills.

*“Attitude problems are typical of scaleups. Not general, but more common than in the case of startups. Even in pricing, contracting, the attitude is different.” (Interviewee 19)*

Banks often have problems with the exact formulation of their development needs and expectations, making the customization and implementation of applications difficult. Bank employees may also not understand the reasons behind the need for development and renewal. The identification of internal champions by FinTechs, therefore, becomes very important. If startups and scaleups establish a good relationship with these individuals or departments, they can obtain exceptional support from them, speeding up the implementation of projects. However, in some cases, the FinTech startups and scaleups promise too much at the beginning of a partnership and then find that they may not be able to deliver or that regulations (e.g., cloud regulations, GDPR) may be a significant barrier.

*“There are executives at each financial institution who have not yet fully realized the benefits, or rather see only them, trying to eliminate or even inhibit concrete projects.” (Interviewee 4)*

*“How many people are in the bank who are aware of this, know what they are doing and want to do? There are, but not many.” (Interviewee 20)*



*“Certain banks can’t realize what startups can bring to them and how the market is changing because they are stuck in older business models, which are still making money but they going to be less relevant.” (Interviewee 24)*

Bank employees are often overburdened and work on multiple projects at the same time. Ensuring compliance with the legal requirements also requires a lot of time and resources from the bank (exploitation-focused human resources). All of these factors mean that the resource problems of banks ensure that they cannot properly focus on cooperation with startups and scaleups, and implementing new developments.

*“Banks’ IT capabilities are often tied to regulatory compliance development. They do not have sufficient developer knowledge, agility, and ability to meet rapidly changing needs.” (Interviewee 25).*

### 4.3. Acceleration program-related drivers and challenges

Through the acceleration programs, FinTechs aim to acquire new perspectives, develop their business and hopefully establish a closer relationship with the bank. Acceleration programs also mitigate problems associated with traditional sales processes. However, in some cases, banks only seek to increase their reputation, resulting in the acceleration program having an excessive PR focus. This means that the bank has no real commercial intentions, which will hamper efficient and successful cooperation. A positive effect could be that startups and scaleups have the opportunity to participate in different networking events, building new relationships and setting up further potential cooperation.

Some banks involve an external facilitator organization in the acceleration program to support them. In this case, tasks and activities that are only partially connected or completely unrelated to the objectives of the bank and the startup or scaleup can be set, which may consume the resources of the FinTechs. This waste of resources is critical and may threaten the survival of the startups. At the end of the program, banks may sign a letter of interest, expressing their willingness to cooperate in the future. This letter can attract additional investors by proving that the FinTech company will generate revenue.

Another goal for the FinTechs may be to secure investment from the bank to ensure their financial stability, which gives the bank new investment opportunities. However, several FinTechs have no drivers for accepting investments from the bank, because there are better investment opportunities available in the market, and banks tend to value companies conservatively.

Last but not least, acceleration programs allow banks to learn how to “fail fast and cheap”, and they can become more resilient. This improves their decision-making skills and processes. This experience can be beneficial in organizational renewal and cultural change in future.

### 4.4. Evolution of structural and contextual ambidexterity

New innovative digital technologies provide both challenges and opportunities for banks. In recent years, more and more FinTech companies have appeared in the market, targeting new segments and responding to emerging customer needs with their flexibility and specialized knowledge.



Traditional commercial banks have access to several ways to acquire opportunities offered by digital technologies (e.g., acquisitions, investments and partnerships). Figure 1 shows that several banks have decided to separate the traditional commercial banking core from a new innovative business unit (a FinTech lab), providing structural ambidexterity. One of the aims of these labs is to create direct relationships with FinTechs. However, banks have several problems integrating new developments into their organization. They struggle with the alignment of new and old solutions and disseminating the innovation focal node in the core organization. Ideally, innovative focal nodes should be proportional to the hierarchy, but are often too small. The core business is often characterized by very bureaucratic, inflexible attitudes and employees do not understand the reasons why new developments are needed. Further players are needed besides the ambidextrous top management team to successfully manage the contextual ambidexterity.

In many cases, suppliers are more flexible, better understand the problems of banks and can better integrate new solutions into the banks' organization and systems. The different departments of banks should ideally handle the emerging issues. However, since contextual ambidexterity is not identifiable at the department level, the solution can instead be placed outside the organization, where structural and contextual ambidexterity meets. Our interviewees highlighted that the identification of the internal champions by startups and scaleups is crucial to facilitate cooperation and spread new developments within banks. These champions can often be best placed to manage the contextual ambidexterity (Figure 2).

Structural ambidexterity can be helpful if the core organization does not have clear exploration goals. However, when a company aims to renew the entire organization, it can be a trap. Contextual ambidexterity is needed at both the top management level and lower levels, and support from external actors (e.g. suppliers) may also become necessary. There has to be some connection between structural and contextual ambidexterity. This connection can be provided within the organization or with the help of external actors. When there is a considerable distance between the different actors and business units, it is necessary to have an intermediary (mediator) who can understand and integrate new solutions into organizational systems, managing contextual ambidexterity.

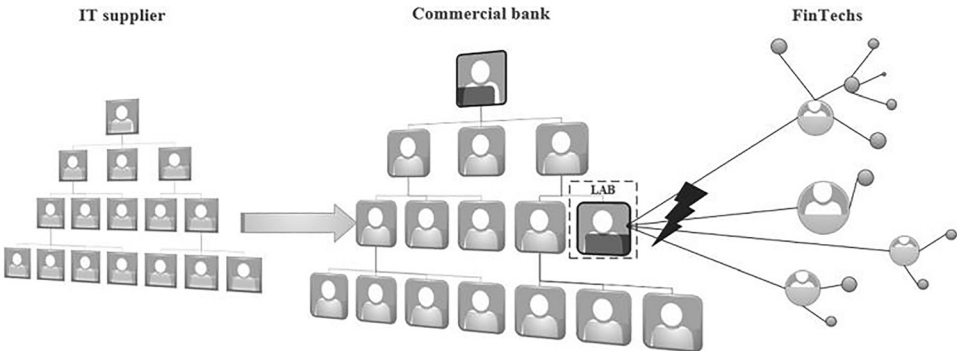
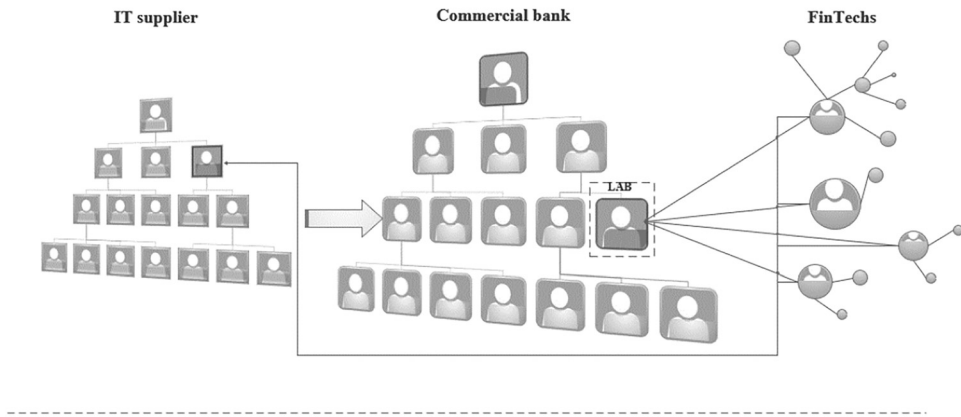


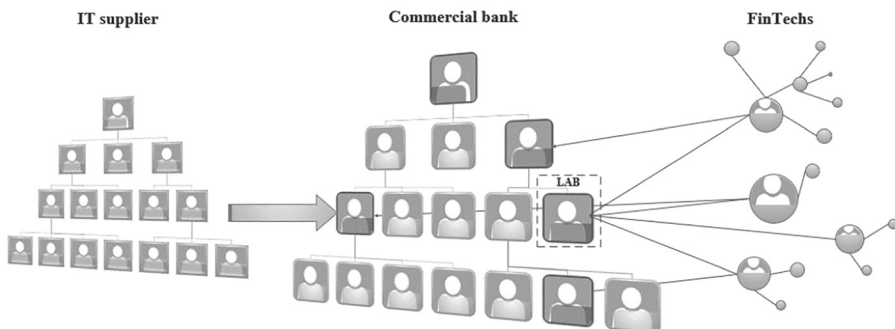
Fig. 1. Creation of FinTech Labs to provide innovative solutions



## Contextual ambidexterity managed by an IT supplier



## Contextual ambidexterity managed by internal champions



**Fig. 2.** Contextual ambidexterity managed by an IT supplier or internal champions

## 5. CONCLUSION

By cooperating with very flexible, specialized FinTech companies, banks can innovate their business models and increase their competitiveness. The cooperation also provides FinTechs with the opportunity to reach more customers, and develop and learn quickly as well as providing both parties with several other unexpected benefits. However, the realization of these benefits can be hampered by several obstacles on both sides.

In this study, we examined the responses of banks to the emergence of innovative FinTech startups and explored the benefits and barriers of FinTech accelerator programs launched by banks. At the beginning of the research, we identified four main stakeholder groups to interview:





banks, FinTech startups and scaleups, investors and regulators. We conducted a total of 27 semi-structured interviews in Hungary and reached theoretical saturation in all stakeholder groups.

In the literature background, we identified several advantages of the cooperation between banks and FinTech companies. Our research supported all these benefits, however, factors that were not discussed in previous research were also explored. Both the literature and our empirical research have shown that banks can significantly increase their competitiveness and effectively renew their product and service portfolios through cooperation with FinTechs. We found that reduction of reputational risk, exploitation of the domain knowledge of startups and scaleups can be additional motivational factors during the accelerator programs. Moreover, we identified that the cooperation with FinTech startups/scaleups offers a cost-efficient way for banks to innovate, and thus, they can also avoid potential future rivalry. On the startups' side, in addition to the factors identified in the literature, further benefits can be the exploitation of opportunities offered by the bank's infrastructure and social capital. Moreover, the challenges of traditional sales processes can also be mitigated by participating in the acceleration programs. However, to realize potential mutual and unexpected benefits, banks need to have a real commercial intention and create a supportive organizational background.

In addition to the benefits, we identified several barriers during the cooperation that were not addressed in previous research. We found that cultural differences and communication problems between the two organizations can significantly hinder the cooperation. Problems with banking IT systems, lack of clearly defined development needs and resource-related challenges (exploitation focused human resources) are additional problems from the side of the banks. Identifiable challenges for startups include, among others; attitude problems, human resource challenges such as weak sales capability, and incomplete knowledge of regulations.

We also found that several banks had separated their core business from the new innovative business unit (FinTech lab), providing structural ambidexterity. However, they still have several problems integrating new approaches into the organization and aligning new and old solutions. We suggest that organizations need both structural and contextual ambidexterity at the same time. We found two possible ways to integrate them and support banks to become ambidextrous. Bank departments and employees usually do not understand the reasons behind the need for new developments and have different goals. Banks, therefore, need someone besides the ambidextrous top management team to manage contextual ambidexterity. We concluded that either the internal champions or external suppliers must be ambidextrous leaders to translate the emerging needs into the language of the core business units. However, the integration of new solutions into the organization through suppliers is presumably more efficient, as there is a much lower chance that all middle managers in the organization will become ambidextrous.

Thus, the question arises, what can a bank do to implement innovative digital solutions? Startup programs can be beneficial to both parties, but banks should not only focus on increasing their reputation, instead, make the cooperation productive. Either Banks nurture a middle management layer that is capable of channeling innovative solutions and shaping organizational culture, or they expect suppliers to deliver innovative FinTech solutions compatible with existing IT systems. However, forming an organizational culture can be challenging and typically a long process, but it can give a competitive advantage to the bank. If a bank expects suppliers to deliver innovative FinTech solutions, there may be two cases. If the supplier delivers only to the given bank, the bank can gain a lasting competitive advantage because the solution will only be available at that bank. However, if the supplier supplies to other





banks too, the competitive advantage can only be temporary, as the solution is expected to be also introduced by competitors. To eliminate this, it is worth building a temporary/permanent exclusivity (e.g., only the bank uses the given solution for one year).

Our research was one of the first in Hungary to empirically examine the advantages and challenges of cooperation between banks and the FinTech companies. In recent years, several banks have launched FinTech acceleration programs, but these programs are unlikely to be typical forms of cooperation in the future. We also pointed out what conditions are needed for the effective integration of innovative solutions into the organization. It has become apparent that banks are typically able to work well with their suppliers, but the organizational culture is difficult to change, which can pose additional challenges. Banks need to strive to develop ambidexterity at the middle management level, because as markets erode, opportunities die out. If banks are unable to bring new innovative things into the organization, are unable to work effectively with the FinTech companies, they could significantly lose their competitiveness.

One of the limitations of this paper is that the examined ecosystem is still under development, which may also hinder the realization of benefits. All actors in the ecosystem still need to learn to operate the accelerator programs as efficiently as possible and to reap the potential benefits.

Despite the importance of the topic, few empirical studies have examined cooperation between banks and the FinTech startups and scaleups. Future studies should analyze the best practices applied during the partnership, determine additional benefits and challenges and examine the perspective of banks. Case studies that can support managers of banks and FinTech startups and scaleups are particularly important. Another research direction could be the examination of the future role of the FinTech Labs within banks, for example, in what other ways these departments can help innovation. Last but not least, this study may provide an example of how to renew large established companies and could serve as a basis for further research in this field.

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