



# Participation Banking Digital Research Report 2021

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## Introduction

Within the framework of the mission of healthy and sustainable development of participation banking, digital transformation has gained momentum and become inevitable in the Turkish finance sector as well as around the world as a result of the pandemic. Changing customer expectations and sector dynamics have caused banks to search for faster, perfectionist and safer alternatives.

We are getting closer step by step to our target of 15 percent market share, which we expect to reach by the end of 2025. In our journey to reach our goals, the “Participation Banking Digital Research Report”, which we believe will contribute to our strategic goal of «building digital competence», has been prepared with the aim of constituting a roadmap in the sector.

In this context, meetings have been held with banks, neo-banks and fintechs at a global and local level. In addition, a survey has been conducted with the participation of 2246 people with different demographic and socioeconomic profiles.

Digital transformation should not be seen as a threat and instead should be considered as an opportunity in terms of change, development, increasing speed and service quality, and improving customer experience. In this context, digital strategy components have been formed and the main digital initiatives that participation banking should take in the short and medium-term have been determined in our report. Plans have started to be made in order to implement the works in these areas. The results of the market research, together with action suggestions on Creating Models for Digital Onboarding, Implementing Segment-Oriented Ecosystem Cooperations, Establishing Technological Infrastructures for Open Banking Models, Increasing Digital Literacy, Establishing Internal/External Agile Organizational Structures, and Improving Digital Banking Competencies, are presented in our report.

The regular preparation of the Participation Banking Digital Research Report, published for the first time in 2021, is planned to be continued within the framework of the relevant strategies and initiatives.

We would like to express our endless gratitude to all our stakeholders who contributed to the preparation of the report, and hope that the report will prove to be beneficial for the participation banking sector.

Best regards,





# Executive Summary (1/7)

## Digitalization in the Financial Services Sector

While, in the financial services sector, the importance of the use of next generation technologies is on the rise among digitalization activities aimed at improving customer experience and increasing operational efficiency, security applications are also becoming popular.

Next Generation Technologies and Trends	
1	Big Data and Data Analysis
2	Artificial Intelligence, Machine Learning and Robotic Process Automation
3	Blockchain
4	Cybersecurity Applications

## The Future of Pandemic-Era Banking Trends

With the Covid-19 pandemic, different practices such as those relating to remote work, financial inclusion, customer-centric and technology-oriented developments are observed and sustainability efforts which have increased with the outbreak of the pandemic are also on the agenda of the banks.

Banking Trends Introduced by the Pandemic	
1	Business Conduct Transformation: Remote Work
2	Customer-Centric Transformation and Technological Developments
3	Sustainability
4	Financial Inclusion and Digital Financial Literacy

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

The service understanding shaped in line with customer expectations and needs in the financial services sector enables banks to improve their operational efficiency, increase service quality and improve customer experience in the light of technological developments. Developments in regulatory issues and next generation technologies have increased the effectiveness of new ecosystem players such as neo-banks and fintechs (financial technology) in the market. It is important for banks to be accessible in order to provide end-to-end services to their customers for meeting customer expectations. With the pandemic, issues such as sustainability and financial inclusion have started to become matters of discussion more than before. In line with these developments in the banking sector, entities continue to closely follow next generation technologies and the changing trends.



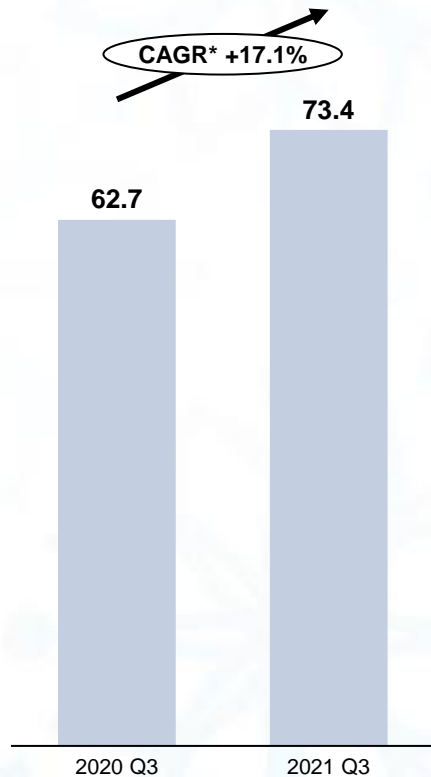
# Executive Summary (2/7)

## Digital Banking Outlook in Turkey

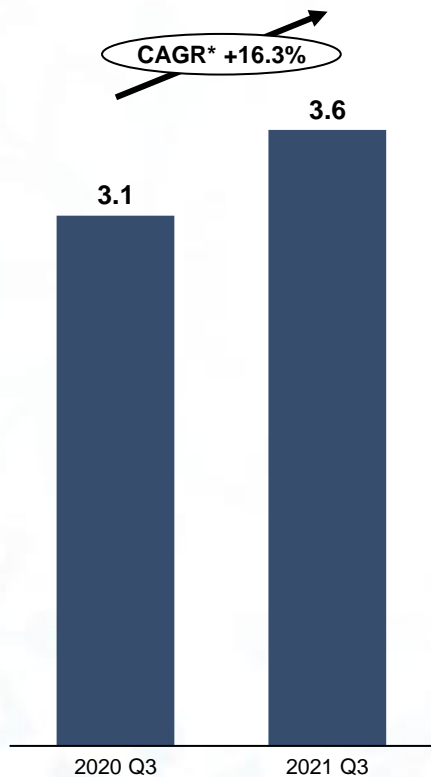
The number of conventional banking digital customers increased by 17.1% between 2020 Q3 and 2021 Q3, reaching 73.4 million customers.

The number of participation banking customers, on the other hand, increased by 16.3% between 2020 Q3 and 2021 Q3, reaching 3.6 million customers. A single participation bank constitutes 56% of the number of digital customers of participation banks.

Number of Active Digital Customers in Conventional Banking, million people

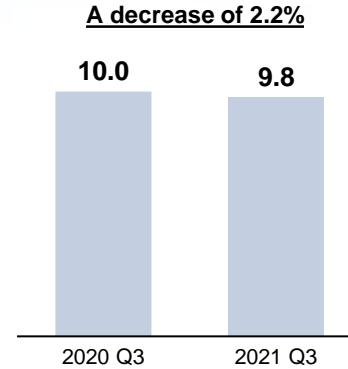


Number of Active Digital Customers in Participation Banking, million people

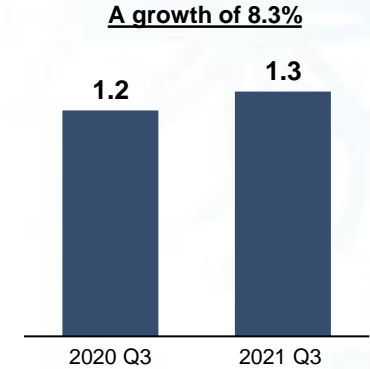


While the number of branches of conventional banks decreased by 2.2%, participation banks grew by 8.3%.

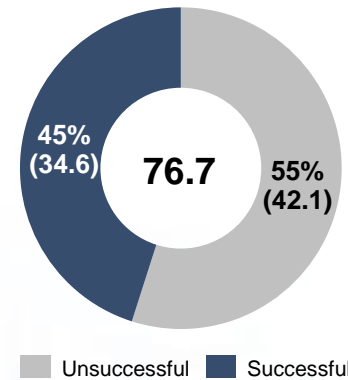
Number of Turkish Conventional Banking Sector Branches, in thousands



Number of Turkish Participation Banking Sector Branches, in thousands



Participation Banking, Digital Onboarding Success Rates, June-October 2021, % (thousand people)



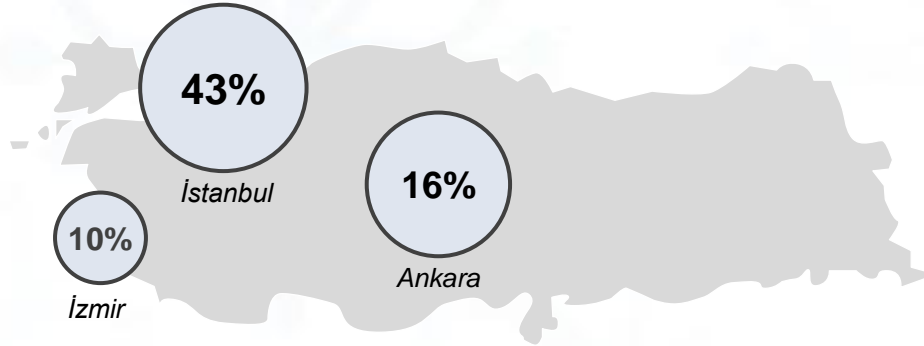
Participation banks have been providing digital onboarding opportunities since May. The digital onboarding success rate of the participation banks is 45% between June 2021 and October 2021, and the total number of applications is 76.7 thousand. A total of 34.6 thousand digital onboarding processes took place between June and October.

Note: (\*) CAGR: Means Compounded Annual Growth Rate.

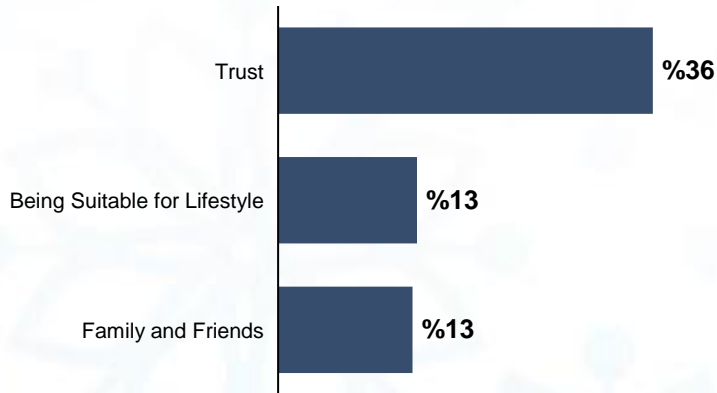
# Executive Summary (3/7)

## Digital Banking Field Survey Study and Analysis (1/2)

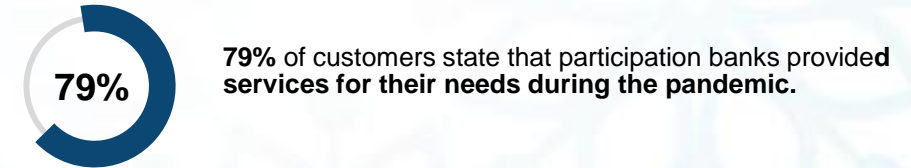
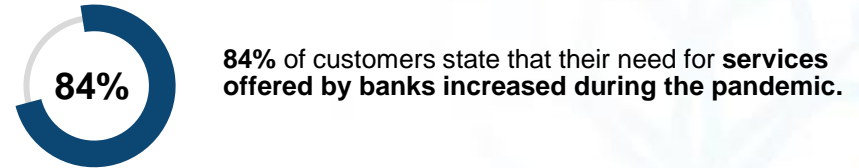
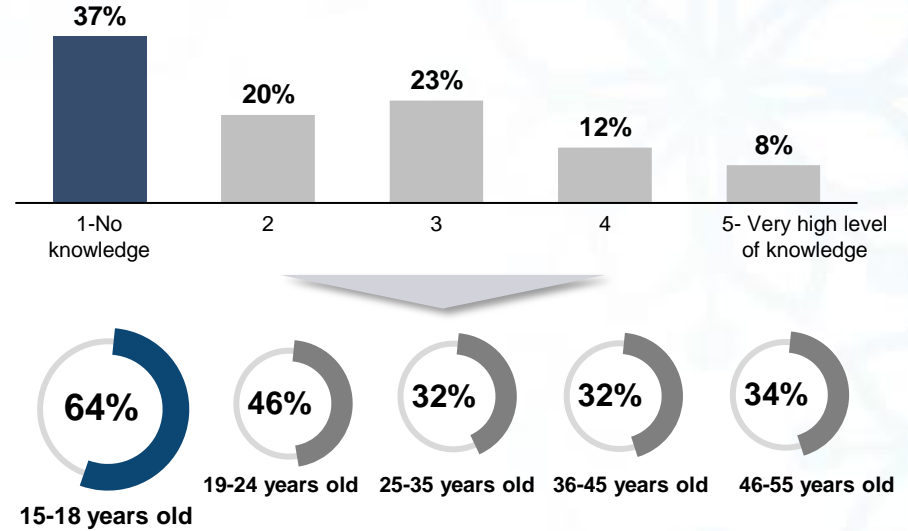
A field research was conducted with 2246 participants to gain insights into the behaviors and perspectives of banking customers in the digital finance ecosystem. 971 of the participants live in İstanbul, 353 in Ankara, 223 in İzmir and the remaining 699 people live in 9 different cities.



It is seen that the most important factor in customers' bank preference is **TRUST**.



It has been observed that 37% of the survey participants have no knowledge of participation banking, and it is observed that the largest majority in this segment is the age group of 15-18.



# Executive Summary (4/7)

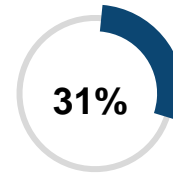
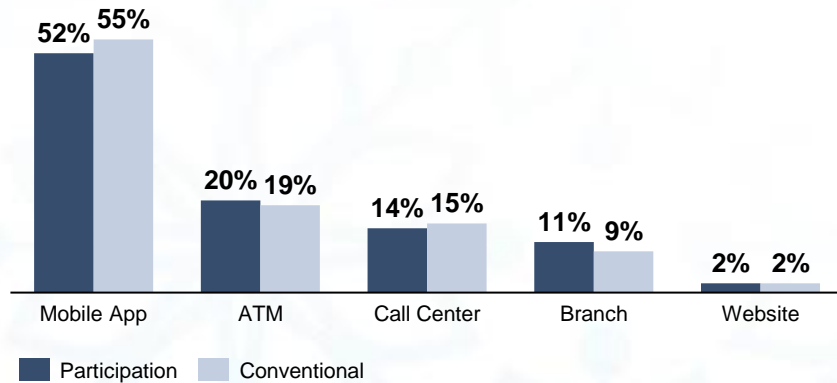
## Digital Banking Field Survey Study and Analysis (2/2)

Participation banking customers state that they do not use participation banking frequently because they find the ATM (Automatic Teller Machine) network and basic banking services insufficient in the participation banking ecosystem.

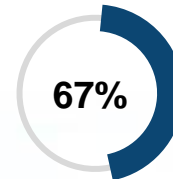
In participation banking, **70% of the participants prefer digital banking because of time saving matters** and **60% of them prefer digital banking because the transactions can be processed faster.**



In terms of the frequently-used bank interaction channels, the **number of branch visits** of participation banking customers is higher than that of conventional bank customers.



31% of participation banking customers state that they visit the branch because they prefer in-person transactions.



67% of participation banking customers who do not use digital banking state that they do not have knowledge about digital banking.





# Executive Summary (6/7)

A competition analysis study has been conducted in order to create initiatives for the digitalization of participation banking in Turkey.



## Strengths

- S1.** Openness of participation banks in Turkey to development in terms of digital transformation
- S2.** Existing participation banking customers' openness to the use of digital services
- S3.** Customers' trust in banks for borrowing and savings transactions in the financial ecosystem in Turkey
- S4.** Existence of customer population who will prefer institutions that provide participation banking services

- O1.** The rapid adaptation of the financial ecosystem in Turkey to digital transformation
- O2.** Digital onboarding legislation that enables simple and fast customer onboarding
- O3.** Existence of the studies of regulators and authorities in the field of digital banking
- O4.** For bank customers who cannot access ATM (Automatic Teller Machine) services, the opportunity to access these services through digital channels
- O5.** Contribution of digital advancements to financial literacy by facilitating customer access
- O6.** Increasing opportunities in ecosystem cooperations with fintech and technology companies

## Opportunities



## Weaknesses

- W1.** The relatively low market share of participation banks in Turkey which limits fintech cooperation opportunities
- W2.** Low financial and digital literacy across the country
- W3.** Low level of general knowledge about participation banking products
- W4.** Existence of areas of improvement in the services offered to the open banking ecosystem

- T1.** Non-banking players also being interested in the financial ecosystem
- T2.** The threat to the market share by local and foreign fintech and neo-banks that do not seek cooperation
- T3.** The probability that the increase in the data security risk and cyber attack threats in the accelerating digitalization environment may damage the element of trust in banking
- T4.** The ability of customers to easily switch between institutions, may pose a threat to institutions of which operational efficiency is not at the desired level







## Threats

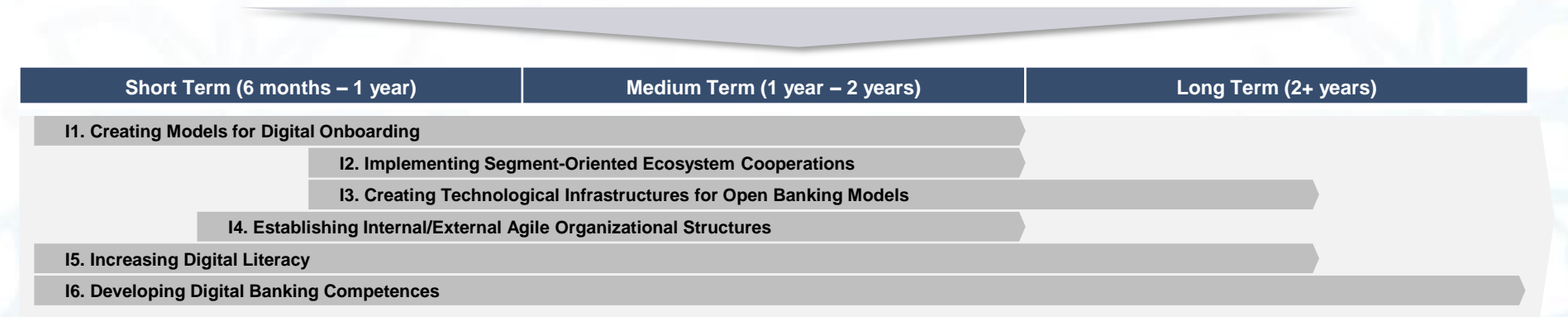


# Executive Summary (7/7)

## Initiatives and Roadmap

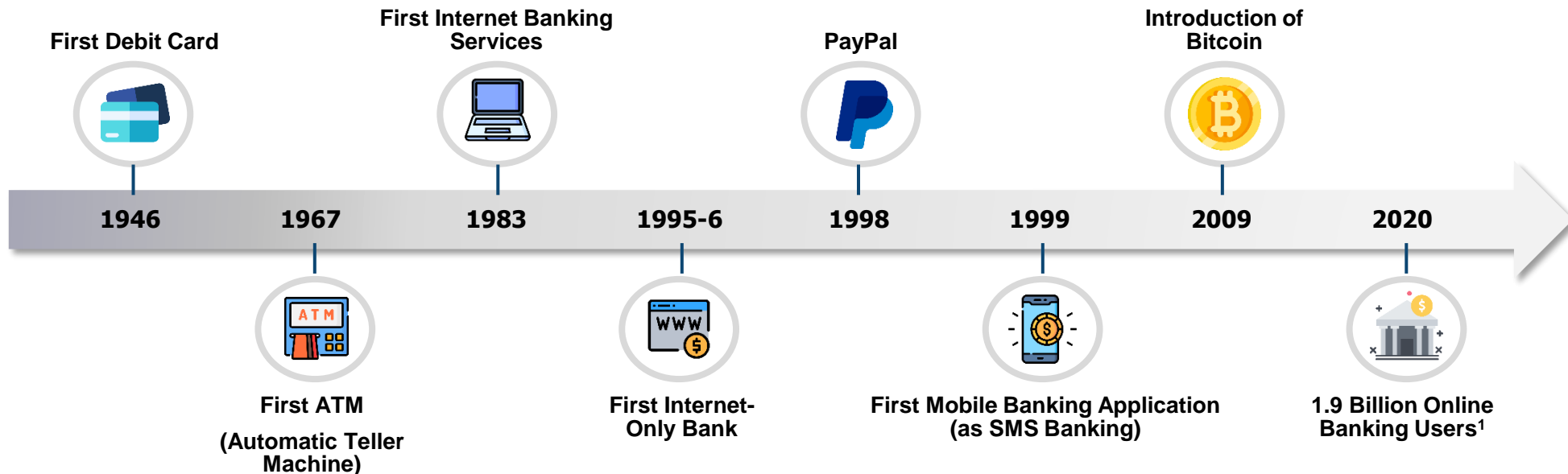
While the importance of the use of next generation technologies increases among digitalization activities aimed at improving customer experience and increasing operational efficiency in the financial services sector, ecosystem cooperations for digital onboarding and customer needs, development of the competencies of individuals in the existing ecosystem, and increase in digital literacy among customers are among important issues.

Initiative	Definition
 <b>Creating Models for Digital Onboarding</b>	Developing digital onboarding methods and approaches and improving the digital customer experience in order to utilize the opportunity to reach out to individuals to whom participation banking cannot reach, by benefiting from the developments in digital onboarding in the field of digital banking
 <b>Implementing Segment-Oriented Ecosystem Cooperations</b>	Developing cooperations for the needs of different customer segments in participation banking and designing operating models for a common goal, by taking into consideration the increase in the number of fintech players with innovative solutions as a result of technological developments
 <b>Creating Technological Infrastructures for Open Banking Models</b>	Launching open banking services in which participation banking is positioned at the center and/or as an additional service due to the rapid digital transformation in the financial ecosystem, the current developments in the legislative infrastructure in Turkey, and the increasing needs of participation banking customers for digital transformation
 <b>Establishing Internal/External Agile Organizational Structures</b>	Developing and implementing agile internal and external organizational models, due to the necessity of making use of the developments in the field of digital banking, and the cooperation, purchasing and project design opportunities emerging in the market, effectively from the perspective of participation banking
 <b>Increasing Digital Literacy</b>	Designing training programs to be offered to customers through digital channels, planning communication activities, and increasing the digital competencies of employees, since digital developments are an opportunity in terms of issues such as low financial and digital literacy and lack of desired level of awareness about participation banking products
 <b>Developing Digital Banking Competences</b>	Planning competence development studies in order to successfully launch new products and implement new business models developed in the field of digital banking and open banking, due to the need to raise awareness within institutions about participation banking products and the operation of the system, and the increase in customers' expectations about digital services and products









# Digitalization in the Financial Services Sector



## Importance of Digitalization in Financial Services Sector

- **Allowing improvement of customer experience** with changing customer needs and demands
- **Creating a competitive environment** among sector players
- **More effective/faster resolution of problems** by early detection of risks/issues
- **Enabling automation of the processes**
- **Increasing the agility and transparency of the organization**

## Next Generation Technologies and Trends

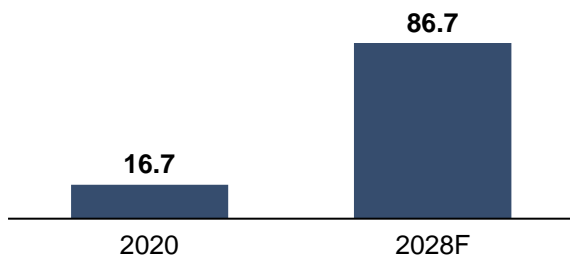
-  **Big data and data analysis**
-  **Artificial Intelligence (AI), Machine Learning (ML) and Robotic Process Automation (RPA)**
-  **Blockchain**
-  **Cybersecurity Applications**



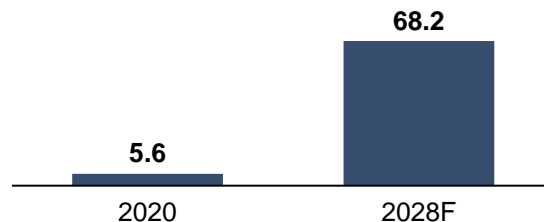
## Next Generation Technologies and Trends

**Making the customer experience and operational efficiency** the focal point is one of the main digitalization trends in the financial services sector. **Big data** used by institutions to stand out in the products/services they will offer to their customers mainly focuses on the correct analysis, classification and availability of shared information. **Artificial intelligence, machine learning, robotic process automation** applications are among the prominent factors in the financial services sector, as in other sectors, in terms of operational efficiency by reducing the manpower element by standardizing, automating and digitalizing the ways of working.

**Graph 1.1: Big Data Analysis Market Size in Financial Services Sector<sup>1</sup>, billion USD**



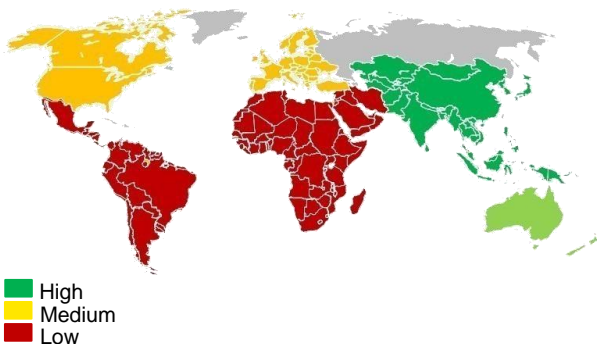
**Graph 1.2: Financial Services Sector Artificial Intelligence Applications Market Size<sup>3</sup>, billion USD**



### Financial Services Robotic Process Automation Usage Areas

- Customer satisfaction practices
- Compliance with regulations
- Report automation
- Cybersecurity
- Effective and fast know-your-customer (KYC) processes
- Anti-money laundering (AML)

### Big Data Analysis in Banking Sector, Regional Growth Rate<sup>2</sup>



More than 2/3 of the world's leading financial services sector organizations state that they use chatbots in their applications.<sup>4</sup>



The market size of the Robo-Advisory industry is predicted to reach 1.2 trillion US dollars by 2024.<sup>5</sup>



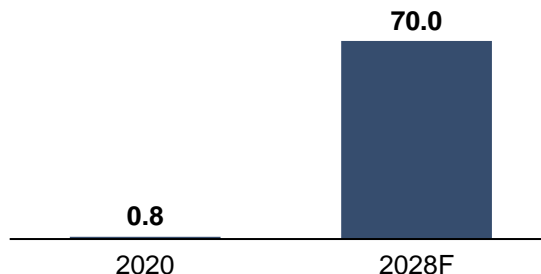
In 2020 robotic process automation applications, the financial services sector is in the lead with a revenue share of over 29%. The main reason for the financial services sector to achieve this share is the increase in the use of robotic process automation in financial regulatory reporting and balance sheet reconciliation processes.<sup>6</sup>

## Next Generation Technologies and Trends

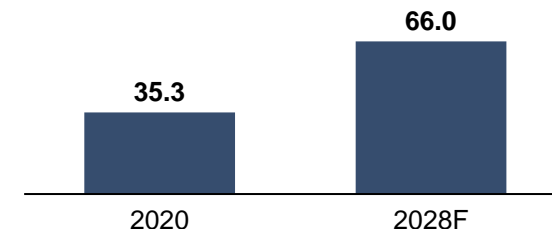
Today **blockchain technologies** are among the technologies that are invested in by organizations in the financial services sector. According to studies, 70% of financial sector institutions invest in blockchain technologies and 88% of senior bank employees believe that these technologies will have a positive impact on the financial services sector.<sup>1</sup> Although digitalization efforts and cooperations with technology companies that aim to help customers understand and trust the banking system and receive services in these areas make it possible to satisfy customer demands, they can also cause organizations to become more vulnerable to attacks in terms of **cybersecurity**.



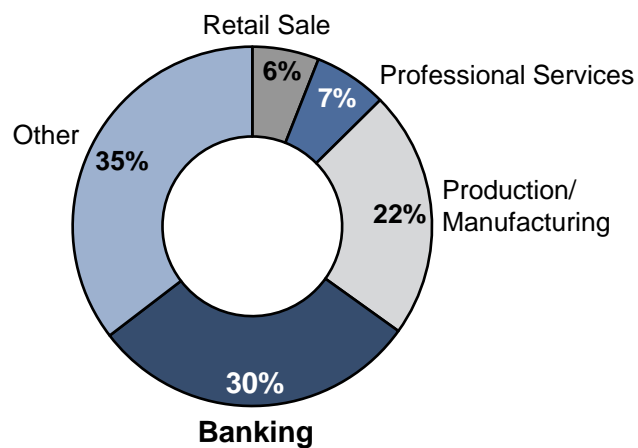
**Graph 1.3: Financial Services Sector Blockchain Market Size<sup>2</sup>, billion USD**



**Graph 1.5: Financial Services Sector Security Market Size<sup>4</sup>, billion USD**



**Graph 1.4: Sectoral Distribution of the Blockchain Market<sup>3</sup>, 2020**



According to The Economist Intelligence Unit's Digital Frontiers survey dated June 2020, cybersecurity investments rank first with 35% among the areas of focus of banks' technology investments.<sup>5</sup>



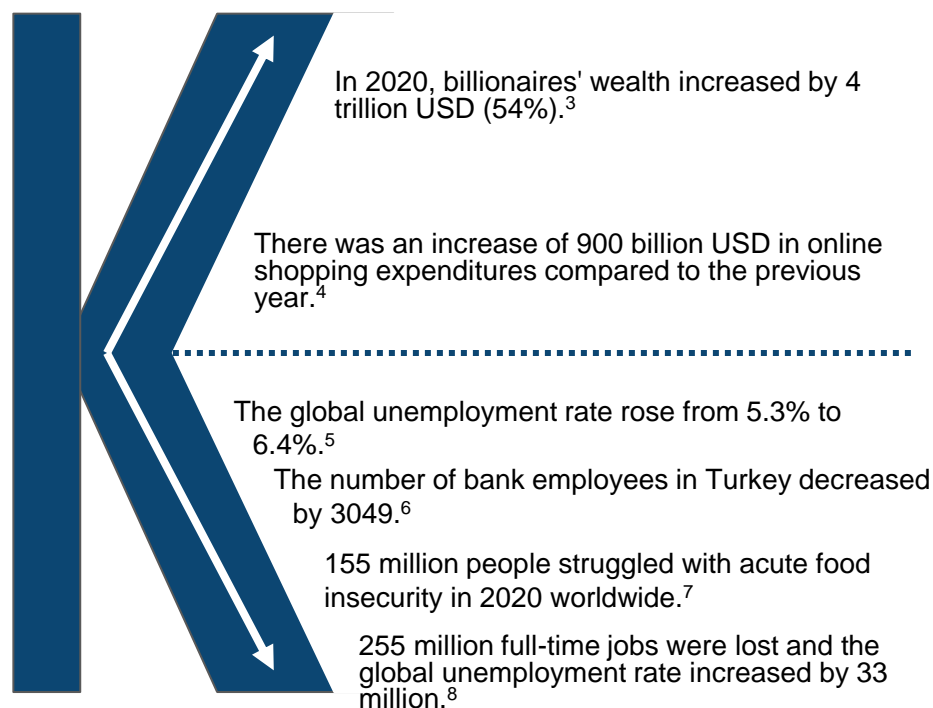
Bank of America CEO Brian Moynihan announced that they have increased their cybersecurity spending to over 1 billion USD annually.<sup>6</sup>

Reference: (1) Lewis Marketing Banking on Blockchain; (2) Emergen Research Blockchain Technology in BFSI; (3) Statista Blockchain Market Share By Industry; (4) Emergen Research Security in BFSI Market; (5) The Economist Intelligence Unit Digital Frontiers New Banking Imperative; (6) CNBC News

## Impact of the Pandemic on Financial Resources

The economic effects of the Covid-19 pandemic, which has started to affect every aspect of our lives at the beginning of 2020, continue to be undeniable.<sup>1</sup>

The economic recovering process after the Covid-19 outbreak varies for different segments of society. While high-income groups and organizations that can sell their products through digital channels continue to generate income, the rest of the society suffers due to unemployment and salary cuts, which in turn triggers income inequality, as a result of which the K-shaped recovery emerges as a concept.<sup>2</sup>



## Developments in Banking Trends in the Pandemic Era

The economic effects of the Covid-19 pandemic has necessitated changes in the ways of working in the financial sector. Different practices such as those relating to remote work, financial inclusion, and customer-centric and technology-oriented developments are observed and sustainability efforts which have increased with the outbreak of the pandemic are also on the agenda of the banks.

### 1. Business Conduct Transformation: Remote Work

The Covid-19 pandemic has caused rapid changes in the financial services sector. **Banks have to change their ways of working in a way that will minimize contact with customers and employees, but at the same time ensure the efficiency that was already present before the Covid-19 outbreak, and even improve it further.**

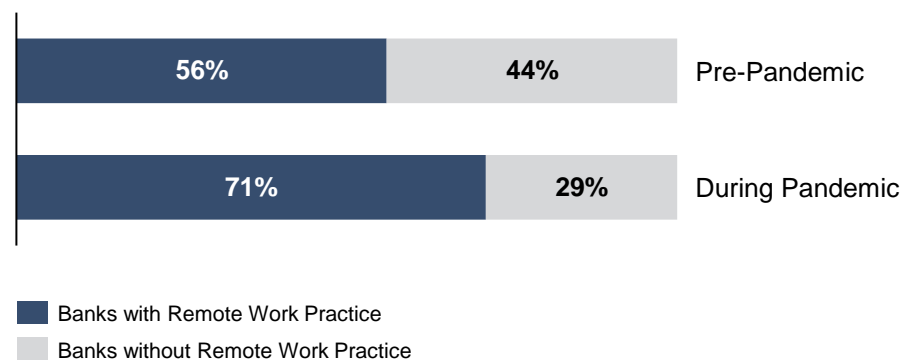
With the transition of millions of people to remote/hybrid working models, a new working ecosystem has emerged. During the pandemic, it has been observed that the financial services sector organizations have switched their employees at different levels, ranging from branch employees to senior management, as quickly as possible to the remote work system. **Video interviews, online trainings, performance monitoring, provision of access to employees in various positions to data on a need-to-know basis**, and monitoring of the secure-storage of data in all these processes that take place in digital environment have become important elements of the new working models of banks.

According to the State of Remote Work report of Global Workplace Analytics, 77% of employees state that the remote work opportunity also in the post-Covid-19 pandemic period will make them happy.<sup>1</sup>

According to the survey conducted with 80 different Islamic banks from 21 countries in the IFSB's (Islamic Financial Services Board) Digital Transformation in Islamic Banking report of December 2020,

44% of the banks state that they did not benefit from remote work opportunities in the pre-Covid-19 pandemic period. As of December 2020, the rate of banks that stated that they have benefited from the practice of working from home was 71%. These banks state that, depending on the frequency and duration of the restrictions in their locations, they have created hybrid work models such as 25% at home-75% at the office or 75% at home-25% at the office.<sup>2</sup>

Graph 1.6: Transition to Remote Work in Global Islamic Banking<sup>2</sup>














## Developments in Banking Trends in the Pandemic Era



Table 1.1: Remote Work Protocols of Banks<sup>1</sup>

Bank	Remote Work Protocols
 <b>KUVEYTÜRK</b>	In order to meet the need for remote work, additional efforts have been made such as allocating PCs to employees who are scheduled to work from home, increasing the capacity of the remote connection method, and increasing the capacity of data lines to avoid slowdowns in access. (It was possible to work flexibly under special conditions prior to the Covid-19 pandemic.)
 <b>alBaraka</b>	The bank has switched its employees to a remote work structure, renewed the transaction trees in order to help out the customers, and made it possible for many branch transactions to be carried out remotely.
 <b>Ziraat Bankası</b>	Employees with chronic diseases have been provided with the opportunity to work remotely, some of the employees have been transferred to different locations in order to reduce the density in the Head Office buildings, and the operation units have been transformed in order to be able to work remotely.
 <b>Garanti BBVA</b>	The remote work ratio is 93% for the Head Office, 50% for the Branch and Regional Employees, 80% for Operations Center, and 100% for the Customer Communication Center.
 <b>YapıKredi</b>	Shortly after the outbreak of the Covid-19 pandemic, all Head Office teams and branch portfolio managers, including the Customer Communication Center, have started to provide uninterrupted services to customers from their homes.
 <b>AKBANK</b>	Remote work is at the rate of 95%.
 <b>QNB FINANSBANK</b>	As of May 2021, nearly 65% of the employees continue to work from home.
 <b>DenizBank</b>	Remote work practice has started as of March 16, 2020, and all the employees, except for 55 people who are physically required to come into the office and who make up only 12% of the Central Operations staff, work from their homes through remote access.
 <b>Fibabanka</b>	Starting from the first days of the Covid-19 pandemic, the Head Office employees have switched to remote work while branch employees have continued to provide uninterrupted services to their customers both from home and office, alternately.

## Developments in Banking Trends in the Pandemic Era

### 2. Customer-Centric Transformation and Technological Developments

For the financial services sector which has felt the economic and social effects of the Covid-19 pandemic and the decision mechanisms of which have been adversely affected due to the panic atmosphere, creating the dynamics that will guide its customers in this sensitive period has been the main goal in the transition process. With the Covid-19 pandemic, **customer-centric approaches** that have existed before have become more important in the banking sector.

The closure of the branches due to the social distancing requirements has allowed all banking transactions to be carried out through digital channels without the need for any physical intervention. **According to the EY article titled «How Covid-19 Has Speed Up Digitalization for the Banking Sector»**, priorities for banks in transitioning to digital systems during the Covid-19 pandemic are listed as follows: **restructuring the customer experience systems, turning the services offered to customers into contactless services as much as possible, integrations with e-commerce sites, using data analysis in the most efficient way possible, and establishing cooperation with the most appropriate technology platforms for processing these data.**<sup>1</sup>

Next generation technologies (Artificial Intelligence, Machine Learning, Robotic Process Automation etc.), big data and data analysis have been useful during the Covid-19 pandemic and will continue to be so also after the Covid-19 pandemic in determining customer behavior and customizing the offers to be made to them, identifying the financial services that will be needed, and improving customer experience. Introducing customers to open banking opportunities through API (Application Programming Interface) and fintech cooperations has accelerated technological innovations in the banking sector.

Reasons such as social distancing requirements and concerns about the spread of the disease cause more effective use of mobile payment tools.



According to Paysafe's Consumer Payment Trends survey of 2021, **59% of users** state that **they have tried at least one new online payment method in the past year**. 33% of the survey participants who have changed their payment methods attribute this change **to the decrease in their in-person payments**. While 44% of the UK participants state that their in-person payments have decreased, this rate was 21% in Bulgaria. While the rate of Canadian participants who state that the frequency of their credit card use has increased significantly compared to the pre-Covid-19 pandemic period is 52%, this rate is 26% in Bulgaria. It is understood that awareness-raising activities related to the transition to digital payment methods are increasing users' trust in online channels, as **38% of the survey participants** state that they have become **more familiar with alternative online payment methods compared to the pre-Covid-19 period**. The rate of users who state that they were more worried about the risk of fraud when using online payment channels when compared to the previous year was 48% in 2020 while this rate was 40% in this year's report.<sup>2</sup>

## Developments in Banking Trends in the Pandemic Era

### 3. Sustainability

The sustainability performances of financial services sector organizations are rated based on the Environmental, Social, & Governance (ESG) scale. **The most significant change in the financial services sector** has been observed under the **environmental heading**. This year's report of Banktrack emphasizes that the world's 60 largest commercial and investment banks have provided a total of 3.8 trillion USD worth of financing to fossil fuels between 2016, when the Paris Agreement was signed, and 2020. While fossil fuel financing has decreased by 9% last year, when the Covid-19 pandemic caused production to stop, 17 banks, including HSBC, Morgan Stanley and Nordea, have recently made a commitment to comply with the Net Zero by 2050 agreement proposed by the International Energy Agency (IEA).<sup>1</sup> As part of digital sustainability, Mastercard has developed a Carbon Calculator together with Swedish fintech company Doconomy. With the Carbon Calculator, customers can see the carbon emissions caused by their purchases across their spending categories in the mobile application, through the new APIs developed.<sup>2</sup>

### 4. Financial Inclusion and Digital Financial Literacy

The importance of financial inclusion has become more prominent during the Covid-19 outbreak. **In the EY article titled «Can Inclusive Banking Drive Economics Growth in Emerging Markets»**, it was noted that as of 2018, approximately 1.6 billion people in the world did not benefit from any financial services.<sup>2</sup> According to 2017 World Bank data, the rate of people over the age of 15 who have a bank account in Turkey was 69%.<sup>3</sup> This population, which is high in underdeveloped or developing countries, has been faced with a difficult struggle in the Covid-19 pandemic due to weak financial opportunities, insufficient regulations and disruptions in healthcare systems. In this respect, the importance placed on the studies for financial inclusion for everyone


ensures that the aforementioned population can overcome the pandemic period relatively more easily.

The constraints that require minimizing physical contact, and the creation of necessary infrastructural changes have necessitated the adoption and implementation of the concept of Digital Financial Literacy, which is a combination of financial literacy, financial competence and digital literacy.<sup>4</sup> **According to the EY article "Why Financial Literacy Programs Benefit Both Your Clients and Your Firm" dated June 2020**, individuals with high financial literacy stand out as being loyal customers, being more open to purchasing higher-value products, and being more successful in adapting to new technologies. It can be said that the processes of transition of these individuals to digital life are relatively smoother. According to the report, users' financial literacy levels differ regionally and while customers with a more restricted financial background are mostly located in the Middle East (46%) and Europe (40%), individuals living in the Asia Pacific region are more confident about their financial knowledge.<sup>5</sup>





# Popular Digital Financial Literacy Platforms




In Finland, where financial literacy is made compulsory through its inclusion in the curriculum of mathematics, social studies and home economics courses, the government provides the necessary materials for financial education in schools up to the age of 18. Zaldo, the gamification platform offered by Finance Finland (FFI), offers participants the opportunity to represent Finland in the Europe-wide exam with the final test at the end of the program, and the opportunity to measure the economic knowledge of 1000 (upper) secondary school students every year with the Economic Guru competition.<sup>2</sup>



It is a platform that offers solutions for the implementation of financial literacy training methodologies and courses in the Finnish Education Model through partnerships between institutions in Finland and Turkey.<sup>3</sup>




The adult learning platform operating in Canada offers online financial education with ABC Skills Hub.<sup>1</sup>




The platform, which continues its activities with the support of the Ministry of Education of Malaysia, provides trainings for five different segments, including employees, youth and professionals, with English, Bahasa and Chinese language options.<sup>4</sup>

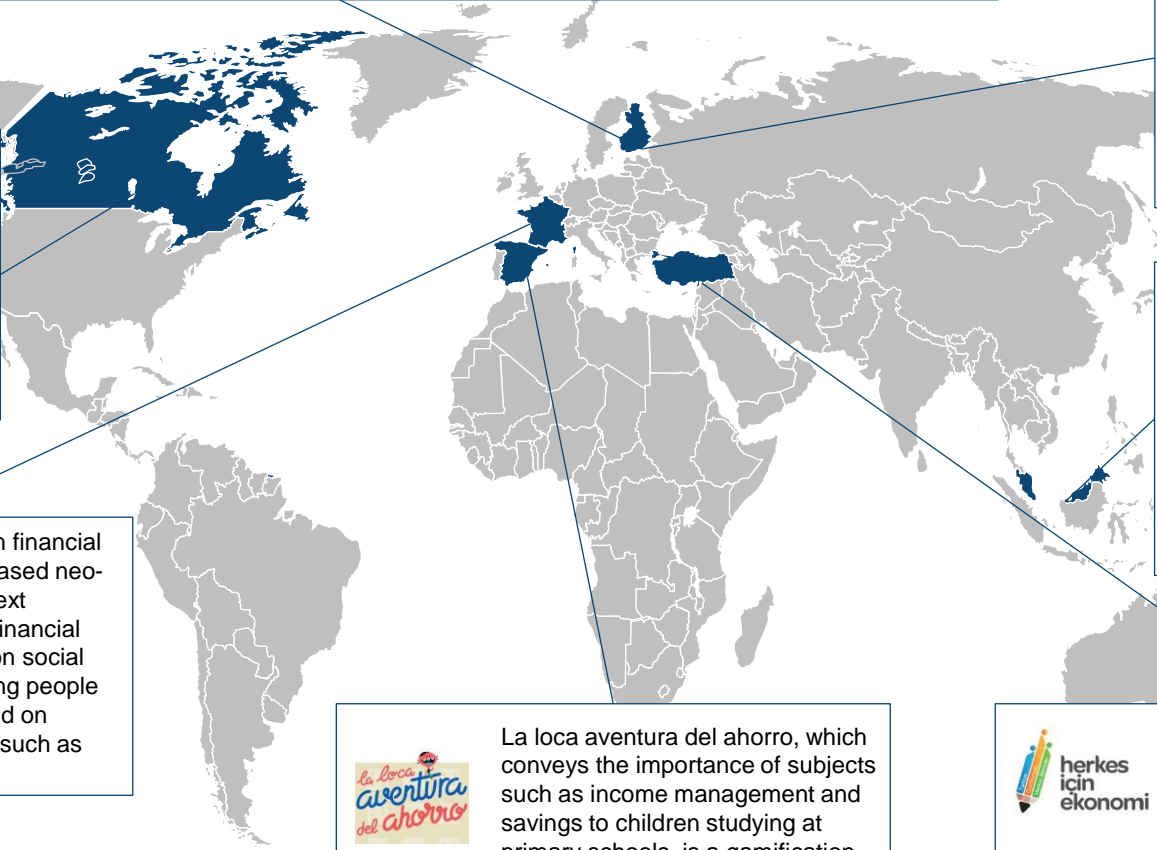
Instead of creating their own financial literacy platforms, France-based neo-banks aim to reach out to next generation users by giving financial product recommendations on social media platforms where young people spend most of their time, and on game distribution platforms such as Discord.



La loca aventura del ahorro, which conveys the importance of subjects such as income management and savings to children studying at primary schools, is a gamification application based in Spain.<sup>5</sup>



'The Economics for All' financial literacy program created by the Central Bank of the Republic of Turkey (CBRT) aims to increase the level of awareness towards the economy and the Central Bank.<sup>6</sup>



Reference: (1) Abclifeliteracy official website; (2) European Banking Federation Financial Literacy Playbook For Europe; (3) Finlit Partners official website; (4) Ulearnmoney official website; (5) La loca aventura del ahorro official website; (6) CBRT official website



## The Future of Pandemic-Era Banking Trends



### Is Full-Time Return to Offices Possible?

It does not seem possible in the short term to say that traditional banking instruments and branch banking will disappear completely, due to the existence of cash-oriented segments of society; therefore, for banks that have to provide some of their services from branches, there appears no possibility of a remote work model that will cover all employees. Banks are signaling that after the Covid-19 pandemic, they will organize their new-normal working models as a mix (Phygital) of physical (branch banking, private banking, etc.) and digital channels (internet and mobile banking).<sup>1</sup>



### Transition to Digital: Customer-Centric Changes

The digitalization trend in banking did not enter our lives due to the Covid-19 pandemic and it does not seem likely that it will lose its importance in the long term after the Covid-19 pandemic, either. Banks will continue to make technological innovations that will make customer experience the most effective part of their processes. According to the 2020 survey of The Economist Intelligence Unit, 66% of bank employees consider new digital technologies such as artificial intelligence, machine learning, and blockchain, to be one of the two trends that they think will affect their institutions the most by 2025.<sup>2</sup> Wells Fargo & Co. analysts predict that technological developments and automation processes, which are trending in the banking ecosystem, will cause the number of bank employees in the USA to decrease by 100 thousand people in the next 5 years. In addition, it is stated that there will be a significant decrease in human resources in operational units such as the call center. It is predicted that the 20% decrease in the number of branch employees in the coming years will constitute one third of the total decrease in the number of bank employees.<sup>3</sup>



### Sustainability

All of the sustainability goals set by global institutions include issues that can be resolved in the long run by the cooperation of sectors, business lines and individuals. Although banks, like other sector organizations, have met their sustainability goals in the short term with the Covid-19 pandemic; they have to determine and implement their new goals related to topics that require long-term solutions and actions such as climate action (United Nations (UN) Sustainable Development Goal No. 13) and reducing inequalities (UN Sustainable Development Goal No. 10).



### Financial Inclusion and Digital Financial Literacy

IMF's (International Monetary Fund) Financial Inclusion Report 2020 mentions that the fiscal policies of the Covid-19 pandemic should cover the works related to the provision of digital infrastructures such as electricity, internet and access to smart phones. Even after the Covid-19 pandemic, digital services will continue to be important so that individuals and business lines can access useful and appropriate financial services for their needs. Increasing the digital and financial knowledge of individuals is an essential element in order to increase and improve access.<sup>4</sup>



## **2** DIGITALIZATION IN BANKING SECTOR AND PARTICIPATION BANKING

## Digitalization in Banking Sector

In today's technology, individuals can perform banking transactions at home through many channels according to their preferences with platforms based on existing technologies such as desktop computers, Smart TVs or mobile devices. The increasing importance of online or digital customer experience, easy transaction capability and fast access to information, and the reliability of financial services are among the main factors that ensure the growth and adoption of global digital banking platforms. The global digital banking platform market is estimated to be on track to reach **9 billion USD** by 2026. According to the Research and Markets Global Digital Banking Platform report, the market is expanding with a compounded annual growth rate (CAGR) of **16%**.<sup>1</sup>

Similar to the growth and adoption of digital banking platforms globally, there has been an increase in digital banking customers of banks also in Turkey. A decrease in the use of cash by banks, branches and customers and an increase in the use of digital channels for standard/simple/widely-used services have been observed. In addition to all this, banks are constantly investing in their digital platforms in order to provide their customers with transaction convenience and solution suggestions, and continue to develop their digital banking channels and services in order to meet customer demands.

The following stand out **among the advantages** that digitalization has offered to banks:

- **Operational efficiency,**
- **Agility,**
- **Cost savings,**
- **Competitiveness,**
- **Visibility.**<sup>2</sup>

**Operational efficiency:** Digital platforms enable improvement in interaction with customers and fulfillment of needs faster, and at the same time make internal processes more efficient. Standardized processes can be easily adjusted to perform differently and respond with agility and dynamism to changes in the market. For example, there has been an increased focus on risk management after the 2008 financial crisis. Even today it can take a long time for banks to adapt to new regulatory changes, and the biggest challenge is always on the technology side.

Traditional banking transactions are costly, slow, and prone to human error. One of the important issues underlying the **cost savings** of banks is automatic and smart applications that replace the workforce. Digital platforms can reduce costs through the synergy of more qualitative data and faster response to market changes.

Digitalization allows banks to reach out to a wider customer base and engage more closely with technology-savvy individuals. In order to **compete** with the technology giants and innovative fintech start-ups of the new age, banks should aim to provide services with the same quality and dynamism. The increasing activities of technology companies and fintech players in the sector are undeniable. In order for banks to **be visible** in the market as reliable and solution-producing institutions, and to compete in terms of costs and usability, their prioritization of digital transformation in their services stands out as a necessity.

## Digitalization in Banking Sector

It is observed that **digital banking awareness, digital customer base, and digital transactions have increased rapidly** with the increasing importance of digitalization and the Covid-19 pandemic. With this increase, offering omnichannel experience with products and services developed through digital channels is a must.



**Along with traditional channels, online and mobile channels are becoming important for banks.**

With and/or instead of the branch-based model, customer onboarding with video calls and ID scanning, end-to-end digital services, customers' starting transactions at the branches and finalizing them in the mobile application or preferring banking transactions in channels such as internet and mobile banking are becoming the trends of today's world. With increasing online and mobile banking services, money transfers are getting easier and faster. With the FAST (Instant and Continuous Transfer of Funds) System, which was launched in 2020, it has become possible to make fund transfers at any time during the day. Customers can make payments via FAST in a fast, contactless and easy way by scanning the QR code to be provided by the relevant business on their mobile phones when purchasing goods and services.



**Digitalization allows access to multiple bank services through a single channel.**

With the increasing number of digital banking applications, customers can access many services quickly and easily. For example, banks provide their commercial customers with the opportunity to view the amount of transactions passed through POS (Point of Sale) devices of other banks, the total balance to be credited to the account, and the date on which they will be transferred to the account, by filtering them either by bank or by business, on a single screen on a daily basis. POS/Virtual POS information in other banks can be viewed, and the reports of the transactions and the transaction amounts to be transferred to the account can be monitored. All POS reports of the another bank can be accessed through a single channel. Thus, it is possible to make transactions on behalf of all bank channels from a single channel.

While banks ensure the digital transition of transactions by keeping the customer experience at the best level, it is highly beneficial for banks to automate their business processes and optimize their big data to reduce costs. **Banks which modernize their applications with next generation technologies, such as artificial intelligence, cloud technologies and process automation**, can rapidly develop products and services and create functionality. This will increase the efficiency of operations and will enable the improvement of user experience and the increase of trust and loyalty.

In addition, as a result of the changing conditions and customer behavior with the Covid-19 pandemic, banks have started to receive the return of their investments in digital channels. It is foreseen that especially the **solutions offered by open banking** for customer behavior will create opportunities.



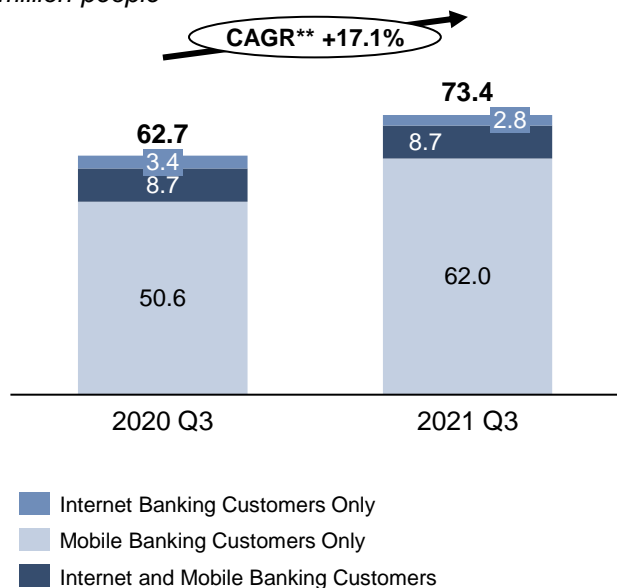
## Turkish Conventional Banking and Digital Outlook



According to the statistics of the Banks Association of Turkey (TBB), the number of active\* digital customers, which was 62.7 million as of the end of 2020 Q3, increased to 73.4 million as of the end of 2021 Q3 and reached a **growth rate of 17.1%**. Out of the number of active digital customers, which was **73.4 million as of the end of 2021 Q3**,

- 84% use only mobile banking,
- 4% use only internet banking,
- 12% use both internet banking and mobile banking.

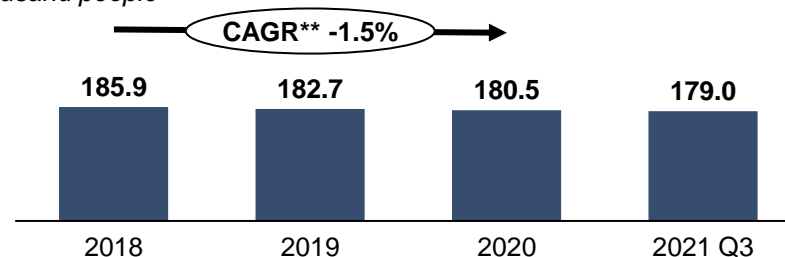
**Graph 2.7: Active Digital Banking Customers of Turkish Conventional Banking<sup>1</sup>, million people**



The development of non-branch alternative distribution channels, the increase in the demand for mobile banking services and the outsourcing of some services affect the number of branches and employees. While there is a decline in the classical branch model in conventional banking with the customer's shift to digital services, the transition to fully-digitalized banking on the corporate side is not expected to be at the same pace in the short term. However, with the increase in the number of digitalized product types, branches are expected to turn into customer relations centers where expertise will be offered to customers.

The total number of employees of conventional banks, which was 185.9 thousand as of 2018, decreased by 1.5% to 180.5 thousand in 2020. As of September 2021, the total number of conventional bank branches decreased by 2.2% compared to the previous year and declined to 9.8 thousand.

**Graph 2.8: Total Number of Employees of Turkish Conventional Banks<sup>2</sup>, thousand people**



**Graph 2.9: Total Number of Branches of Turkish Conventional Banks<sup>2</sup>, thousand**



Reference: (1) TBB official website; (2) BRSA Banking Sector Monthly Bulletin

Note: (\*) Number of active customers: It shows the total number of customers who have made a transaction (login is sufficient) at least once in the last three months. (\*\*) CAGR: Means Compounded Annual Growth Rate.

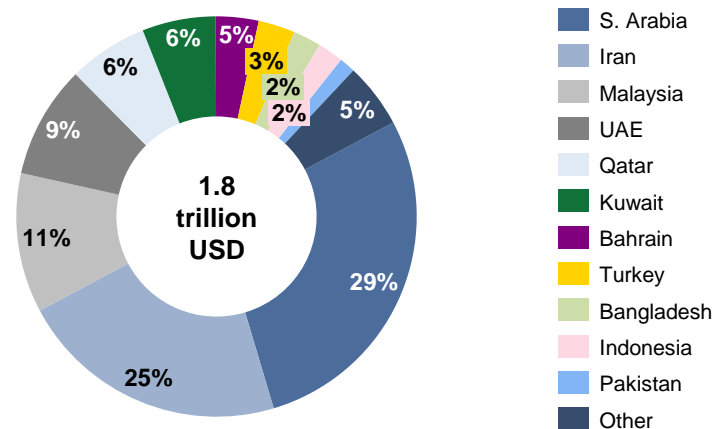
## Development of Participation Banking in the World and in Turkey

In countries where Muslims constitute the majority of the population, the interest-based infrastructure of conventional banking sector started to be questioned as of 1950s. **With the first steps taken in mid-1970s** towards Islamic banking system, banks operating in accordance with Islamic principles entered into the system that started to become an important alternative to conventional banks in countries where Muslims constitute the majority of the population. In the 1990s, Islamic banking attracted the attention of international banks as well and these banks started to provide services also in accordance with Islamic principles in countries where Muslims constitute the majority of the population. **The sector attracted international attention and accelerated its growth in 2000s.** The services provided by Islamic banking institutions started to gain recognition and to be in demand in international arena. While conventional banks had a problem of profitability in the economic crisis period experienced in 2008, **Islamic banks continued their growth and profitability until the time the crisis started to adversely affect the real sector, as well.** It was seen that the Islamic banking system was more resistant to the crisis which deeply impacted especially the economies of developed countries and the international finance system, due to the fact that its operations are intertwined with real economy.<sup>1</sup>

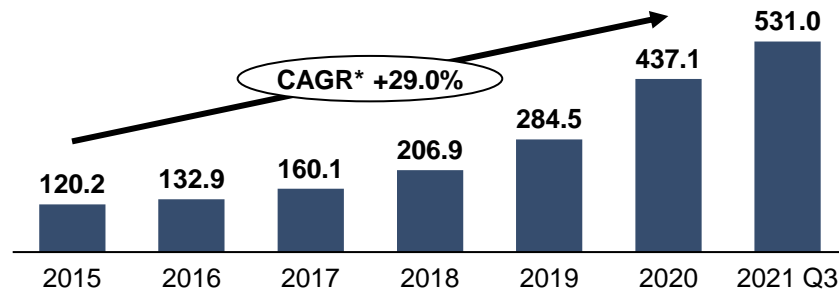
According to the Islamic Financial Services Industry Stability Report, the sum of global Islamic banking asset size, sukuk, Islamic funds and takaful values reached 2.7 trillion USD in 2020. The asset size of the **Global Islamic Banking, on the other hand, reached 1.8 trillion USD.**<sup>2</sup>



Graph 2.1: Distribution of Global Islamic Banking Assets by Country<sup>2</sup>, 2020 Q3



Graph 2.2: Total Assets of Participation Banks of Turkey<sup>3</sup>, million Turkish liras



Reference: (1) Participation Banking Strategy Update Report 2021-2025; (2) Islamic Financial Services Industry Stability Report 2021; (3) BRSA Banking Sector Monthly Bulletin

Note: (\*) CAGR: Means Compounded Annual Growth Rate.

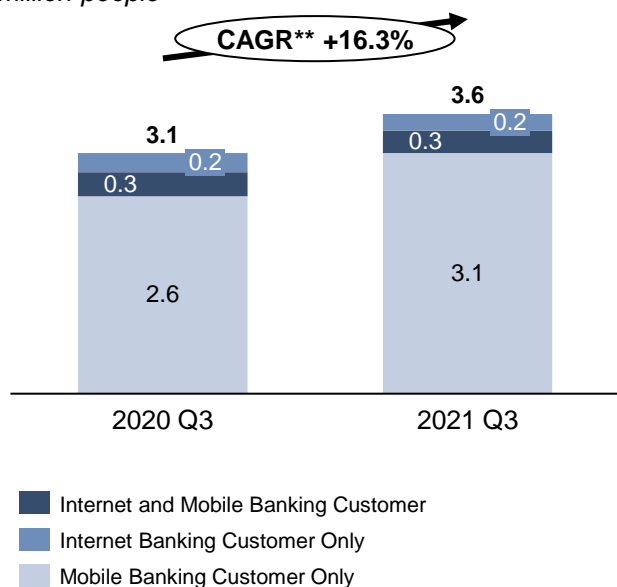
## Turkish Participation Banking and Digital Outlook



According to the statistics of the Participation Banks Association of Turkey (TKBB); with the driving force of the Covid-19 pandemic, the number of active\* digital customers, which was 3.1 million as of the end of 2020 Q3, increased to 3.6 million as of the end of 2021 Q3 and reached a **growth rate of 16.3%**. Out of the number of active digital customers, which was **3.6 million as of the end of 2021 Q3**,

- 86% use only mobile banking,
- 6% use internet banking,
- 8% use both internet banking and mobile banking.

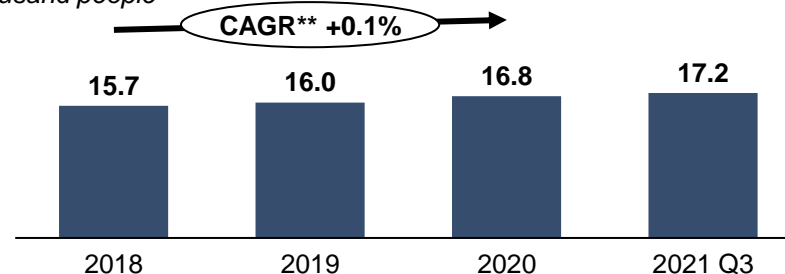
**Graph 2.3: Number of Active Digital Customers in Turkish Participation Banking<sup>1</sup>, million people**



Internet and mobile banking services are developing as an alternative non-branch channel in participation banking and are becoming an important channel. While the general point of view in the sector is that the branching in participation banking will continue until it reaches a sufficient size to meet the sector's needs; in this approach, it is expected that branches will be opened at the locations where contact with the customer is required, instead of opening branches close to each other. (network optimization, geographic clustering, access to branches, etc.)

The total number of employees of participation banks, which was 15.7 thousand as of 2018, increased by 0.1% and reached 16.8 thousand in 2020. As of September 2021, the total number of bank branches belonging to 6 participation banks increased by 8.3% compared to the previous year and reached 1.3 thousand.

**Graph 2.4: Total Number of Employees of Turkish Participation Banks<sup>2</sup>, thousand people**



**Graph 2.5: Total Number of Branches of Turkish Participation Banks<sup>2</sup>, thousand**



Reference: (1) TKBB official website; (2) BRSA Banking Sector Monthly Bulletin

Note: (\*) Number of active customers: It shows the total number of customers who have made a transaction (login is sufficient) at least once in the last three months. (\*\*) CAGR: Means Compounded Annual Growth Rate.

## Turkish Participation Banking and Digital Outlook

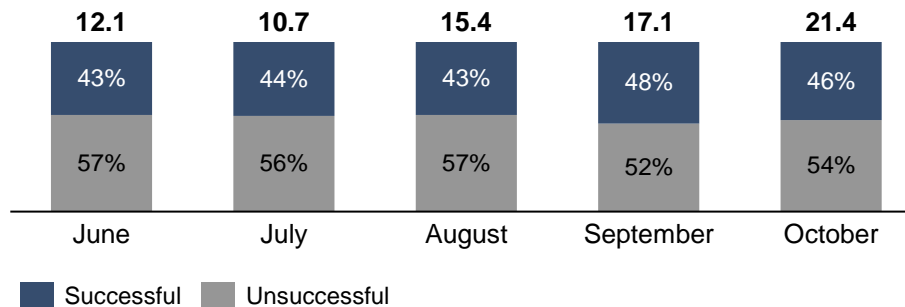
### Digital Onboarding

With Digital Onboarding, banks got the opportunity to acquire new customers through end-to-end digital environments. The transactions required to become a bank customer are carried out online with tools such as video conferencing and individuals can easily open an account whenever they want, from anywhere they want.

One of the main factors mentioned by banks about the customer onboarding through digital channels **is the shortened onboarding period**. This is because when individuals have to go through more than one step in transactions such as opening of an account, they tend to terminate the process halfway through. For this reason, banks take many actions to shorten the time of their first interaction with their potential customers and to increase onboarding rates. Among the actions taken, there are factors such as shortening the Know Your Customer (KYC) process, reducing the number of questions directed to customers or collecting only the necessary information for opening an account. **While most banks have already reduced the time of their digital onboarding process to 5-8 minutes**, a bank operating in Asia has reduced the time of its digital onboarding process to less than 3 minutes.

Within the scope of digital onboarding, banks take various actions such as reducing the number of documents required to make the account opening process easier for customers. For example, in France, banks used to request two identity cards for account opening and now only request one identity card and a video, selfie, etc. for liveness detection. When the digital onboarding success rates are evaluated, it is seen that the success rates of banks have reached ~75% in France, ~56% in Turkey, and ~99% in Asia.

**Graph 2.6: Participation Banking Digital Onboarding<sup>1</sup>, 2021, thousand people**



Participation banks have been providing digital onboarding opportunities since May. A total of **34.6 thousand digital onboarding processes** were performed between **June and October**.<sup>1</sup>



In addition to onboarding through digital channels, banks need to launch products and services that meet the expectations and needs of customers in order to attract the attention of individuals. In this context, banks around the world offer high yield savings accounts to individuals in order to gain customers. Another effective factor in customer onboarding is innovative services such as cashback.



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

Today, banking services in compliance with Islamic principles continue to become widespread in different countries and geographies, as was the case in the recent past. **With the developments in digitalization and technological areas, financial solutions focused on technology have become one of the focus points of participation banking sector.**

### Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

A. Improved Customer Experience

B. Operational Efficiency

C. Next Generation Technologies

D. Sustainable Finance and Digital

E. Financial Inclusion

F. Open Banking Applications

G. Fintech Ecosystem



### A. Improved Customer Experience

The participation banking sector, which exists as a dynamic and developing part of the banking sector, has gained an important place in the sector with its flexible performance that is observed even in crisis environments. **Having a digital customer strategy aimed at improving the ongoing service quality in the light of market changes and trends** is important for participation banks in order to have a competitive position in the market. Competing in the digital age, banks are focusing more on digital applications, services and solutions as compared to the past in response to market changes and customer needs. Institutions prefer **services that will increase customer satisfaction rates and provide higher profits**, by improving their digital competencies in order to improve customer experience. In a competitive financial markets environment, participation banks, like other institutions, improve their customer satisfaction levels by **constantly re-evaluating their service offerings and customer experiences in line with the expectations of their customers.**

It is observed that the next generations have a clear tendency to perform their banking transactions on digital platforms. It is expected that the provision of digitally-enhanced experience **to reach out to this younger customer base which is more knowledgeable in terms of digital literacy** will contribute to the increase in the market share of participation banks. In today's world, it is critical for participation banks to use digital tools effectively in order to reach out to younger generations and to increase their activities in digital channels such as social media where the younger generation mostly spends their time. By increasing their activities in these areas, institutions are expected to focus on improving the financial literacy of the younger generation on the one hand, and on onboarding new customers with the expansion of customer interaction channels, on the other.

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization



### Kuveyt Türk Participation Bank: Digital Explorer Mobile Application

The Digital Explorer mobile application contributes to the development of budget management and financial literacy by allowing children to view their account balance and account activities. Parents, on the other hand, can keep their children's expenses under control thanks to the spending limits that can be determined by them.

The Entrepreneur Explorer web game aims to reach all children by teaching them the basics of banking with puppets and online games in a fun way.<sup>1</sup> Thus, the young population will be able to learn about Islamic products and services by getting involved in the banking sector at early ages.

Even though studies show that interest rate sensitivity is among the reasons why participation banks are **preferred, interest sensitivity is not considered as the only reason**. For this reason, it is expected that participation banks will provide digital services that meet customer requests and needs and **contribute to the development of quality perception in the eyes of customers**. Participation banks are expected to focus on improving customer experiences and increasing the level of digital services with technological advances by **meeting the future customer expectations and the needs of the digital generation, while offering products that comply with Islamic principles**. Digitalization has become a necessity for customer experience and customer satisfaction **and is now an essential feature to have, rather than a type of service that participation banks should merely offer**. However, the fundamental role of human-based service provision in providing customer loyalty and satisfaction should also not be neglected.



### Albaraka Türk Participation Bank: Digital Card

Participation banks in Turkey have various product and service offerings in order to improve and expand their customer experience:

- **Albaraka Türk Digital Debit Card** : It is a digital debit card that can be purchased via the internet branch without physically going to the branch and without the need for a courier.<sup>2</sup>



### Vakıf Katılım Participation Bank: POS on Mobile

- **POS on Mobile**: Vakıf Katılım POS on Mobile, which transforms Android smartphones with near field communication (NFC) feature into contactless POS devices, enables payments from contactless debit and credit cards.<sup>3</sup>

## B. Operational Efficiency

Participation banks, which operate on a commodity basis, have many operational burdens in their transactions. Complex and lengthy manual transactions cause **participation banks to lose customers and become dependent on personnel**. The desire of customers to perform their transactions in a faster and more practical way will be possible with end-to-end digital processes offered in participation banks. The digital initiatives that participation banks are working on will also allow customers to perform their own transactions via a mobile application or platform **without physically going to the branch**. Therefore, reductions in the number of personnel for certain operational processes in banks are among the possible scenarios.

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

It is foreseen that use of new methods that are less costly for banks and more practical and faster for customers in terms of depositing/withdrawing money will help reduce the dependency on ATMs at least to some extent.



### Insha Ventures: NakitBasit Application

With applications such as NakitBasit developed by Insha Ventures, customers can withdraw/deposit money without the need for an ATM or branch. While this will improve the operational efficiency of banks, it will also improve the experience journey of customers who cannot access ATMs/branches.<sup>1</sup>

## C. Next Generation Technologies

### Artificial Intelligence

Artificial intelligence has started to stand out as an important development that will offer innovations in banking. **With the use of artificial intelligence**, it is predicted that **there will be developments in the operations, product/service costs, risk management, customer services, marketing activities and many other areas of participation banks.**

In addition to ensuring the development of applications that facilitate the banking experience of customers, with chatbots and robo-advisors; **the artificial intelligence technology enables the integration of digitally-adapted products/services to mobile/internet banking platforms, the detection of real-time fraud incidents, the determination of products/campaigns that will address the individual needs of the customer**, and the development of algorithms that will enable the recognition of customers without a banking background.

In the light of these developments, it is expected that participation banks will use artificial intelligence along with other technological applications in order to increase their profitable growth in the banking sector in the coming years, and that **taking investment advice about a product in accordance with Islamic principles through an artificial intelligence will be among the inevitable developments to occur in the future.**



### Credit Scoring with Artificial Intelligence Technology: Velocity and Kabbage

- With the effective use of artificial intelligence technology, **Velocity** offers credit scoring opportunity without the need to obtain customers' past banking experience, through the analysis of behavioral data of individuals (such as the applications they use, shopping habits) and their lifestyles.<sup>2</sup>
- **Kabbage** is a financial technology firm that makes the loan application process of SMEs (Small or Medium Sized Enterprises) 100% automated and online. It uses various data such as income, accounting data, business transactions, shipping data, and social media to understand the general condition of the enterprise and to calculate credit limits throughout its life cycle.<sup>3</sup>



### Bank of America: Virtual Assistant Erica

Bank of America invests significantly in artificial intelligence, machine learning and business intelligence to better understand individual financial preferences and provide tailored services to customers. The artificial intelligence-supported virtual assistant Erica provides customers with a personalized experience. It proactively detects recurring charges in an account and notifies customers thereof. It also helps with billing disputes, fees, deposit holds, and transaction-related questions.<sup>4</sup>



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### Regulatory Technologies (Regtech)

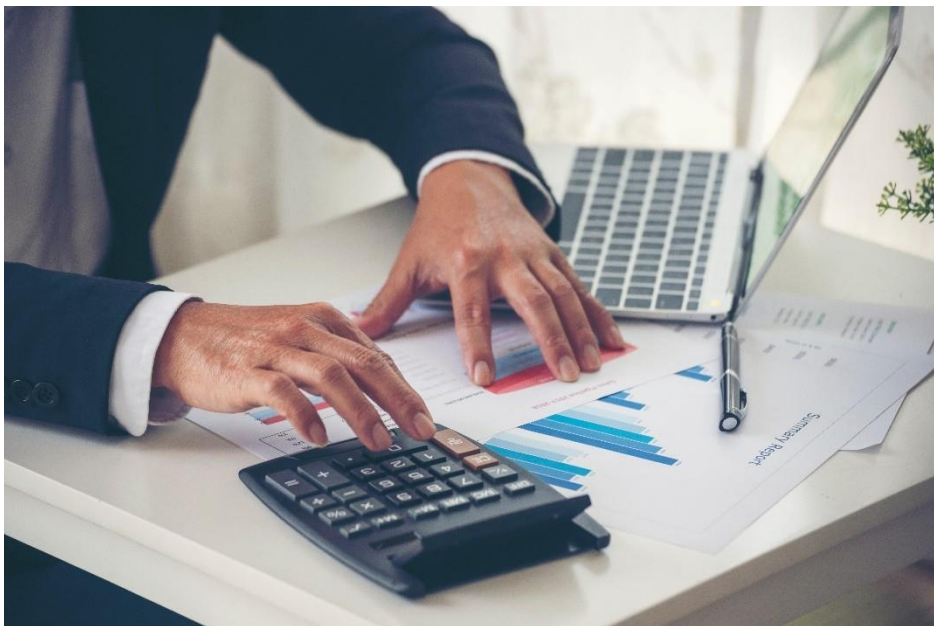
With the use of artificial intelligence, regulation-oriented processes in the financial sector are becoming faster and automated. Key functions include monitoring, reporting and compliance.



#### Regtech Companies: Acuant and Trunomi

As an example of Regtech companies;

- **Acuant:** It provides fraud prevention and risk management services for digital transactions by tracking payment assets.
- **Trunomi:** It provides the service of securely managing the consent of customers to use their personal data.



### Robo Advisors

Robo advisors are virtual financial advisors developed with artificial intelligence. It is possible for them to automate financial planning by using software run by algorithms. **The importance of robo advisors is increasing due to the fact that the next generation does not need physical consultants and that transactions are carried out comfortably through remote access.** Robo advisory services that proceed in accordance with Islamic principles are called " **Halal Robo advisory**" or "**Islamic Robo advisory**" services. It is estimated that this technology will contribute **greatly to the participation banking sector's visibility, cost-effectiveness, and increased productivity.** The most outstanding benefit of robo advisors is their **low cost** since virtual consultants are used instead of physical consultants. **The ability to reach robo advisors 24/7** is also among the beneficial factors for customers.<sup>1</sup>



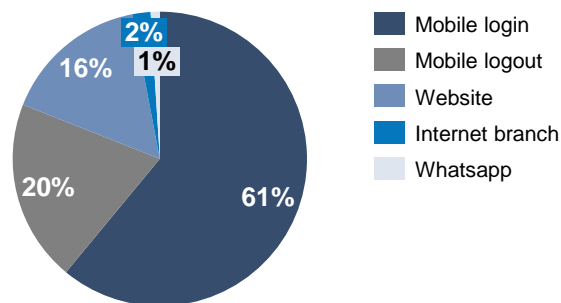
#### Kuveyt Türk Participation Bank: Digital Assistant Selim

The virtual assistant, which is brought to life with artificial intelligence technology and constantly improves its skills and learns new things, is put into service through digital channels. Many services such as those involving getting information about bank products, money transfer, bill payment, debt payment and currency calculation transactions can be carried out via digital assistants. They can also answer questions about basic information and concepts concerning participation banking. Smart assistant Selim answered a total of 9,231,992 questions in 3,521,904 chats/calls made on the website, internet, mobile branch and whatsapp between April 1, 2021 - October 1, 2021. An average of 3 questions are received in 1 chat/call and an average of 18,590 questions are answered daily. According to the data of September 30, 2021, Selim understood what the customers were saying at a rate of 98% based on words and provided guidance accordingly.<sup>2</sup>



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

**Graph 2.10: Channels Used by Customers to Talk with Digital Assistant Selim as of September 30, 2021<sup>1</sup>**



### Data Analysis and Big Data

The participation banks' taking their digital initiatives to the next level and **gaining predictive customer insight** by using customer analytics will contribute to the **accurate determination of product configurations and customer targets by better measuring customer preferences**. Even though participation banks are a relatively faster growing area in the market compared to conventional banks, **measuring customer preferences for services and products in accordance** with Islamic principles and **collecting this information in detail** will create an important insight. The digital union that will be created between customers and participation banks, together with data analysis, will allow valuable insights to be formed about the attitudes and needs of customers in terms of key factors.

**With big data applications, the amounts of spending of customers** according to age, gender and social class can be easily analyzed. A high level of customer satisfaction is ensured by offering a **personalized experience to customers**.

With big data and data analysis, it will be easier for participation banks to match the right product with the right customer by predicting which products will be more effective and necessary for a specific customer. **By using big data, credit and market risks are evaluated** by institutions operating in accordance with Islamic principles, and even if these risks cannot be completely avoided, it is **possible to take precautions at early stages**.<sup>2</sup>

In order for participation banks to make sufficient progress in the use of next generation technology, including data analysis and big data, it is important to employ good quality and qualified workforce. In addition, the organization of studies/trainings to increase the competence of existing personnel in the fields of data analysis and next generation technologies will positively affect the digitalization process.

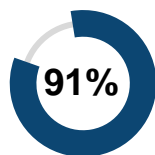


## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### Cloud-Based Systems/Solutions

Cloud technologies are data storage services that allow data sharing between electronic devices. The operation and objectives of an organization are important factors when choosing cloud-based systems/solutions. Institutions with heavy workloads or variable demands can turn to public cloud models while institutions with predictable workloads can turn to private cloud models. Public cloud models have higher data archival capacity as they offer long-term storage. Private cloud models, on the other hand, may have higher security and privacy regulations. Hybrid cloud models offer a combination of features from both systems. Today, it is seen that public cloud models, which offer low cost, large data archive and fast service compared to private and hybrid cloud models, are more preferred.

### Graph 2.11: Rate of Utilization of Cloud-Based Service Models<sup>1</sup>



The ratio of financial services sector organizations that stated that they are currently using cloud services or are planning to use them in 6-9 months is 91%.

Table 2.1: Comparison of Cloud-Based Systems and Traditional IT On-Premises<sup>2</sup>

	Cloud-based IT (Information Technology) solutions	Traditional IT On-Premises
<b>Flexibility</b>	Quite high	Highly constrained - high-cost and slower flexible growth
<b>Time to market</b>	Almost instantly	Long
<b>Cost management</b>	Dynamic, provides insights	Not possible after investment
<b>Impact on capital ratio</b>	Similar to other profit & losses expense	High
<b>Security</b>	Opportunity to integrate with next generation technologies	Solutions for existing services based on internal resources and external support

The need to securely store data, which has become more essential in the finance ecosystem, especially with neo-banks and traditional banks serving customers 24 hours a day with mobile applications, has made the industry one of the sectors where cloud-based systems are used most actively. These solutions have taken their place among the focal points of the sector in terms of providing banks with the opportunity to **develop new and innovative service models and making their business processes more efficient and cost-effective**. In addition, these technologies have the potential to increase the competitiveness of institutions in the financial services sector with fintechs.



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### Blockchain Technology

The use of blockchain technology and cryptocurrencies, which have gained importance recently has influenced the Islamic finance ecosystem as well as the entire sector. **Although there is no clear conclusion about the compatibility of the use of cryptocurrencies with Islamic principles, some Islamic countries are taking initiatives for the effective use of blockchain**. For example, the United Arab Emirates aims to move 50% of government-dependent transactions to blockchain platforms within the Emirates Blockchain Strategy 2021.<sup>1</sup>

Blockchain technologies are used in sukuk, check-based payment, smart contracts and Islamic finance. The number of financial technology startups offering blockchain solutions in line with Islamic principles is also increasing. Biokkoin, BitOasis, CaizCoin, Fasset, Finterra, MenaPay, OneGram and Rain are the most important ones among these startups.



First cryptocurrency in line with the Islamic principles<sup>2,3</sup>



It was developed in Germany in 2020.

The platform has been established to ensure the ethical transformation of cryptocurrencies and include them into everyone's current financial world in accordance with Islamic principles.

- First decentralized blockchain in line with Islamic principles
- A safe, transparent and accessible structure for everyone
- Recognition of investors as partners
- Promoting ethical values by including the concept of zakat

#### Products

- Caizcoin token (7.45 USD\*)
- Caizcoin Wallet
- Caizcoin API
- Digital banking partners
- caizchain.com
- Caizscan.io network



Cryptocurrency platform compatible with Islamic principles, reaching customers from more than 50 countries<sup>4</sup>



The Bahrain-based platform, which was founded in 2017, was authorized by the Central Bank of Bahrain (CBB) in 2019.



In the first half of 2021, the trading volume of the platform increased by 20 times compared to the same period of the previous year, reaching 1 billion USD.



100,000+ active users and customers from 50+ countries

- Providing fast and accessible financial opportunities with cryptocurrencies to the Middle East region where cryptocurrencies are difficult to acquire despite the advanced financial system and technology-savvy population.
- Ability to open individual and corporate accounts
- Exchange bitcoin, ethereum, litecoin, and XRP with 1.5% trading fee
- Easy trading with compatibility with 6 different local currencies and VISA MasterCard integration
- Protecting 98% of cryptocurrencies on the platform from attacks by keeping them offline with Cold Storage methods

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### D. Sustainable Finance and Digital

Today, processes that directly impact individuals are increasingly becoming surrounded by an electronic/digital world and this digitalization has relatively accelerated in the infrastructures of businesses and industries. For example, the vast majority of global carbon emissions originate from the transport sector, industrial processes and buildings. The replacement of these analog structures by digital systems or the creation of digital systems equipped with these structures have the potential to add great value to our world in terms of environmental sustainability.

Participation banking progresses in **line with the principles of sustainability**, by considering the areas that will benefit the society and the environment as per its philosophy. Participation banks are defined as institutions that are based on a real business activity, place emphasis on ethical values in business operations, provide transparent information to the people and institutions to which they are accountable to, are **based on solidarity and partnership relations and act with no-interest sensitivity**<sup>1</sup> and they try to support **environmentally-friendly projects**, including especially investments for renewable energy projects.

From a sustainability perspective, **digital banking has an important position**. Transformation is carried out in an **environmentally-friendly manner** both with the financial tools used and with the banking operations. Accordingly, performance of operations through digital tools and reducing paperwork and long processes will be beneficial in terms of sustainability, and the importance of what can be called **green digital transformation** is expected to increase.



### Studies on Sustainability

- Albaraka Türk continues its Carbon Disclosure Project (CDP), BIST Sustainability Index and LEED Gold Green Building Certification studies.<sup>2</sup>
- Breaking new ground in the field of sukuk, Kuveyt Türk has performed the “Global Sustainable Tier 2 Subordinated Sukuk Issuance” for the first time in Turkey and in the world.<sup>3</sup>
- Garanti BBVA became the only company from Turkey to be included in the Dow Jones Sustainability Indices (DJSI), one of the most prestigious platforms that evaluates the sustainability performance of corporate companies worldwide, and has been included in the index five times in a row. By strengthening digital channels and informing customers about branchless banking practices, Garanti BBVA increases the rate of transactions made through digital channels, thus increasing the efficiency of branches, and enabling the customers to save on paper and fossil fuel they consume while visiting branches.<sup>4</sup>
- In partnership with FinTecSystems, **Ecolytiq** has developed the Sustainability-as-a-Service platform, which provides automated analysis of consumers' environmental impacts based on debit card and bank transactions.<sup>5</sup>

### E. Financial Inclusion

Insufficient education, lack of valid ID, geographical difficulties and lack of credit history are among the reasons why customers are not provided with banking services. **It is expected that mobile banking and e-banking applications** together with the use of innovative technology will make it possible to overcome these obstacles with low costs.



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

With digital banking applications, it will be possible to reach most of the people in various regions with cheap, fast, reliable and simple methods.

Considering that digitalization is no longer common only in educated and wealthy cities, it is **predicted that digitalization in participation banking will help with financial inclusion to a large extent** and will contribute to the expansion of the market **by providing access to the masses located in distant / less-branched regions.**

With the Republic of Turkey Identity Card application, which was put into effect in 2016, chips are started to be used on IDs. By the end of 2020, the percentage of citizens who switched to using the new identity cards reached approximately 75-80%. With the use of valid ID cards with chips, it is expected that access to banking transactions will increase and it will be easier to receive reliable services, and the levels of financial inclusion will become better.

According to TÜİK (Turkish Statistical Institute) data, the age groups with the least use of computers and internet in 2020 are 45-54 (75%) and 55-64 (51%) age groups.<sup>1</sup> When the age groups are analyzed by gender, it is seen that the computer and internet usage rates of women are lower than the usage rates of men for all age groups. In addition to all these figures, it was observed that the rates of computer and internet usage increased both in terms of age group and gender between the years 2019 and 2021. Informing women and the elderly, whose computer and internet usage rates are relatively low, in terms of financial and digital literacy will be an important gain in terms of their financial inclusion.<sup>1</sup>

New ID card application, increasing computer and internet usage rates, and informing the women and the elderly about financial and digital literacy

will increase the financial inclusion of the citizens in Turkey and expand their opportunities.

There are various signs that are also valid for Turkey in order to reach the target audience in developing markets and to take advantage of the financial inclusion opportunity. Banks **should pay attention to the following indicators when prioritizing financial inclusion investments<sup>2</sup>** :

- High level of mobile usage and e-payment methods
- Digitalized national identity systems
- Transparent and reliable credit data infrastructure
- Access of institutions to digital data
- Digital currencies
- Financial literacy practices
- Regulatory incentives for banks
- Presence of various financial ecosystems/ cooperation opportunities



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

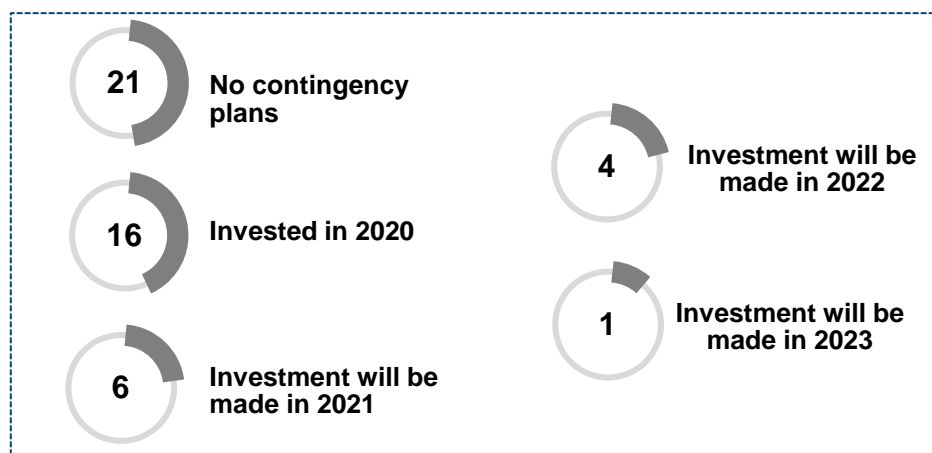
### F. Open Banking Applications

Open banking is a service model in which financial data is shared with third-party organizations, with the approval of customers, in order to improve the services offered to customers and to ensure more efficient use of data. This reliable and transparent model is an area that has recently attracted the attention of fintechs as well as banks. Since open banking provides transparency and economic justice, which are the basic principles of participation finance, it is widely used by participation banks and its importance is increasing day by day.

Companies in the world and especially in Europe have started to add their transformation strategies in open banking to their roadmaps. Institutions in Turkey plan to shape the APIs they offer according to open banking regulations and standards. According to Architech's 2021 Open Banking Research, 423 open banking platforms worldwide have released more than 2800 API products as of 2020 Q3.<sup>1</sup>

In the survey conducted by Architech with the participation of CIOs from different institutions; CIOs were asked for their views on their institutions' plans to invest in open banking. It has been observed from the responses that 16 institutions in this field have already made their investments in open banking in 2020.<sup>1</sup>

**Graph 2.12: CIOs' Open Banking Investment Planning<sup>1</sup>**



**Table 2.2: Topics of API Services Provided by Selected Banks in Turkey<sup>2</sup>**

Albaraka Türk	Kuveyt Türk	Vakıf Katılım	Ziraat Katılım
Accounts	Accounts	Accounts	Accounts
Payments	Credit card	Credit card	Information services
Money transfers	Loans	ATM finder	Authentication services
Loans	Payments & digital payments	Branch finder	
Credit card	Money transfers	Customer information	
Information services	Information services	IBAN	
Investment products	Virtual POS		
Analysis	Donation		
	Incident operations		

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

In accordance with the new open banking rules prepared by the Central Bank of the Republic of Turkey; in order to monitor the account movements of customers, it will be possible to access all bank data in line with permission through integration with the Interbank Card Center (BKM). This will help meet the customers' demand to view their accounts in different banks on a single platform. Providing the customers with the opportunity to view the facilities in different banks on a single platform is important in terms of reducing the transaction density in the branch. However, since the possibility to view all banks at the same time and to select the appropriate product provides competition opportunity for smaller banks, it also carries the risk of being a disadvantage for large banks with a wide branch network. Therefore, banks are expected to reconsider their business models in order to have a competitive advantage in the market and to be more competitive in terms of prices by gaining cost advantage.

### Uniting Bank Accounts on a Single Screen: Vomsis

Vomsis, one of the Albaraka Garaj startups and receiving investment from Albaraka Fintech Venture Capital Fund, enables bank accounts to be gathered on a single screen. On a single screen, users can instantly control the balance and account movements of their accounts.<sup>1</sup>

Participation banks also develop solutions on services and products for customers' demand for cashless and contactless payment solutions through open banking applications and cooperations.

### FAST Payment System

In the Instant and Continuous Transfer of Funds (FAST) system, a 24/7 instant payment system developed by the Central Bank of the Republic of Turkey, which was put into use as of January 8, 2021, an average of 2 million instant payments per day are made in less than a second between customer accounts. It is possible to initiate payments easily and quickly with the Republic of Turkey Identity Number (TCKN), phone number and e-mail address. The number of users registered to the Easy Addressing System to proceed with this method has reached 11.3 million.<sup>2</sup>



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### Financing and Payment Institution Example



This was implemented in order to provide financial support to customers who will procure the technological products offered to customers through Turkcell channels. Turkcell Finansman A.Ş. was licensed by the BRSA in 2016.



Asset size of TRY 2.5 billion at the end of 2020 period



More than 11 million loans as of 2020



Nearly 200 employees

### Products

- Consumer Loan
- Commercial Loan
- Financell Kredim Güvende: It is an insurance product offered in cooperation with BNP Paribas Cardif Hayat Sigorta A.Ş. and can be used only with a loan product.

### Success Factors

- Onboarding with functions from different sectors:  
In 2020, 129 thousand new customers were onboarded by Turkcell through Financell.
- Making use of the increasing demand for e-commerce with high smart device usage rate
- The goal of contributing to the transition to a cashless society
- Diversification of payment channels with ecosystem cooperations:  
While postpaid customers can reflect their device payments on their invoices, users with prepaid lines are offered the opportunity to pay their installments through the Paycell application, stores and channels of 11 institutions including Akbank, Ziraat Bank, Yapı Kredi and PTT.

With the prepared digital banking regulation draft and the increasing tendency of payment systems in the ecosystem, it is likely **that there will be potential opportunities for cooperation with banks.**



Founded in 2000, Turkcell Ödeme ve Elektronik Para Hizmetleri A.Ş. became the first operator brand licensed by the BRSA in 2016. Paycell operates in partnership with Turkcell Finansman A.Ş. with a 90% share.



5.5 million active users in 2021 Q2



A trading volume of TRY 301 million in 2021 Q2



12 thousand member businesses as of the end of 2020

### Products

- Paycell Card: It is a prepaid shopping card.
- Paycell Application: It is a financial platform that includes functions such as money transfer and bill payment and can be used independently of the operator.
- Paycell Mobile Payment: It is an application that offers the opportunity to make payments via SMS, one-time password (OTP) and mobile application, to be charged on the invoice.

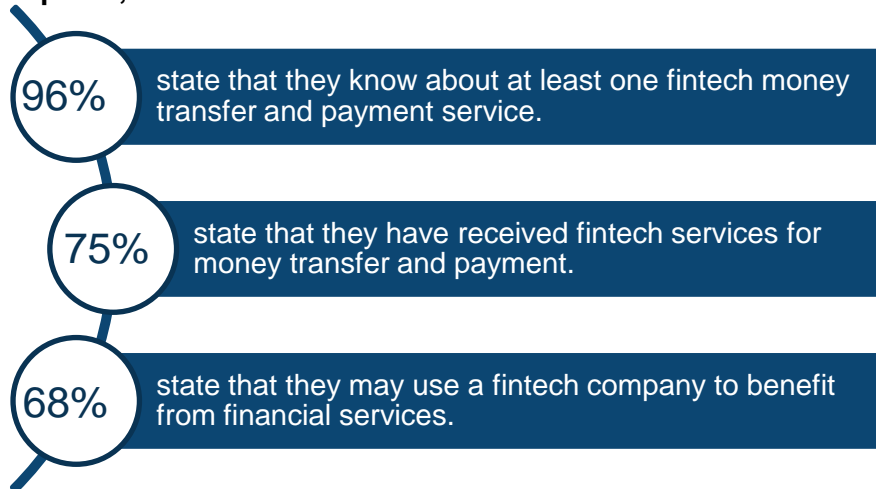


## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### G. Fintechs

Fintech companies are technology companies that aim to provide innovative services at affordable costs through well-designed platforms and mobile applications. They have caused some changes in payment, money transfer, lending, borrowing and investing, and have led the financial sector to be smarter and more agile. According to the EY Global Fintech Adoption Index, customers have a high percentage of awareness of fintechs.<sup>1</sup>

According to EY Global Fintech Adoption Index<sup>1</sup>, out of the participants,



#### Bank and Fintech Partnership Scenarios

Ensuring the scaling of fintech startups with sufficient resources and facilitating/improving the operational processes of banks are supporting factors in the emergence of bank-fintech partnership cooperations. In addition, the role of banks in increasing e-commerce site business models is quite significant.

Many companies are considering cooperation scenarios with banks for services such as processing payment and transfer transactions, providing loan services and offering e-wallet applications.

**Table 2.3: Examples of Services Provided by Fintechs**

Categories of Services Provided by Fintechs	Services
Money transfer and payments	Online currency transaction
	International money transfer
	Branchless banking
	Non-bank money transfer
	QR code payment method
Budget and financial reporting	Cryptocurrency e-wallet
	Budgeting and planning tools
Savings and investments	Retirement planning tools
	P2P Lending (Exchange of information, data or assets between parties without a central authority)
	Investment crowdfunding
	Investment consultancy
Borrowing	Stock market transactions
	Online loan providers
	Online markets
Insurance	Online commission transactions
	Premium comparison websites
	Smart insurance devices
	Application-based insurance

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

With methods such as in-app mobile payment solutions, mobile wallets and mobile browser-based payments, customers have ensured that their payment transactions and money transfers entered into a transformation process, triggering the development of the banking sector and increased cooperations. Mobile devices can be positioned as credit or debit cards, allowing shopping payments to be made in a mobile environment. With the cooperation of mobile payment companies, e-commerce companies, retail companies or the mobile payment solutions offered by the companies themselves, payment transactions can be carried out quickly and reliably without time and location dependence.



### Partnership Scenarios: ComPay and Oney

**ComPay:** With the application, customers can connect to their own bank at the time of payment, and can easily and securely pay with payment solutions such as money transfer, shopping credit and mobile wallet. Many banks can use alternative payment products in all sales channels through a single API. It has agreements with banks such as Kuveyt Türk, Ziraat Katılım, Albaraka Türk, Vakıf Katılım, TEB, Halkbank and Denizbank.<sup>1</sup>

**Oney:** France-based company Oney, which closely follows the development of the digital commerce approach, provides mobile payment solutions to consumers by forming a partnership structure with thousands of retail companies. With the Oney+ mobile application, it makes it possible to make payment transactions for everyone anywhere in the world, at anytime. In addition, Oney allows dividing a payment amount into several transactions with different payment methods.<sup>2</sup>

### Fintechs Offering Islamic Finance Products/Services

Institutions that offer Islamic finance products in the fintech ecosystem differ from Islamic banks and offer solutions to specific issues, displaying a technology-based and customer-centric approach.

The activities of fintechs offering Islamic finance products/services can be summarized in three points<sup>3</sup>:

- The digital delivery of an Islamic financial product,
- The application in Islamic finance of an emerging technology such as AI and blockchain
- Providing services addressing unmet financial needs of the Muslim market.

These institutions, which offer digital-oriented financial solutions in accordance with Islamic principles, enable Islamic banks to reach a wider audience, as well as revitalize Islamic finance. Fintechs offering Islamic financial products/services are expected to play an important role in the industry's recognition, especially by the Muslim population who have less access to financial products and services. This situation has created the necessity for participation banks in Turkey of adapting to the changing environment. On the other hand, fintechs offering Islamic financial products have an important complementary feature within the ecosystem. In addition to meeting the unmet needs in the participation finance sector, which is one of the main factors in their emergence, they also support the digital transformation processes of banks with various business model scenarios such as partnerships.



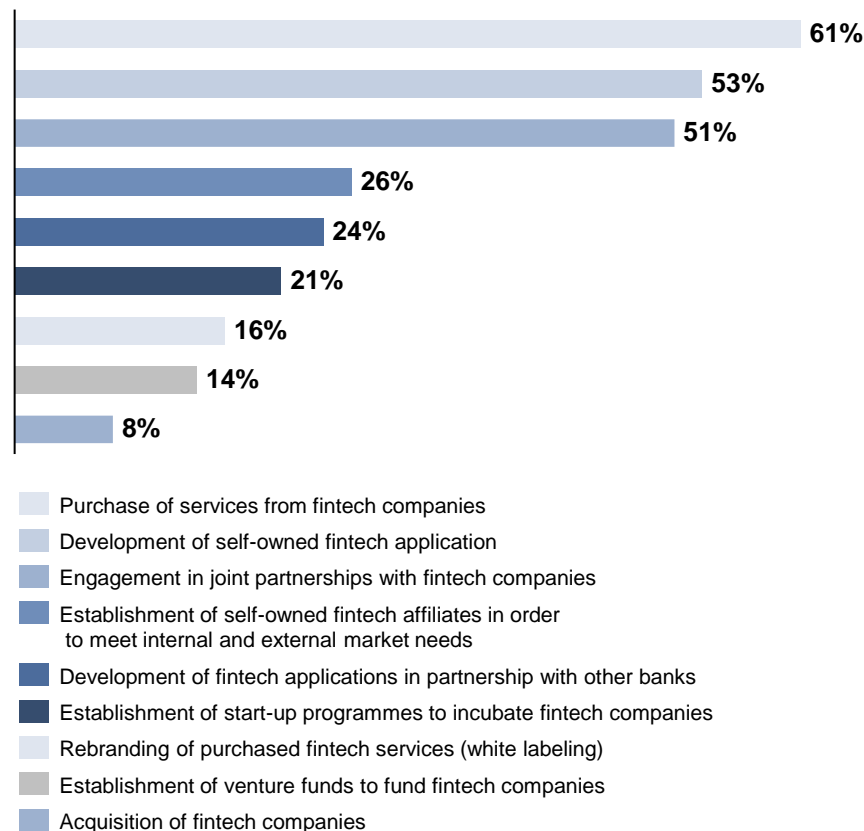
## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

Fintechs, with the products and services they have developed according to the sensitivity of Muslims, have not only changed the dynamics of the sector with this innovative environment, but also pioneered a new era in Islamic finance services, business models and customer expectations.

According to the CIBAFI (General Council of Islamic Banks and Institutions) Global Islamic Bankers survey, the majority of Islamic banks prefer to purchase services from fintech startups for various activities related to digitalization. However, there are many Islamic banks that prefer to develop their own internal fintech solutions. Another prominent partnership scenario is bank-fintech partnerships.

Due to the ongoing structure and nature of participation banking in Turkey, there is a sense of competition in which competing banks follow each other. Inter-bank interactions and information-sharing opportunities have been limited with the impact of the Covid-19 outbreak. With the effect of these and similar situations, participation banks have not seemed to take place in the entrepreneurship ecosystem with a consolidated approach in the process so far. In the participation banking sector, banks mostly try to incorporate the initiatives they describe as successful and support successful practices. Participation banks also take various initiatives for the development of the fintech ecosystem offering Islamic finance products/services. Many participation banks implement incubation centers and accelerator programs to support fintech startups and ensure their growth. However, there are many participation banks that have implemented venture funds to finance fintechs.

**Graph 2.13: Strategic Approaches to Integrate Fintech Solutions<sup>1,\*</sup>**



Reference: (1) CIBAFI Global Islamic Bankers' Survey 2020

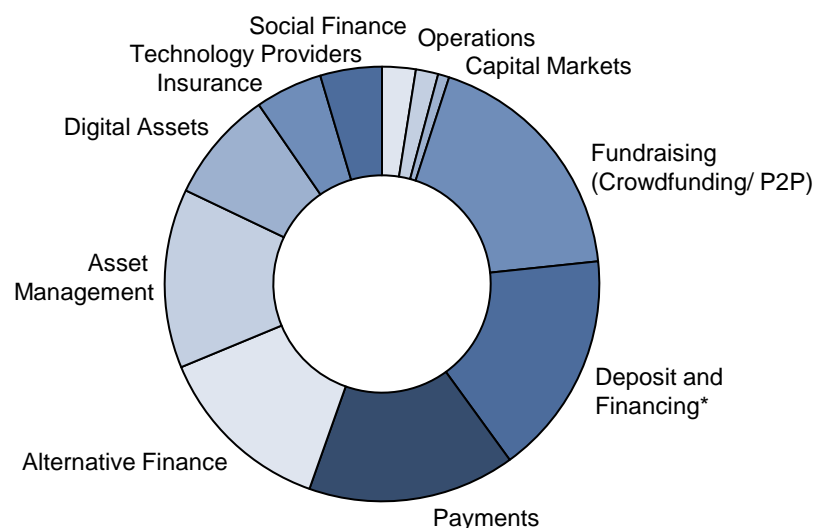
Note: (\*) The data analyzed within the scope of this survey study were collected at the end of 2019 and at the beginning of 2020 and come from 101 Islamic banks located in 35 different countries.

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

It is possible to collect the services provided by fintech startups offering Islamic finance products/services under 11 main headings. These services include basic banking services provided by Islamic banks, such as mobile payments or wealth management. On the other hand, many innovative services such as crowdfunding, P2P Lending, digital assets, robo advisory and social finance are also among the activities of fintechs.<sup>1</sup>

It is of great importance that the services offered by enterprises operating in the field of finance and investment are compatible with Islamic principles. In this context, as in other services, institutions providing investment consultancy services must only provide investment advice in line with Islamic principles.

**Graph 2.14: Sectoral Distribution of Fintechs Offering Islamic Finance Products/Services<sup>2</sup>**



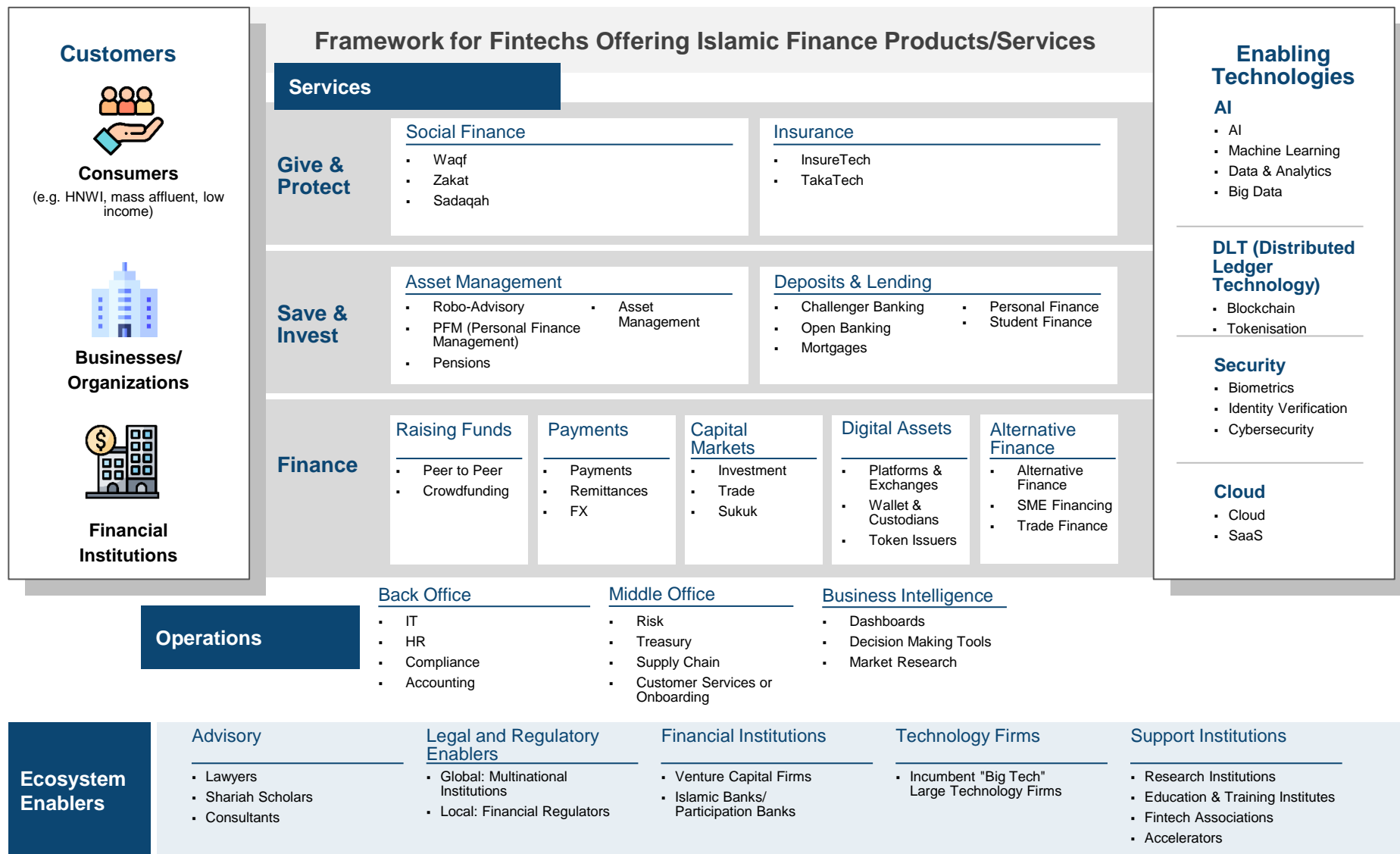
Reference: (1) Global Islamic Fintech Report 2021; (2) IFN Financial Innovation Report 2020

Note: (\*) Deposit and Financing covers challenger banking, open banking, mortgages, personal finance and student finance.



# Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

Table 2.4: Framework for Fintechs Offering Islamic Finance Products/Services<sup>1</sup>



Reference: (1) Global Islamic Fintech Report 2021

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### Crowdfunding

Crowdfunding is one of the areas in which fintechs offering Islamic finance products/services are most active. It is a mechanism that collects the necessary funds for people to realize their investment goals. The main reason for these platforms to stand out is that they support risk/profit & loss sharing and benevolence principles in line with Islamic principles by directly bringing capital providers and capital consumers together. In addition, its debt-free and leverage-free structure allows it to be used for investment opportunities in accordance with Islamic principles. Crowdfunding platforms are very effective for financing SMEs that have difficulty in obtaining financing from traditional participation banks.<sup>1,2</sup>

Crowdfunding products may find it difficult to find customers in an ecosystem where short-term profit is expected; although there is not enough investment due to this risk, banks can contribute by cooperating with crowdfunding platforms.

The "Communiqué on Equity-Based Crowdfunding" published in the Official Gazette on October 3, 2019 was amended on October 27, 2021. With the new communiqué, debt instruments have been considered to fall within the scope of the communiqué. With equity-based crowdfunding, institutions will have to be subject to the CMB (Capital Markets Board of Turkey) legislation and directly or indirectly comply with various legislation such as the Turkish Commercial Code, Turkish Code of Obligations, and Personal Data Protection Law. In addition, issues such as increasing their capital (at least TRY 1 million), changing their management structures, revising their business processes and strengthening their IT structures become prominent requirements. According to the new regulations made on the investor side, natural persons who are not qualified investors will be able to invest a maximum of 50 thousand Turkish Liras within a year through equity-based crowdfunding. While the investor has the chance to invest 10% of the annual net income declared on the platform, the investment should not exceed 200 thousand Turkish Liras.

With the regulation change, the expectation of the sector is to increase the focus on crowdfunding. It is thought that the products to be issued on crowdfunding, microfinance or mudarabah partnership in accordance with Islamic principles will attract attention as they have the opportunity to appeal to the entire customer segment.



### Fintech Operating in the Field of Crowdfunding and Offering Islamic Finance Products/Services in Turkey: Fonbulucu

Fonbulucu, the brand of Global Kitle Fonlama Platformu A.Ş., provides crowdfunding services through various platforms. Fonbulucu's services include equity-based crowdfunding platform (invest), reward and donation-based crowdfunding platform (reward), venture capital mutual fund digital angel investment network (ventures), and entrepreneur and investor support training platform.<sup>3</sup>

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### Fintech Ecosystem Offering Islamic Finance Products/Services in Turkey

Fintechs offering Islamic finance products/services have started to emerge in Turkey, with the participation banks entering a technological transformation process with the effect of the digitalization trend in the participation finance sector in Turkey and the Turkish fintech ecosystem that has been growing since 2015.

Since the share of participation banking in Turkey is less than that of conventional banking, it is observed that the players in the entrepreneurial ecosystem mostly work to appeal to a wider audience. In order for Islamic financial technologies to be successful in Turkey, the need for participation banking products to become more competitive in terms of price and quality in the market and the need for increasing the market share of participation banking are among the important issues.



Today, fintechs in Turkey, which act with no-interest sensitivity, continue their development around participation banks.

Although facilitating access to the Internet and the use of mobile devices in many transactions such as shopping accelerate the development of the fintech ecosystem, it is seen that enterprises with a strong capital can hold on better in the sector. Participation banks have an important role in the growth of the sector with their investments and activities in fintechs offering Islamic finance products/services. In this context, Albaraka Türk has a Fintech Venture Capital Fund under the management of Albaraka Portföy, where it invests in projects that complete the Albaraka Garaj acceleration program.<sup>1,2</sup> In addition, there is the Teknogirişim Venture Capital Investment Fund, which was established with the cooperation of Kuveyt Türk and Vakıf Katılım.<sup>3,4</sup> However, basic participation banking principles such as sukuk, murabahah, musharakah and micro-sukuk do not have a sufficient place in the fintech ecosystem in Turkey.

In the current situation, e-money and payment services institutions can provide licenses to enterprises in return for a license fee. It is thought that providing the opportunities offered to e-money and payment services institutions to other fintechs may create an opportunity to increase the trust in fintech institutions. Since the stakeholder want to develop financial technology products within their own structure and aim to make a quick profit in the short term, they may abstain from cooperation at some points. Therefore, they may prefer to operate in the real sector instead of the banking sector where supervision and taxation are intense, and to achieve rapid results and higher profits in the short term.

It is important to establish regulation mechanisms in order to minimize the risks of Fintech structures for both the customer and the company. With the Digital Banking Regulation, which is planned to come into effect on January 1, 2022, new players to be included in the sector have the potential to create services that can compete with banking products or provide common benefits. It is expected that there will be competitive fintech initiatives in subjects such as micro-credit and consumer financing, which are not yet available in Turkey.



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### National Fintech Strategy Document of Turkey

The Presidency of the Republic of Turkey Finance Office continues to work on «National Fintech Strategy Document» in line with the **11th Development Plan and the 2021 Economic Reforms Action Plan**. Turkey's becoming a regional and global center for financial technologies and innovation within the scope of İstanbul Financial Center is among the main objectives. It is aimed that the steps to be taken in the field of fintechs will have effects such as revealing new financial and economic resources, catching global opportunities and establishing financial confidence.<sup>1</sup> According to the Presidency of the Republic of Turkey Finance Office, it is important for the roadmap to be prepared for the development of the fintech ecosystem in Turkey and the studies to be made in the fintech field in order to reflect the potential of Turkey, to be handled through a holistic and inclusive planning, and to realize the targeted outputs with the «**National Fintech Strategy**».

Within the scope of other studies, there are plans to publish the Turkish Fintech Ecosystem Report and to establish the Fintech Coordination Board. There are also plans to establish İstanbul Finance and Technology Base within İstanbul Finance Center (IFC), to make the Fintech Hub platform, a virtual incubation center that will serve the whole country, available online, and to create a regulatory testing area structure focused on regulatory compliance of fintechs. To this end, the Presidency of the Republic of Turkey Finance Office organizes meetings with all licensed electronic money and payment institutions, open banking, insurance technologies, capital markets, legislation and legal technologies, venture capital funds, new ventures, the Association of Payment and Electronic Money Institutions of Turkey (TODEB), TOBB Fintech Sector Assembly and relevant public institutions and continues to work on strategy and roadmap.<sup>1</sup>





## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

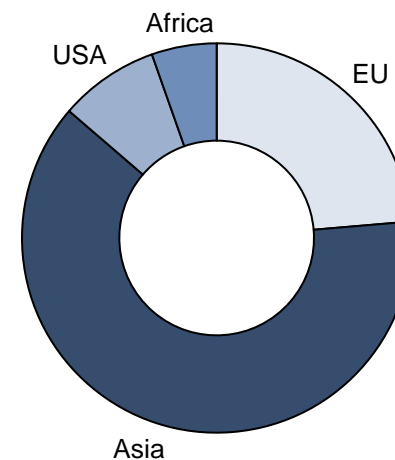
### Geographical Distribution of Fintechs Offering Islamic Finance Products/Services

Fintechs offering Islamic finance products/services operate in more than 30 countries around the world. The majority of these countries are the member countries of the Organization of Islamic Cooperation (OIC), of which the populations are predominantly Muslim. One of the main reasons for this is that the Islamic finance sector is more developed in these countries. In addition, various initiatives are being implemented in many countries such as Malaysia, Indonesia, United Arab Emirates and Bahrain for the digitalization of Islamic finance and the development of fintechs offering Islamic finance products/services within this framework.

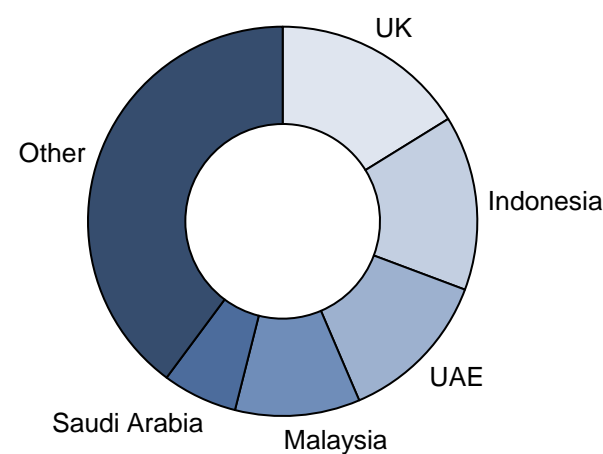
In addition, there are fintechs providing Islamic finance products/services in Europe and, to a lesser extent, in the United States, which have a remarkable position and have significant growth potential in the sector. The location of fintechs providing Islamic finance products/services in regions where the population is not predominantly Muslim is of critical importance in expanding the reach of Islamic finance. This is because these institutions not only ensure that Muslim populations around the world receive financial services, but also attract the attention of non-Muslim stakeholders by addressing niche areas which do not cover conventional instruments. Today, the countries that host the most fintech institutions are the United Kingdom, Indonesia and the United Arab Emirates, respectively.<sup>1</sup>



**Graph 2.15: Distribution of Fintechs Offering Islamic Finance Products/Services by Continent<sup>1</sup>**



**Graph 2.16: Distribution of Fintechs Offering Islamic Finance Products/Services by Country<sup>1</sup>**



## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization



### Malaysia Fintech Ecosystem

Malaysia, one of the world's leading Islamic finance centers, also has a leading position in the field of fintech, which offers Islamic finance products/services. Malaysia's strong position is based on many factors;

- **State support in the digitalization of the economy:** Malaysia has a supportive legal and regulatory environment that supports the development of fintechs and encourages innovation.<sup>1,2</sup>
- **A developed Islamic finance ecosystem:** In addition to many financial institutions operating in the field of Islamic finance, there are experts and academics in this field in the country.<sup>1</sup>
- **Institutions with the mission of developing the fintech ecosystem offering Islamic finance products/services:**
  - Malaysia Digital Economy Corporation (MDEC): It is a government agency responsible for developing Malaysia's digital ecosystem. The institution works closely with all stakeholders in the fintech ecosystem offering Islamic finance products/services and supports initiatives and sector-oriented programs to ensure growth in the sector.<sup>1,3</sup>
  - The FIKRA Islamic Fintech Accelerator Programme (FIKRA): FIKRA, a joint venture of the Securities Commission Malaysia (SC) and the United Nations Capital Development Fund (UNCDF), aims to develop the Islamic capital market (ICM) ecosystem in Malaysia by identifying and scaling innovative fintech solutions.<sup>4,5</sup>
- **Socio-demographic factors:** Malaysia has a population of which 60% is Muslim. Also, the population is largely online and has a high awareness of fintechs offering Islamic finance products.<sup>3</sup>

Today, there are more than 20 fintech institutions operating in Malaysia offering Islamic finance products/services. These institutions mainly offer services in alternative finance and crowdfunding / P2P Lending.

Fintechs also offer Banking as a Service (BaaS) opportunity to banks. In addition, payments, deposits and loans (open banking, challenger banking, etc.) are among the other prominent areas in Malaysia. Despite this, the capital markets sector takes more of a back seat in the fintech ecosystem that offers Islamic finance products/services in Malaysia, compared to other sectors. Fintechs focus on innovative approaches such as developing payment platforms compatible with Islamic principles with blockchain technology in line with their goal of making Malaysia a global Islamic financial center.<sup>1</sup>

Leading fintech startups offering Islamic finance products/services in Malaysia:

- **Hello Gold** is a mobile application that provides the world's first savings solution in line with Islamic principles, allowing to buy, save, sell and cash-in gold digitally. It is certified by AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions).<sup>6</sup>
- **EthisVentures is the world's first real estate Islamic crowdfunding platform** that invests in entrepreneurship, business, commerce and real estate activities. The purpose of this platform is not only financial-focused, but also is to create social impact.<sup>7</sup>
- **PayHalal** is the world's first digital payment network in line with Islamic principles.<sup>8</sup>
- **Finterra** is a leading technology firm providing blockchain-based Islamic applications that address global issues. Finterra ecosystem offers an inclusive platform to consumers with tools such as open source development platform and e-commerce platform. Finterra's core product, WaqfChain, has been launched to adapt the Islamic Social Economy to the digitalization trend via blockchain.<sup>9</sup>

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### UK Fintech Ecosystem



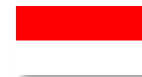
The UK is one of the leading hubs for fintechs offering both conventional and Islamic finance products/services, with a sophisticated regulatory environment, rapidly evolving technology sector and broad talent base. Despite not having a predominantly Muslim population, the United Kingdom is currently the country that hosts the most fintech startups offering Islamic finance products/services.

Institutions operating in the UK mainly operate in the fields of alternative finance, loans and deposits. Asset management and fundraising are other prominent areas. However, the number of fintechs offering Islamic finance products/services in payments, digital assets and social finance is relatively small.<sup>1</sup>

Examples of leading fintechs offering Islamic finance products/services in the UK:

- **Yielders** is an innovative savings platform that includes mass real estate purchases and rental income sharing in the UK and the South East with an ethical investment model. It is the UK's first Islamic crowdfunding platform to be directly authorized by the FCA (Financial Conduct Authority).<sup>2</sup>
- **Fasset** is a blockchain-based ethical financing platform built on sustainability principles. It provides investment opportunities for sustainable structures through "Real Asset Tokens".<sup>3</sup>
- **Kestrl** is a digital banking platform based on ethical values that provides an alternative to conventional banking. Compliant with Islamic principles, the platform offers various services from investment to savings.<sup>4</sup>

### Indonesia Fintech Ecosystem



With the world's largest Muslim population, Indonesia creates a high-potential market for fintechs offering Islamic finance products/services. The contribution of the state is quite high in the fintech ecosystem offering Islamic finance products/services, which is growing rapidly in Indonesia. It is possible to see various initiatives for the growth of fintechs, which offer both conventional and Islamic finance products/services in the country. The most important of these is the Indonesian Sharia Fintech Association (AFSI - Asosiasi Fintech Syariah Indonesia), which was established by the Indonesia Financial Services Authority (OJK - Otoritas Jasa Keuangan) to develop the fintech sector that provides Islamic finance products/services. In addition, Indonesia is the first country in the world to implement digital sukuk.<sup>5,6,7</sup>

About 40% of fintechs offering Islamic finance products/services in Indonesia operate in P2P Lending and crowdfunding.<sup>1</sup> One important reason for this is that OJK has established a regulatory framework for P2P lending platforms.<sup>3</sup> However, insurance, digital assets, and social finance lag behind the Indonesian fintech ecosystem.<sup>1</sup>

Examples of leading fintechs offering Islamic finance products/services in Indonesia:

- **Investree** is a leading P2P platform in Indonesia.<sup>8</sup>
- **PayTren** is a payment platform that offers e-wallet and mobile payment services.<sup>9</sup>

## Major Issues Emerging in the Banking Sector and Participation Banking with the Effect of Digitalization

### United Arab Emirates Fintech Ecosystem



The aggressive investment policy of Dubai International Financial Centre (DIFC) for fintechs not only enabled the growth of the Islamic finance sector in the United Arab Emirates, but also contributed to the country's position as a fintech center offering important Islamic finance products/services.<sup>1,2,3</sup>

In the fintech ecosystem offering Islamic finance products/services in the United Arab Emirates, companies serving in the field of payment stand out. In addition, the areas of finance, deposits and digital assets are very active. However, there are very few companies operating in the social finance and capital markets sectors.<sup>1</sup>

Examples of leading fintechs offering Islamic finance products/services in the United Arab Emirates:

- **Beehive** is the Middle East and North Africa (MENA) region's first regulated P2P Lending financing platform. Its purpose is to facilitate financing to accelerate the growth of small and medium-sized enterprises with high credibility and potential.<sup>4</sup>

### Saudi Arabian Fintech Ecosystem



Saudi Arabia, which attaches great importance to digitalization, provides strong government support and regulatory environment for the fintech ecosystem with Fintek Saudi. In addition, as part of its efforts to make Saudi Arabia an innovation hub, the Saudi Central Bank (SAMA) has established a legal framework to support fintech initiatives.<sup>1,2,5</sup>

Most fintechs operating in Saudi Arabia focus on alternative finance.<sup>1</sup>

Examples of leading fintechs offering Islamic finance/product services in Saudi Arabia:

- **Ta3Meed** is the first Saudi fintech firm to provide Islamic purchase order financing. Ta3Meed offers a Purchase Order financing solution specifically to support local SMEs working with government. The platform is considered as one of the fintech companies offering the most innovative Islamic finance products/services. Ta3Meed provided more than 2800 investors' participation, more than 18% annual income return, and 37 million 800 thousand PO financing.<sup>7</sup>





## Neo-Banks and Digital Banks

Neo-banks are challenger banks that operate entirely on digital platforms and do not have physical branches. In the neo-banking ecosystem, institutions often specialize in certain products in order to increase their competitiveness in the market. However, neo-banks may differ not only in the services they offer, but also in their target audiences. One of the primary strategies of neo-banks is to reach sufficient customer volume in target markets. In this respect, neo-banks that invest in order to maximize onboarding processes focus on the **young generation and SMEs**.

The range of products and services offered by neo-banks to SMEs is quite wide. In this context, in addition to basic services such as current accounts, debit/credit cards, money transfers between accounts or mobile banking applications, products and services for meeting the needs of SMEs such as multi-account management, customized financial products (e.g. short term loans to facilitate the purchase of equipment) or long term factoring are also offered. Recently, non-banking services have started to occupy an important place in the value propositions of neo-banks. In this context, additional non-financial services such as accounting are frequently seen among the services provided by neo-banks to SMEs.

Since 2017, there has been a market boom with accelerating new onboarding processes in neo-banks. In Europe, a **transition from traditional banks with branches to neo-banks** is observed. This situation has accelerated with the entry of digital banks such as N26 and Revolut into various countries and the shift of current accounts, credit cards, mobile banking applications to neo-banks.

### Examples of Neo-Banks Serving SMEs Worldwide

#### qonto

It is a neo-bank for SMEs established in France. Operating in a completely digital environment, this neo-bank provides many services to facilitate the daily activities of companies. These services include current account, debit card, money transfer services and payment solutions, as well as additional services such as a simplified accounting service and management of team expenses.<sup>1</sup>



PRISMEA

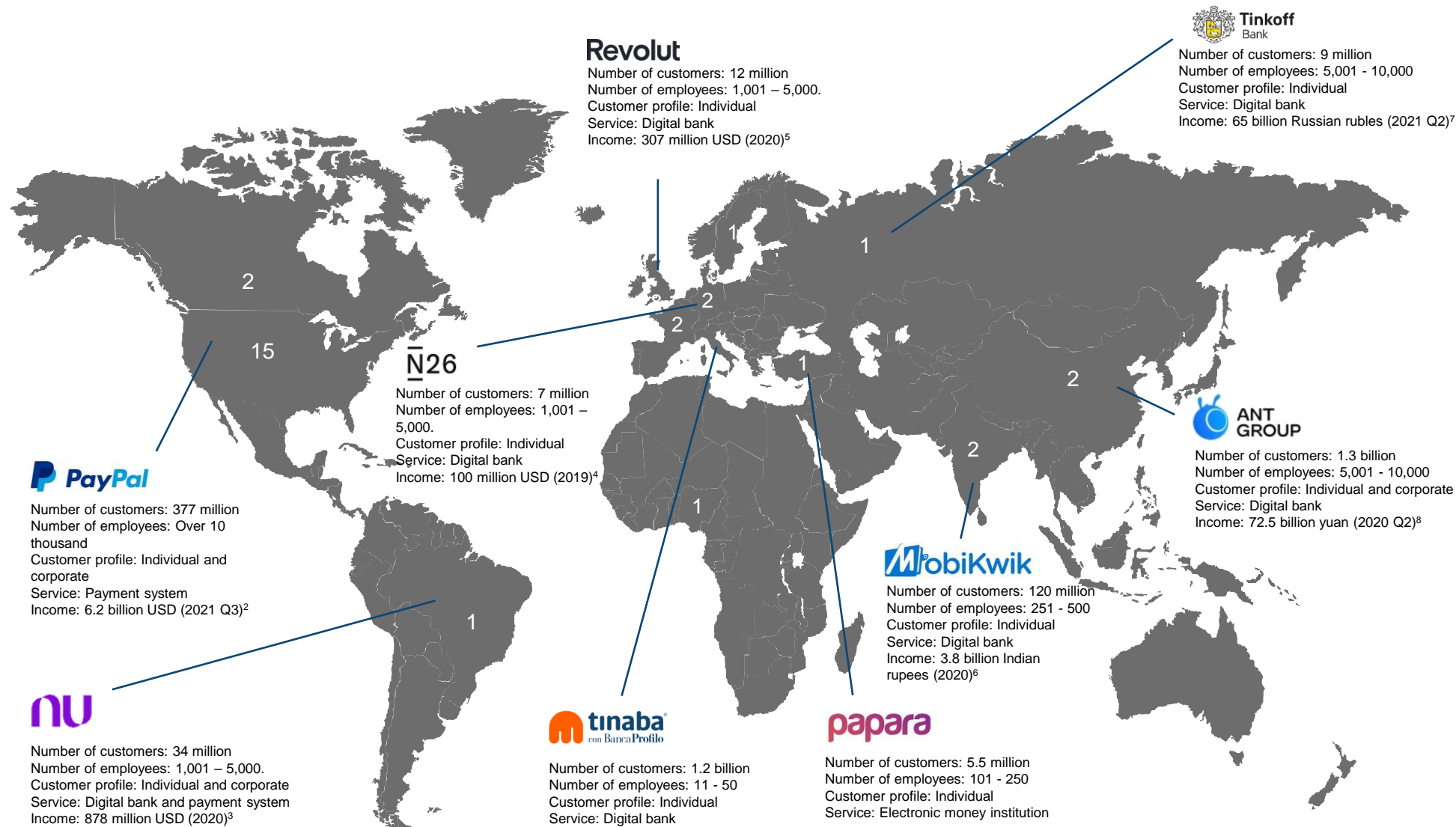
It is a neo-bank established by Crédit du Nord to serve SMEs. Supporting its customers in their financial management, PrisMEA offers account management, debit card and money transfer services. It has developed various tools around data analysis to provide planning and cash management solutions to customers.<sup>2</sup>

#### PAObank

With its low-cost financial products, it offers a comprehensive range of products and services to help SME clients maximize their working capital and realize their growth plans.<sup>3</sup>

# Neo-Banks and Digital Banks

Prominent neo-banks and payment institutions<sup>1</sup> with one million or more customers are selected and shown in the image.



Reference: (1) The Financial Brand; (2) PayPal official website; (3) Financial Times; (4) N26 official website; (5) Forbes; (6) Mobikwik official website; (7) Tinkoff Bank official website; (8) S&P Global

Note: The numbers indicated on the map shows the number of digital banks and payment institutions with one million or more customers in the relevant country.

## Neo-Banks and Digital Banks

### Example of a Neo-Bank that is Successful in Customer Experience



It was authorized by the European Central Bank (ECB) in 2016 with a full banking license.

In 2020, the bank's gross revenues increased by 244% compared to the previous year and reached 47.5 million Euros.

- It was established in Germany in 2013.
- Revenues of 100 million USD as of the end of 2019
- 7 million users from 25 countries
- 1500 employees

#### Products

- N26, which was established to make banking easy and transparent for everyone by equipping it with the most up-to-date technologies, offers various products and services: Normal account and business account products (Standard Account, Smart Account- Optional additional card, You Account- Free money withdrawal, Metal Account\*-Telephone and Rent A Car insurances), Student Accounts, Account Cards, Flex Account, Free and instant money transfer, Insurance Products, Loan products, Independent sub-accounts, Sub-accounts that can be shared with up to 10 people, Cost sharing, EasyFlex Saving (Saving with daily interest), Budget Planning, CASH26 (money withdrawal from the store)

#### Success Factors

Improvement of **customer experience with ecosystem** cooperations (Account opening processes can be performed in less than 10 minutes with the cooperation of Know Your Customer solutions provider IDnow.; Mastercard, Apple Pay, Google Pay and Wise integration)

**Expanding the customer base by focusing on product diversity**

**Financial inclusion** (offering the opportunity to open N26 Flex Accounts to users who do not have sufficient credit scores to open N26 accounts\*\*)

**Partnerships with players from non-banking sectors** (campaigns with successful brands such as Booking.com, Adidas, Udemy)



As of 2017, it started to operate in the UK with a full banking license.

25% of the revenues of the 2021 financial year came from Monzo Plus, Monzo Premium and Monzo Business products introduced in the same year.

- It was founded in the UK in 2015 under the name Mondo.
- Revenues of 79 million pounds as of February 2021
- 5 million 620 thousand active users
- Around 1300 employees

#### Products

- Founded with the aim of eliminating the customer experience problems that exist in traditional banking and providing banking experience, Monzo offers various products and services: Current Account, Plus Accounts (Opportunity to view different accounts), Premium Accounts\*\*\* (Telephone and international travel insurance facility), Business Accounts, Joint Account (possibility of shared use of 2 or more people), Cost sharing, 16 - 17 Accounts (Ability to identify age-restricted practices), Savings Accounts, Monzo Flex (Buy Now Pay Later), Loans, Debit Card, Energy provider exchange service

**Improving customer experience with ecosystem cooperations** (Making onboarding process fast, easy and secure with the cooperation of Know Your Customer solutions provider jumio, working with the cloud-based real-time response company Pager Duty, Making use of the API infrastructures of Stripe, which provides payment systems solutions)

**Financial inclusion** (Providing refugees with limited account opening with residence permits instead of passports)

**Involving the user in the development of the bank** (Opening the bank APIs to the user with hackathons, getting the customer's ideas when the name 'Mondo' was changed in 2016)

Reference: (1) N26 official website; (2) IDnow. Official website; (3) Monzo official website; (4) Monzo Annual Report 2021

Note: (\*) N26 Metal Account includes additional privileges as compared to N26 You accounts; N26 You Account includes additional privileges as compared to N26 Smart accounts, and N26 Smart Account includes additional privileges as compared to standard accounts.

(\*\*) Only available in Germany. (\*\*\*) Monzo Premium Accounts include additional privileges as compared to Monzo Plus accounts, and Monzo Plus Accounts include additional privileges as compared to current accounts.

## Comparative Banking Structures in Terms of Digital Banking

Table 2.5a: Comparative Banking Legislation Structures of USA, European Union, United Kingdom, Brazil, Hong Kong, Malaysia and Turkey

	USA	European Union	United Kingdom	Brazil	Hong Kong	Malaysia	Turkey*
e-KYC Solutions	Contacting the applicant with non-documentary authentication methods and matching the requested information with references from a consumer reporting agency, public database or other institutions	With the Circular 3/2017 (GW) coded video identification circular in Germany, recording the explicit consent of the person, identification, video liveness detection / verification of the person and completion of the verifications with a personalized SMS	Ensuring authentication by matching information from a reliable source independent of the user; expectations from companies to ensure that these sources provide reasonable cumulative information about the person's identity	Developing an Open Data Portal for information sharing; allowing customers with an authenticated digital identity to remotely open and manage their digital bank accounts	In addition to the authentication measures, fintechs also carry out continuous PEP (Politically Exposed Person) checks and screening for adversities that may indicate customer involvement in money laundering activities.	Use of algorithms such as artificial intelligence (AI), machine learning (ML) for e-KYC ( Know Your Customer) solutions and authentication, as well as ensuring that the addressee is not an impersonator of the customer, with liveness detection	Following the stages of recording the explicit consent of the person, using the near field communication (NFC) technology in identification; video liveness detection, and completing the authentications with a personalized SMS
KYC Transfer	-	-	The ability of the user to access the verified identity information in the source to which he has previously registered for electronic verification purposes	-	-	-	The expectation for regulations regarding obtaining of service through open banking services from another bank that has previously identified the customer.
Open Banking Standards	The evolution of open banking as a market-driven enterprise	Compliance with the PSD2 (Payment Services Directive 2) regulation; a total of 14 Regulatory Technical Standards, Guidelines and Opinion Papers published by the European Banking Authority (EBA)	Open Banking Implementation Entity (OBIE) standards to help nine major banks migrate to open API structures, establish the OBIE, and meet PSD2 and RTS (Regulatory Technical Standards) procedural requirements	Supporting pro-competitive innovation and fulfilling the duties of controlling, regulating and resolving, while providing prudent data protection for individuals and companies through the Central Bank	The Open API Framework was released in July 2018, and a four-step approach was adopted for banks to implement Open APIs.	Being still in the design phase of standards, the ability to comply with the UK's OBIE standards	Efforts to ensure legislative alignment with EU PSD2 in order to strengthen the open banking legal infrastructure
Digital Bank Operating Permit	Regulating digital banks with standard banking licenses	Regulating digital banks with standard banking licenses	Regulating digital banks with standard banking licenses	Direct Credit Society (Sociedades de Crédito Direto) or Peer-to-Peer Loan Company (Sociedade de empréstimo entre pessoas) license requirement for digital banking activities by segment	Obligation to obtain a digital bank license in order to operate a digital bank	Obligation to obtain a digital bank license in order to operate a digital bank	Digital bank activities are subject to establishment and operating permit requirements of regular banks

Note: (\*) The studies in Turkey were made on the basis of the "Regulation on Operating Principles of Digital Banks and Banking as a Service", which is in draft form.



## Comparative Banking Structures in Terms of Digital Banking

Table 2.5b: Comparative Banking Legislation Structures of USA, European Union, United Kingdom, Brazil, Hong Kong, Malaysia and Turkey

	USA	European Union	United Kingdom	Brazil	Hong Kong	Malaysia	Turkey*
Gradual Approach	-	-	With optional pre-application, and mobilization stages that can last up to 1 year, processes are available through which banks can complete their infrastructure investments and capital needs by operating with certain restrictions after being authorized.	Regulatory inclusion of the Securities and Exchange Commission of Brazil (CVM) or the Central Bank of Brazil (BCB), on the basis of digital bank segment	-	Digital banks licensed in the «foundational phase» process operating with limited asset size (3 billion Malaysian Ringgit (TRY 6.1 billion) for up to 5 years	If TRY 1 billion, which is determined as the minimum capital amount required for candidate institutions, is increased to TRY 2.5 billion in the process, these activity restrictions can be terminated by the board upon the application of the digital bank.
Limited Licenses	-	Candidate banks to obtain a full banking license in Germany perform all basic banking activities while holding a restricted banking license	Providing core banking services, and licensing with lower initial capital compared to fully-authorized banks	Differentiation of banking licenses according to the field of activity	-	-	-
Financial Inclusion	-	-	-	-	Different actions required to be taken by the banks in order to comply with the local requirements in the Banking Regulation as well as the requirements and standards mandated by banks' head offices or overseas authorities	The obligation of candidate banks to include the analysis of sector gaps and actions that will expand access to the unserved/underserved population in order to support it	Despite the fact that financial inclusion is listed among the objectives of the regulation, no request is made from candidate banks regarding the actions to be taken in this sense in their applications
Activity Restrictions	-	-	-	Inability of the digital bank to operate outside the license obtained from the regulator in the field in which it will operate	-	The total asset size of a licensed digital bank at the time of establishment does not exceed the limit of RM 3 billion	Digital banking customers' being consisted only of financial consumers and SMEs

Note: (\*) The studies in Turkey were made on the basis of the "Regulation on Operating Principles of Digital Banks and Banking as a Service", which is in draft form.



# 3

**DIGITAL BANKING FIELD  
SURVEY STUDY AND ANALYSIS**

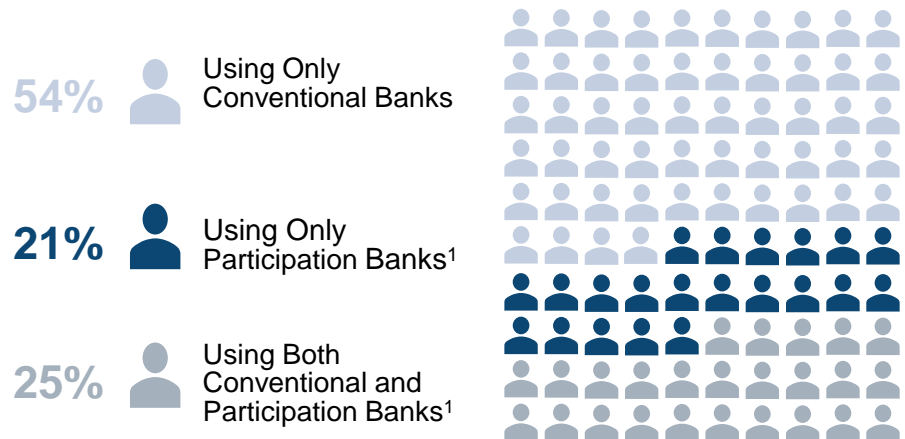
# Digital Banking Field Survey Approach

The survey is prepared to gain insights into the behaviors and perspectives of conventional and participation banks customers in the digital finance ecosystem.

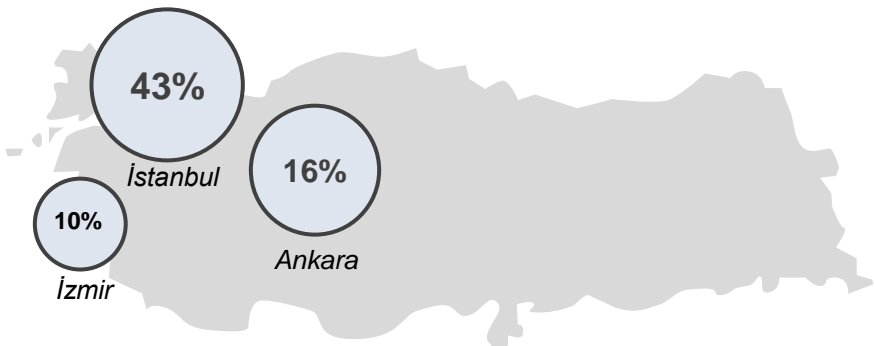
Took place in July-August 2021 with the participation of

# 2246

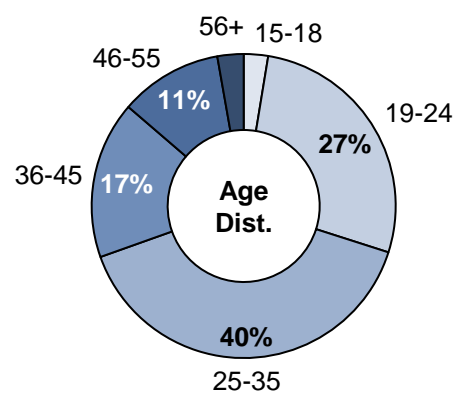
people with different demographic and socioeconomic profiles



971 of the participants live in İstanbul, 353 in Ankara, 223 in İzmir and the remaining 699 people live in 9 different cities<sup>2</sup> of Turkey.



**Graph 3.1: Distribution by Socioeconomic Status (SES) Group**



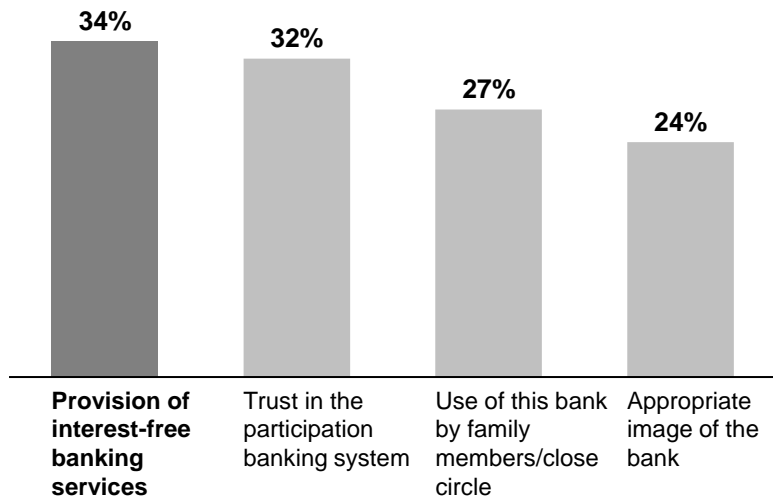
In order to analyze the target audience, the survey participants are divided into relevant SES groups by evaluating their educational status, occupational groups and monthly income. As one goes from group A to C2, the level of education and income decreases. Group A constitutes 27% of the participants, Group B 31%, Group C1 23% and Group C2 18%.

Note: (1) The survey aimed to reach a minimum of 1000 participation banking customers. (2) The survey covers 9 different cities (Adana, Balıkesir, Bursa, Erzurum, Gaziantep, Kayseri, Malatya, Samsun and Trabzon).

## «The Importance of Interest-Free Services» in Participation Banking and «Trust» in Bank Selection

“Provision of Interest-Free Banking Service” stands out among the reasons why customers prefer to use participation banks. Although the trust factor is important when choosing between banks, it is noticed that there are actions to be taken in terms of useful digital products in Participation banking.

Graph 3.2: Reasons for Preferring Participation Banking

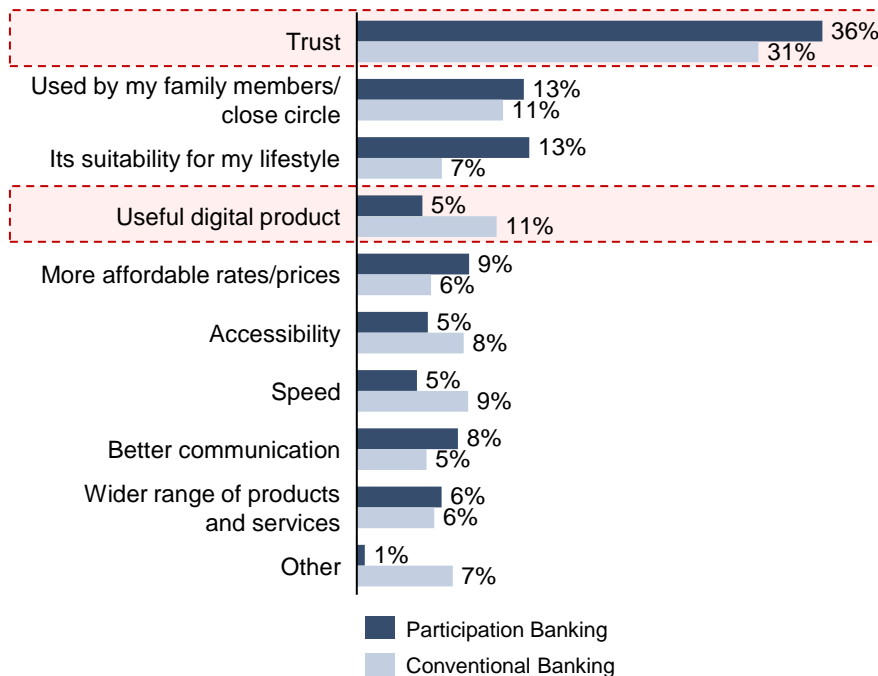


34% of participation banking customers state that provision of interest-free banking services is the main reason for their preference.



While 36% of participation banking customers state that the main reason for choosing the bank they use is trust, it is noticed that there are actions to be taken in useful digital products, as well.

Graph 3.3: Bank Preference Criteria of Customers

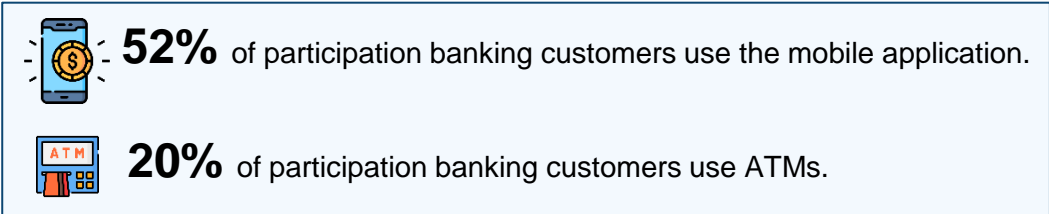




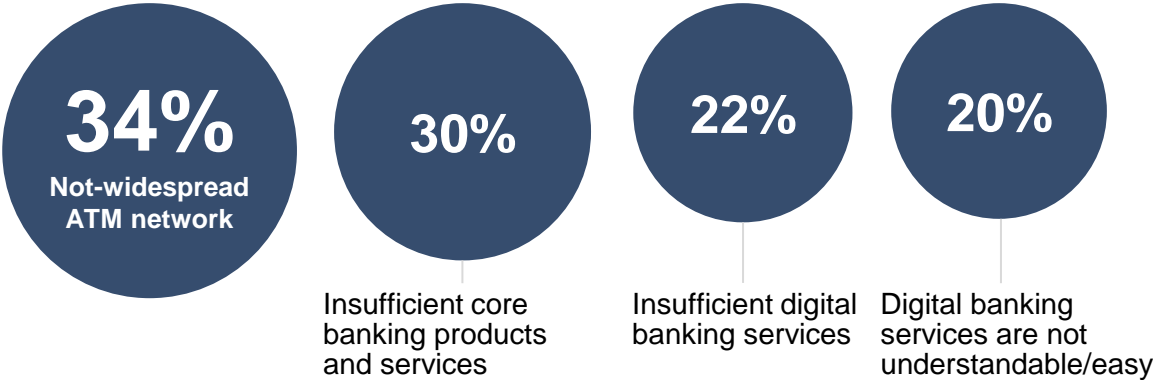
# The Importance of «Mobile application» and «ATM» in Access to Participation Banking Services

**Participation banking customers state that the ATM network is not widespread, the basic banking products and services are not at an adequate level, and they prefer using nonbank financial tools (e.g.: payment applications).**

Participation banking customers mostly make transactions via mobile applications and ATMs.



Participation banking customers state that they do not use participation banking frequently because they find the ATM network and basic banking services insufficient in the participation banking ecosystem.

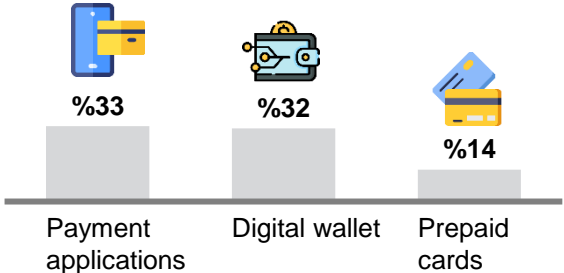


## Use of Nonbank Financial Tools

Participation banking customers prefer nonbank financial tools to manage their financial situation. **While 65% of participation banking customers use nonbank tools for their financial services, 40% of conventional bank customers use these products.**

**Payment applications and digital wallets** stand out among nonbank financial tools used by participation banking customers.

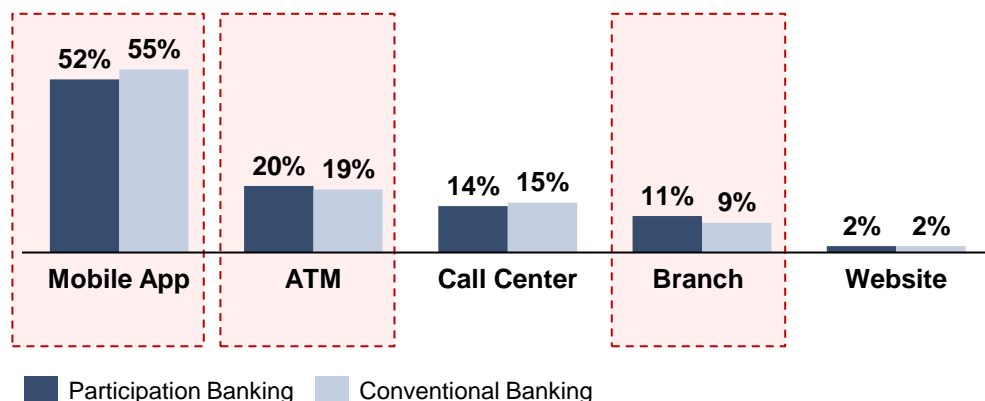
**Graph 3.4: Financial Tools Preferred by Participation Banking Customers as Bank Alternatives**



## “In-Person Transaction Preference” of Participation Banking Customers

Participation banking customers prefer to receive service from branches and ATMs more frequently than conventional bank customers. The reason for this is low digital literacy, low trust in digital banking and the habit of making in-person transactions.

Graph 3.5: Frequently-Used Bank Interaction Channels



- Participation banking customers **have a higher number of branch visits than conventional bank customers.**
- While 30% of participation banking customers visit the branch at least once a week, this ratio is 20% for conventional bank customers.**
- 21% of participation banking customers use digital banking every day while this ratio is 31% for conventional bank customers. The average number of transaction type of **digital banking customers using only participation banks is 2, of customers using only conventional banks is 3, and of customers using both banks is 4.**

31%

31% of participation banking customers state that they visit the branch because they prefer in-person transactions.

67%

67% of participation banking customers who do not use **digital banking** state that they do not have knowledge about digital banking.

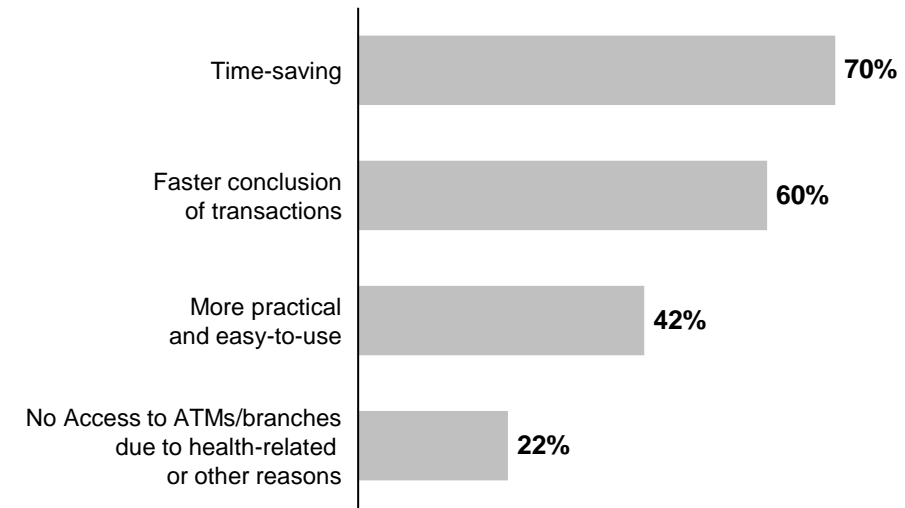
25%

25% of participation banking customers, who do not prefer to use digital banking despite their knowledge, **state that they do not trust digital banking.**

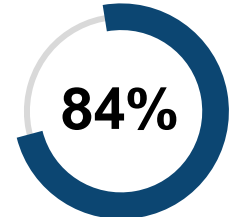
## «Increased Demand for Digital Banking Services» with the Pandemic

Participation banking customers prefer digital banking for reasons such as its being time saving, its being fast/easy, and health concerns. During the pandemic period, reasons such as the services offered by participation banks and the increasing customer need increased the rate of digital banking usage.

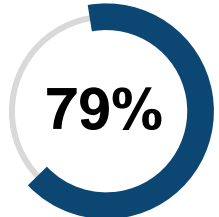
Graph 3.6: Reasons for Participation Banking Customers to Prefer Digital Banking




Regarding the reasons for using digital banking in participation banking, **70% of the participants prefer digital banking for saving time; 60% for performing transactions faster and 42% for its being more practical/easier.**




**84%** of participation banking customers state that their need for **services offered by banks increased during the pandemic period.**



**79%** of participation banking customers state that participation banks provided **services for their needs during the pandemic period.**



**20% of participation banking customers have been using digital banking for the last 1 year. 9% of conventional bank customers have been using it for the last 1 year.**



**34% of customers over the age of 56** state that they use digital banking because they cannot access ATMs/branches due to health problems or other reasons.

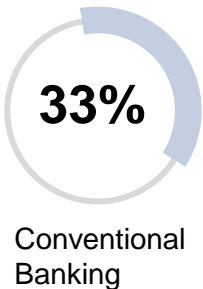
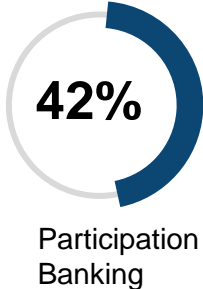
# The Importance of "Easy to Use" and "Comprehensive" Digital Service in Bank Preference

**Participation banking customers care about provision of easy-to-use and comprehensive digital services in their bank preferences, and they also state that they use smart assistants to facilitate transactions.**

Participation Banking  
**64%**  
 The ease of use and availability of digital services **significantly affects the bank preferences of 64% of participation banking customers** and 61% of conventional banking customers.

**61%**  
 Conventional Banking  
 As the socioeconomic status improves, the demand for digital services to be easy and available increases. While digital service quality significantly affects the preference of 26% of group A, it affects 20% of group C2.

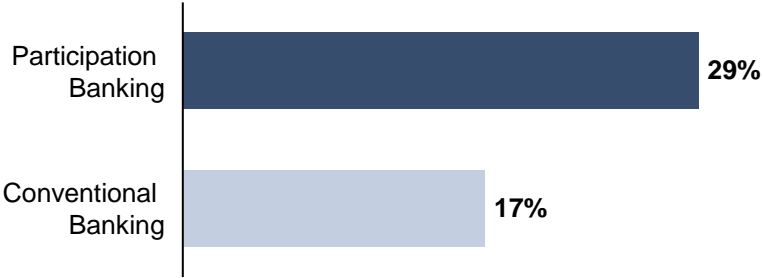
**43% of participation banking customers state that they will switch to a bank that offers more convenient and comprehensive digital services.** This rate is 33% for conventional bank customers.



Smart assistants, which are applications that have the ability to process natural language, understand voice commands and perform related tasks within the scope of commands, are an effective factor in bank preference by ensuring that the services offered digitally are easy and understandable.

**While 29% of participation banking customers benefit from smart assistant services, this rate is 17% for conventional banking customers.** Participation banking customers mainly use smart assistants to receive account statement notifications and information/reminders about current payments.

**Graph 3.7: Smart Assistant Usage Rate of Conventional and Participation Banking Customers**

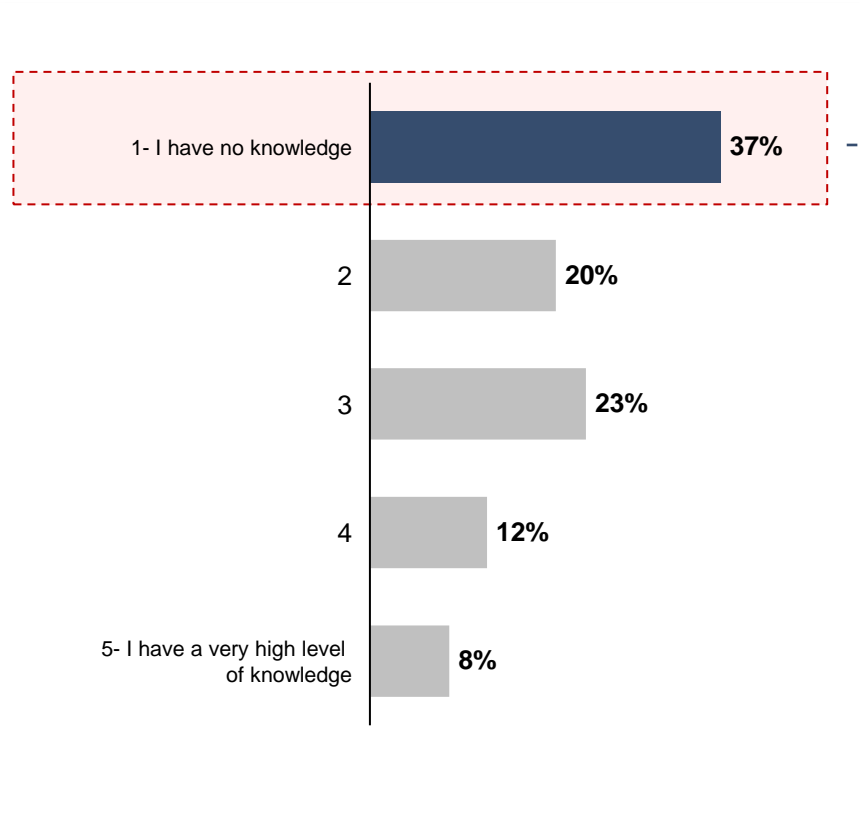




## The Need for «Financial Literacy» in Participation Banking

It is observed that the level of financial literacy in participation banking is not at a sufficient level. This situation is more prominent especially in the younger generation and low socioeconomic status.

Graph 3.8: Participation Banking Knowledge Level of Survey Participants



### Distribution of individuals who have no knowledge of participation banking

- Age Distribution**

Age Group	Percentage
15-18 years old	64%
19-24 years old	46%
25-35 years old	32%
36-45 years old	32%
46-55 years old	34%
- The knowledge level of the young population about participation banking is lower.**
- Socioeconomic status (SES)**

SES Group	Percentage
C2 SES	44%
C1 SES	43%
B SES	36%
A SES	29%

It is observed that **the level of knowledge about participation banking increases as the socioeconomic status improves**. Participants in SES group A have the highest level of knowledge.

# Digital Banking Field Survey Potential Actions



**With the development of digital banking services, customer onboarding and financial deepening become possible.**

- Onboarding new young customers who tend to use digital banking, or planning the sale of additional services/products
- Improving customer satisfaction levels by improving the digital banking experience of existing customers



**In the fintech ecosystem, it is possible to develop different cooperations and provide holistic services to the customer.**

- Re-gaining the customers using digital wallets and payment solutions by developing additional solutions to existing digital services



**Using digital competencies in distribution channels contributes to channel performance in terms of gaining new customers, improving existing customer experience and increasing operational efficiency.**

- Developing the ATM network, which is found to be inadequate by customers, and improving customer experience
- Opening branches at locations where customer contact is required instead of opening branches close to each other, and network optimization



**The need to invest in technology infrastructure and digital banking operating model will make it possible to positively meet customer expectations.**

- Diversification and digitalization of core banking products and services expected by customers



**The introduction of next generation technologies in digital banking services is an important element for the continuous improvement of service quality.**

- Focusing of the banks on technologies such as artificial intelligence and machine learning to better understand users' financial preferences and offer personalized products

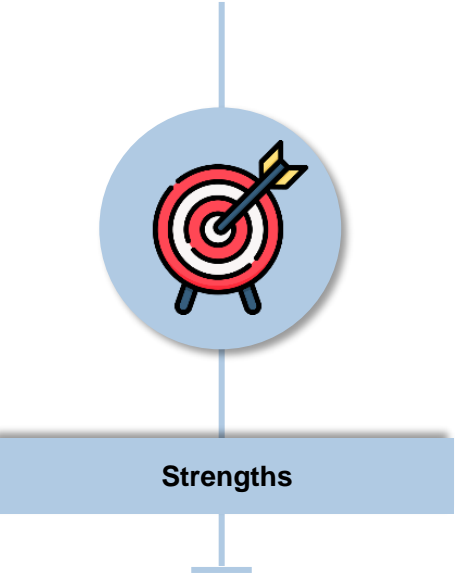


**Organization of trainings and performance of studies specifically for current and potential customers of participation banking are important in raising awareness in order to develop financial and digital literacy.**



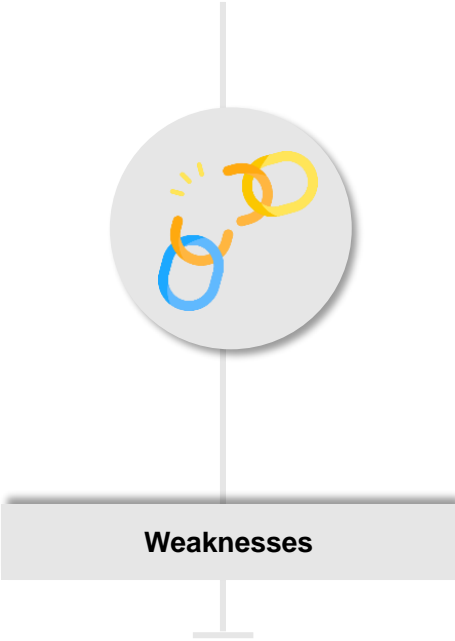
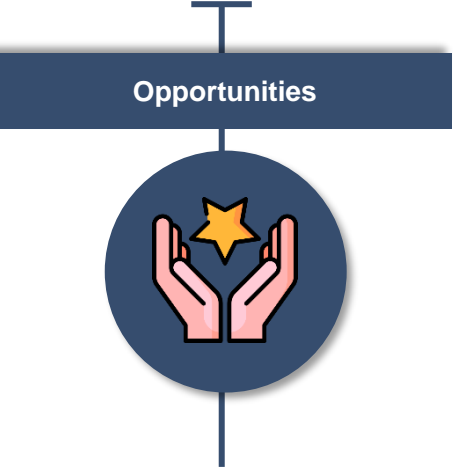
# 4 STRATEGY COMPONENTS AND INITIATIVES FOR DIGITALIZATION

# Competition Analysis for the Digitalization of Participation Banking



- O1.** The rapid adaptation of the financial ecosystem in Turkey to digital transformation
- O2.** Digital onboarding legislation that enables simple and fast customer onboarding
- O3.** Existence of the studies of regulators and authorities in the field of digital banking
- O4.** For bank customers who cannot access ATM (Automatic Teller Machine) services, the opportunity to access these services through digital channels
- O5.** Contribution of digital advancements to financial literacy by facilitating customer access
- O6.** Increasing opportunities in ecosystem cooperations with fintech and technology companies

- S1.** Openness of participation banks in Turkey to development in terms of digital transformation
- S2.** Existing participation banking customers' openness to the use of digital services
- S3.** Customers' trust in banks for borrowing and savings transactions in the financial ecosystem in Turkey
- S4.** Existence of customer population who will prefer institutions that provide participation banking services



- W1.** The relatively low market share of participation banks in Turkey which limits fintech cooperation opportunities
- W2.** Low financial and digital literacy across the country
- W3.** Low level of general knowledge about participation banking products
- W4.** Existence of areas of improvement in the services offered to the open banking ecosystem

- T1.** Non-banking players also being interested in the financial ecosystem
- T2.** The threat to the market share by local and foreign fintech and neo-banks that do not seek cooperation
- T3.** The probability that the increase in the data security risk and cyber attack threats in the accelerating digitalization environment may damage the element of trust in banking
- T4.** The ability of customers to easily switch between institutions, may pose a threat to institutions of which operational efficiency is not at the desired level





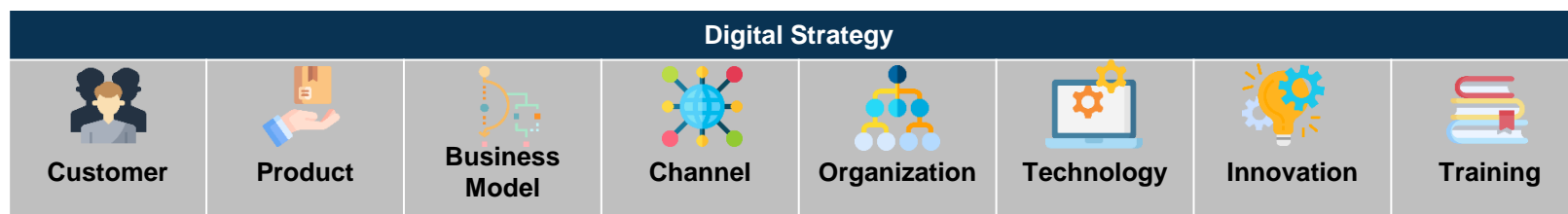
## Participation Banking Digital Strategy Components

### Participation Banking Digital Vision

«Ensuring that the Participation Banking sector develops products and services in accordance with world standards in the field of digital banking, and establishing an infrastructure that will make a difference in terms of experience while offering these products and services to customers»

### Digitalization Strategy and Components in Participation Banking

Participation Banking digitalization strategy components have been prepared as a result of researching the effect of digitalization and pandemic in the financial services sector, examining global and local sector studies, conducting interviews with expert institutions and experts, and a field survey, and are examined under 8 main headings. Accordingly, **28 dual evaluation analyses** have been conducted over the binary grouping of the components in order to depict the strategic positioning and actions more clearly.



## Digital Strategy Components and Component Relations (1/2)

Strategic Components		Component Relationship Definition
1 Customer	Product	▶ Personalization and parameter determination of product features according to customer details
	Business Model	▶ Developing business models that provide end-to-end digital services to the customer
	Channel	▶ Monitoring the customer's journey in digital and conventional channels and providing consistent and quality experience
	Organization	▶ Creating a team structure focused on digital-savvy customer groups within the organization
	Technology	▶ Making front-end and application flow designs that will enable the customer to use bank's digital applications comfortably and get self-service
	Innovation	▶ Creation of digital applications that follow the life cycle of customers and combine different services
	Training	▶ Providing information and training to target customer segments on digital banking services and digital financial literacy
2 Product	Business Model	▶ Integrating digital-oriented business models with digital-specific/adapted products; aligning focus customer groups and revenue-expenditure structures
	Channel	▶ Aligning the features of digital-oriented products and channels; presenting personalized products according to customer preferences and needs through selected channels
	Organization	▶ Establishing separate product management responsibilities for digital product management that work with existing product managements
	Technology	▶ Determining the digital banking-oriented products, and the technology infrastructure and requirements for personalization needs of the products
	Innovation	▶ Creation of new product designs in compliance with participation banking rules; determination of certain product designs with customers
	Training	▶ Creating training content for digital banking-oriented products and including it in the institution's training program and calendar

## Digital Strategy Components and Component Relations (2/2)

Strategic Components		Component Relationship Definition
3 Business Model	Channel	Aligning the bank's channel strategy with digital-oriented business models; making the service that the customer will receive from all channels integrated and consistent
	Organization	Aligning the organization and setting up separate agile organizational units to create and operate digital-oriented business models
	Technology	Defining technology infrastructure and requirements to support digital-oriented business models
	Innovation	Designing business models outside the standard structure to provide solutions to the customer in the digital field
	Training	Designing training content dealing with the concept/business model, and method of implementation of the work that is to be done with the internal (related departments) and external stakeholders (customers, business partners)
4 Channel	Organization	Increasing the focus within the organization on channel management of digital channels; defining roles and responsibilities to work in partnership with business units and IT
	Technology	Determining the technology infrastructure required for digital channels; ensuring integration with conventional channels and customer experience journey flow
	Innovation	Diversification of digital channels and designing the channel setup to provide better quality service to the customer
	Training	Designing training content on the structure and features of digital channels, their difference from conventional channels, and joint operation of thereof
5 Organization	Technology	Designing a technological organizational structure that will work with agile method, and implement new features in sprints, with the organizational structure created to design and operate digital-oriented business models
	Innovation	Establishing an agile organizational structure and joint teams with external companies to accelerate digital banking solutions
	Training	Organizing trainings that will increase digital financial literacy within the banks and convey the features of digital products and channels
6 Technology	Innovation	Determination of utilization scenarios for the use of new technologies on the basis of digital business models and channels; organizing pilot projects
	Training	Establishing a technology infrastructure for instant access so that training can be provided through digital tools
7 Innovation	Training	Examining and implementing different practices in banking and other sectors regarding digital financial literacy education content and channel design

# Initiatives and Roadmap (1/2)

## Digital Strategy Components and Initiatives

	Innovation	Organization	Business Model	Product	Channel	Technology	Training
Customer	I1. Digital Onboarding	I1. Digital Onboarding	I2. Segment-Oriented Ecosystem Cooperations	I1. Digital Onboarding	I2. Segment-Oriented Ecosystem Cooperations	I1. Digital Onboarding	I5. Digital Literacy
		I4. Agile Organization		I2. Segment-Oriented Ecosystem Cooperations			
Innovation		I4. Agile Organization	I2. Segment-Oriented Ecosystem Cooperations	I1. Digital Onboarding	I3. Open Banking Models	I3. Open Banking Models	I6. Digital Banking Competency Development
			I3. Open Banking Models	I3. Open Banking Models			
Organization			I4. Agile Organization	I4. Agile Organization	I4. Agile Organization	I4. Agile Organization	I4. Agile Organization
Business Model				I2. Segment-Oriented Ecosystem Cooperations	I2. Segment-Oriented Ecosystem Cooperations	I2. Segment-Oriented Ecosystem Cooperations	I6. Digital Banking Competency Development
Product					I3. Open Banking Models	I1. Digital Onboarding	I2. Segment-Oriented Ecosystem Cooperations
						I3. Open Banking Models	I5. Digital Literacy
Channel						I1. Digital Onboarding	I5. Digital Literacy
						I2. Segment-Oriented Ecosystem Cooperations	
						I3. Open Banking Models	
Technology							I6. Digital Banking Competency Development



## Initiatives and Roadmap (2/2)

### Digitalization Initiatives in Participation Banking



Note: The studies regarding the inclusion of short-term initiatives in the implementation plans in line with the Participation Banking Digital Strategy report are planned by TKBB.

## Initiatives and Key Actions (1/6)

### I1. Creating Models for Digital Onboarding

Initiative Definition	Relevant Strategic Component	Competition Analysis	Critical Success Factor
Developing digital onboarding methods and approaches and improving the digital customer experience in order to utilize the opportunity to reach out to individuals to whom participation banking cannot reach, by benefiting from the developments in digital onboarding in the field of digital banking	<ul style="list-style-type: none"> <li>▪ Customer-Organization</li> <li>▪ Customer-Product</li> <li>▪ Customer-Technology</li> <li>▪ Product-Innovation</li> <li>▪ Product-Technology</li> </ul> <ul style="list-style-type: none"> <li>▪ Channel-Technology</li> </ul>	<ul style="list-style-type: none"> <li>▪ S2</li> <li>▪ S3</li> <li>▪ S4</li> <li>▪ O2</li> <li>▪ O4</li> <li>▪ T4</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased customer insight</li> <li>▪ Customized products and services</li> <li>▪ Easier customer onboarding</li> <li>▪ Decreased cost of customer onboarding</li> <li>▪ Improved customer experience</li> </ul>

#	Main Action Points
1	Evaluation of the implications for customer behavior in the TKBB Digital Research Report, and of the field survey results and global studies
2	Analyzing customers' digital behaviors and preferences through digital solutions and innovative technologies, identifying digital-savvy customers, and creating customer segmentation for these studies
3	Designing customized products and services based on customer preferences and expectations in line with the target segment and market
4	Determining the business model for the products and services to be designed for the determined target segment customers (creating access models for unbanked and underbanked population, etc.) and evaluation of cooperation areas with the fintech ecosystem, which offers innovative solutions in the market (purchase / business partnership / project-based partnership)
5	While designing customer-centric application and service interfaces in a format that will allow simple, convenient and fast transactions, designing user-friendly interfaces that will outshine the customer experience in the physical world
6	Reviewing participation banking product-channel positioning, from the focus of digitalization, and analyzing and launching participation banking products that can be offered through digital channels
7	Creating and effectively implementing innovation methods in accordance with participation banking standards in digital products, applications and services to be developed
8	Diversifying the tools through which customers can receive product and channel-specific feedback and requests via digital channels; equipping the 'voice of the customer' approach with digital competencies, and starting and ending the end-to-end digital process
9	Developing marketing strategies by taking into account the customer segment which the designed products, applications and services appeal to; making the personalized product and service offerings sustainable from the mobile, internet and communication center, and providing access to new and potential customers
10	Giving importance to technological infrastructure investments in banking channels with the aim of increasing operational efficiency and keeping up with digitalization, banking services and customer expectations (increasing the efforts for open banking)

## Initiatives and Key Actions (2/6)

### I2. Implementing Segment-Oriented Ecosystem Cooperations

Initiative Definition	Relevant Strategic Component	Competition Analysis	Critical Success Factor
Developing cooperations for the needs of different customer segments in participation banking and designing operating models for a common goal, by taking into consideration the increase in the number of fintech players with innovative solutions as a result of technological developments	<ul style="list-style-type: none"> <li>▪ Customer-Product</li> <li>▪ Customer-Business Model</li> <li>▪ Customer-Channel</li> <li>▪ Product-Business Model</li> <li>▪ Product-Training</li> <li>▪ Business Model-Channel</li> <li>▪ Business Model-Technology</li> <li>▪ Business Model-Innovation</li> <li>▪ Channel-Technology</li> </ul>	<ul style="list-style-type: none"> <li>▪ S3</li> <li>▪ S4</li> <li>▪ W1</li> <li>▪ O6</li> <li>▪ T1</li> <li>▪ T2</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased innovative business models</li> <li>▪ Improved operational efficiency</li> <li>▪ Customized products and services</li> </ul>

#	Main Action Points
1	Determination of cooperation areas with companies in the participation banking ecosystem and other sectors for target segments (banking, insurance, fintech, start-up, etc.)
2	Identifying and analyzing ecosystem cooperations that can provide joint services to participation banks under the coordination of the TKBB; making suggestions to sector players
3	Creating value propositions for cooperation areas, creating a financial model, and making financial calculations for this purpose
4	Determining the actions in the field of participation banking to create ecosystems in which fintechs, entrepreneurs and banks can cooperate, and implementing these actions in line with plans that can be followed (crowdfunding, venture capital investment funds, etc.)
5	Designing trainings, seminars, digital webinars on the functioning of participation banking products, standards and system for fintechs, entrepreneurs and other sector players with which ecosystem cooperation will be made
6	Designing platform cooperations with the players in the participation banking ecosystem and TKBB coordination, which will generate income and cause growth in the market
7	Determining the approaches to the planning and pilot implementation regarding the cooperation studies to be carried out with the players in the participation banking ecosystem (the business model subject to the pilot application, determination of the product, establishment of the sandbox environment)
8	Evaluation of cooperation studies such as e-commerce etc. with the players in the participation banking ecosystem, which are suitable for the participation finance system and will meet the expectations of the customers; designing the operating model for these studies
9	Preparation of innovative, sustainable and flexible operating models in cooperation opportunities
10	Determination of the follow-up structure and key performance indicators (e.g.: customer onboarding, trading volume) for the follow up of the established cooperations, under the coordination of TKBB

## Initiatives and Key Actions (3/6)

### 13. Creating Technological Infrastructures for Open Banking Models

Initiative Definition	Relevant Strategic Component	Competition Analysis	Critical Success Factor
Launching open banking services in which participation banking is positioned at the center and/or as an additional service, due to the rapid digital transformation in the financial ecosystem, the current developments in the legislative infrastructure in Turkey, and the increasing needs of participation banking customers for digital transformation	<ul style="list-style-type: none"> <li>▪ Business Model-Innovation</li> <li>▪ Product-Innovation</li> <li>▪ Product-Channel</li> <li>▪ Product-Technology</li> <li>▪ Channel-Innovation</li> <li>▪ Technology-Innovation</li> <li>▪ Technology-Channel</li> </ul>	<ul style="list-style-type: none"> <li>▪ S2</li> <li>▪ S3</li> <li>▪ W4</li> <li>▪ O1</li> <li>▪ O3</li> <li>▪ T3</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased customer onboarding</li> <li>▪ Increased customer engagement</li> <li>▪ Decreased customer loss</li> <li>▪ Improved customer experience</li> </ul>

#	Main Action Points
1	Designing omnichannel experience models where participation banking customers can perform their transactions and check their account information whenever and wherever they want
2	Designing integration models for products and services that participation banking customers need where banking is centralized or is an ancillary service
3	Emerging need for personalized and innovative product and service design due to the current competition in the sector and the inclusion of new non-banking players in the market (payment institutions, neo-banks, e-commerce sites, etc.); developing the technological infrastructure in a format extending to the outside on the basis of targets and topics determined by its business models and channel structures (API Banking) due to the emerging need to improve efficiency in operations
4	Developing APIs for personal finance management and investment in addition to account information query and listing processes in the open banking API infrastructure
5	Implementation of incentives and pilot programs for startups that will develop business solutions by using the API set of participation banks
6	Establishing sandbox infrastructures for testing rules and technologies related to legislation and business model
7	Establishing ecosystems for the development of API platforms and incubation centers and supporting innovative ideas with participation banking services
8	Establishment of API infrastructures for the presentation and processing of sustainable finance products focused on ESG (Environmental, Social and Governance)



## Initiatives and Key Actions (4/6)

### I4. Establishing Internal/External Agile Organizational Structures

Initiative Definition	Relevant Strategic Component	Competition Analysis	Critical Success Factor
Developing and implementing agile internal and external organizational models, due to the necessity of making use of the developments in the field of digital banking, and the cooperation, purchasing and project design opportunities emerging in the market, effectively from the perspective of participation banking	<ul style="list-style-type: none"> <li>▪ Customer-Organization</li> <li>▪ Product-Organization</li> <li>▪ Business Model-Organization</li> <li>▪ Channel-Organization</li> <li>▪ Organization-</li> </ul> <ul style="list-style-type: none"> <li>▪ Innovation</li> <li>▪ Technology-Innovation</li> <li>▪ Innovation-Training</li> </ul>	<ul style="list-style-type: none"> <li>▪ S1</li> <li>▪ W1</li> <li>▪ O1</li> <li>▪ O6</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased operational efficiency</li> <li>▪ Dynamic and agile organization</li> <li>▪ Organizational structure suitable for digital transformation</li> </ul>

#	Main Action Points
1	Designing internal organizational structures suitable for digital transformation and ecosystem cooperation (cooperation/partner management team, incubation center management, start-up/fintech ecosystem management)
2	Designing operating models to be carried out with external stakeholders (company acquisition, cooperation with the company, project-based working model with the company)
3	Equipping the work with internal and external stakeholders with digital infrastructures to support flexible/hybrid working models
4	Determining the application areas of the agile organizational model and agile working approach in pilot teams within the organization (priority functions in dissemination, technology, marketing, product management teams)
5	Determining the units to be established and different operating styles for digital banking
6	Analyzing remote and hybrid working models with internal and external stakeholders

## Initiatives and Key Actions (5/6)

### I5. Increasing Digital Literacy

Initiative Definition	Relevant Strategic Component	Competition Analysis	Critical Success Factor
Designing training programs to be offered to customers through digital channels, planning communication activities, and increasing the digital competencies of employees, since digital developments are an opportunity in terms of issues such as low financial and digital literacy and lack of desired level of awareness about participation banking products	<ul style="list-style-type: none"> <li>▪ Customer-Training</li> <li>▪ Product-Training</li> <li>▪ Channel-Training</li> </ul>	<ul style="list-style-type: none"> <li>▪ S2</li> <li>▪ W2</li> <li>▪ W3</li> <li>▪ O5</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased customer awareness</li> <li>▪ Decreased product/service time</li> <li>▪ Increased digital trading volume</li> <li>▪ Increased number of active digital customers</li> </ul>

#	Main Action Points
1	Transferring the positive points of participation banking products/services/applications that distinguish them from conventional banking through digital channels in order to raise awareness of the customer and the society
2	Preparing the basic training content as a digital banking user guide that will help customers adopt and start using digital banking services, advantages and transactions, keeping them constantly up-to-date and communicating with target segments, on the platforms they commonly use (new customer, existing customer - acquainted with banking service, not yet acquainted with banking service – young, middle-aged, elderly, etc.)
3	Examining examples of successful applications that increase digital literacy in participation banking and other sectors, internalizing the studies in this field, and including them in the training program of institutions.
4	Establishing a suggestion and feedback mechanism for customers who have increased their competence in making the right financial decisions and whose digital banking activity level has reached a certain point
5	Conducting periodic consultations with TKBB and participation banks; establishing and improving the structure for the development of digital literacy; determining the actions to be taken within TKBB and within participation banks, and clarifying and tracking the cooperation areas
6	Taking actions to increase the digital competencies of the existing employees in participation banks, keeping the knowledge of the employees up-to-date, and including the new graduates in the ecosystem after they get equipped about the system (organizing trainings and panels; collaborating with successful universities in the field)
7	Designing innovative digital solutions (robo-advisory, financial literacy mobile application, etc.)

## Initiatives and Key Actions (6/6)

### I6. Developing Digital Banking Competences

Initiative Definition	Relevant Strategic Component	Competition Analysis	Critical Success Factor
Planning competence development studies in order to successfully launch new products and implement new business models developed in the field of digital banking and open banking, due to the need to raise awareness within institutions about participation banking products and the operation of the system, and the increase in customers' expectations about digital services and products	<ul style="list-style-type: none"> <li>▪ Business Model-Training</li> <li>▪ Channel-Training</li> <li>▪ Innovation-Training</li> <li>▪ Technology-Training</li> </ul>	<ul style="list-style-type: none"> <li>▪ S1</li> <li>▪ S2</li> <li>▪ W3</li> <li>▪ O1</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased digital workforce competence</li> </ul>

#	Main Action Points
1	Creating standard training plans and communicating them through digital channels in order to ensure a uniform understanding of the working structure of digital banking/participation banking business model by ecosystem stakeholders
2	Keeping the internal and TKBB training programs up-to-date in line with global developments; determining the platforms where developments specific to Turkey will be followed closely, and cooperating with these platforms
3	Designing trainings for players in the ecosystem, relevant departments within the institution, customers, and business partners, and content for the operation of the system, through digital tools that allow access from anywhere at anytime
4	Analyzing the existing competency set, identifying the differences in the digital competency set that should be in the targeted structure, and designing the actions to be taken
5	Identifying the internal teams and functions that need to be developed in the field of digital banking, and focusing on these teams within the framework of defined actions
6	Enabling the joint work of internal teams to be developed in the field of digital banking, and the start-ups and fintechs operating in this field (e.g.: to make projects with fintech companies that the institution collaborates with)
7	Planning joint initiatives by TKBB and participation banks to develop digital banking competencies by conducting periodic consultations







# **ANNEX 1** **Strategy Components** **Socioeconomic Status (SES) Grouping**

## Strategy Components (1/5)

Component Relationships		Strategic Benefit	Important Points	Market Applications
<b>Customer</b>	<b>Product</b>	<ul style="list-style-type: none"> <li>- Facilitating customer access with personalized recommendations</li> <li>- Increasing customer engagement and satisfaction</li> <li>- Developing operational processes for product and service delivery</li> <li>- Reducing risks</li> </ul>	<ul style="list-style-type: none"> <li>- Personalized product and service offerings should be made accessible to new and potential customers with a continuous alert mechanism from mobile, internet and communication center, without waiting for customers to be present in the physical environment.</li> <li>- Customer engagement and satisfaction for the institution should be increased by making customers feel special by offering them customized products or services in line with customer experience.</li> <li>- Thanks to the collection of data about the customer and the product by using digital solutions and innovative technologies, product and service offerings are taking place more accurately and faster.</li> </ul>	<p><b>Yapı Kredi:</b> Playcard offers advantages such as special campaigns for students and non-charging of account maintenance fees.</p> <p><b>HSBC:</b> HSBC Kinetic, a banking application developed specifically for SMEs, provides personalized suggestions and services and allows banking transactions to be made easily, quickly and from anywhere.</p> <p><b>Albaraka Türk:</b> With the Trend Debit Card and the Trend Credit card, the bank brings together young people between the ages of 18 and 25 with free banking.</p>
Detailed personalization and parameter determination of product features according to customer details				
<b>Customer</b>	<b>Business Model</b>	<ul style="list-style-type: none"> <li>- Preparation of flexible operating models and application architectures</li> <li>- Facilitating customer onboarding; increasing the possibility of onboarding especially younger customers</li> <li>- Reducing operational burden and costs</li> <li>- Creating the advantage of cooperation with other companies in the sector</li> </ul>	<ul style="list-style-type: none"> <li>- Transactions such as borrowing loans, deposit management and money transfer can be made more conveniently and quickly through banks that provide services in the digital environment.</li> <li>- In terms of responding quickly to customer demands and offering personalized product and service recommendations, action can be taken more quickly than in branches and similar channels. In addition, the need for creating physical channels and the employee costs are also reduced.</li> <li>- With business models that provide end-to-end digital services, operations such as administrative tasks and data collection and processing can be carried out with the help of innovative technologies, thereby reducing the duration and volume of operational works. Processes can be managed by establishing cooperations in different sectors.</li> </ul>	<p><b>Ally Bank:</b> As a digital bank without a branch, it offers its customers online and mobile access. It offers banking services such as savings products, loans and retirement services.</p> <p><b>Tayyab:</b> In addition to banking services, it also offers services such as prayer times, qibla compass, dhikr counter, zakat calculation, and mosques and prayer rooms map.</p> <p><b>Kuveyt Türk:</b> The Bank developed the 'digital calendar' application that can help in time management in religious and economic terms.</p>
Developing business models that provide end-to-end digital services to the customer				
<b>Customer</b>	<b>Channel</b>	<ul style="list-style-type: none"> <li>- Providing personalized services for each customer</li> <li>- Providing service through channels that are frequently used/preferred by customers</li> <li>- Ensuring new customer onboarding and customer engagement</li> </ul>	<ul style="list-style-type: none"> <li>- The ever-evolving digital environment, cutting-edge technology, competition and increasing customer expectations have become a key competitive element in almost every sector, including banking and financial institutions. Thus, banks should also provide their customers with consistent and quality experience.</li> <li>- Modern customers prefer to use different channels in banking services. Providing the same quality service in all channels, both online and offline, should be among important issues for banks to consider.</li> </ul>	<p><b>Swedbank :</b> Nina, the artificial intelligence assistant developed, engages customers in natural conversations by observing their behavior in digital channels to provide an intuitive, automated experience for all digital channels.</p> <p><b>Al Rajhi Bank:</b> Based on Islamic banking principles, the Saudi Arabian bank aims to meet the needs of its customers with Microsoft Dynamics 365, customer-centric processes and services.</p>
Monitoring the customer's journey in digital and conventional channels and providing consistent and quality experience				
<b>Customer</b>	<b>Organization</b>	<ul style="list-style-type: none"> <li>- Gaining insights into customers' digital behavior and preferences</li> <li>- Development of customer onboarding competence</li> <li>- Taking the customer experience to the next level</li> </ul>	<ul style="list-style-type: none"> <li>- Digital-savvy customers should be identified by analyzing the digital behavior and preferences of customers, and customer segmentation should be done accordingly.</li> <li>- With the establishment of digital-oriented mass banking teams, digital-savvy customer interaction should be strengthened.</li> <li>- Marketing strategies should be supported by technologies such as artificial intelligence or machine learning.</li> <li>- Customer access channels should be expanded and customer onboarding should be facilitated by actions such as increasing marketing activities on digital channels (social media, etc.).</li> </ul>	<p><b>CitiBank:</b> Citibank has partnered with Google to offer Google Pay users digital current accounts and savings accounts. With this partnership, Citibank, which offers products and suggestions on the Google platform, has expanded its reach only to digital customers.</p> <p><b>SeninBankan:</b> SeninBankan, launched by Kuveyt Türk Participation Bank in 2015, is Turkey's first digital participation banking application. The application also offers services for university students aged 25 and under with SeninBankan Genç program.</p>
Creating a team structure focused on digital-savvy customer groups within the organization				
<b>Customer</b>	<b>Technology</b>	<ul style="list-style-type: none"> <li>- Providing customers with a more comfortable experience with the adoption of new technologies</li> <li>- Practical convenience in performing banking transactions</li> <li>- User satisfaction in banking applications</li> <li>- Opportunity to meet the expectations of new generation customers in the field of technology use</li> </ul>	<ul style="list-style-type: none"> <li>- Banks should design applications that will provide opportunities for customers to use their time efficiently.</li> <li>- Various banks in the world and in Turkey should provide practical convenience in banking transactions to be carried out by their customers with the self-service options they offer to their customers both in conventional and internet branches and on mobile applications.</li> <li>- In addition to the simple and convenient design of banking application interfaces, ensuring the technological infrastructure that can provide faster service is important for customer satisfaction and engagement.</li> </ul>	<p><b>VakıfBank:</b> For the first time in Turkey, it has enabled bank customers without cards to become self-service internet banking customers by having their ID cards scanned through NFC-enabled mobile devices.</p> <p><b>OdeaBank:</b> It enables customers to be informed about bank products and to use various interactive applications such as calculators thanks to the touch screens in the display sections, without entering inside the branches.</p> <p><b>TFX Target:</b> It is a platform developed by Türkiye Finans that enables the performance of investment transactions. It is used through the application via desktop computer or mobile phone.</p>
Making front-end and application flow designs that will enable the customer to use bank's digital applications comfortably and get self-service				
<b>Customer</b>	<b>Innovation</b>	<ul style="list-style-type: none"> <li>- Obtaining meaningful customer insights through data</li> <li>- Reproduction of personalized product options</li> <li>- Reaching wider customer bases</li> <li>- Ensuring digital onboarding</li> </ul>	<ul style="list-style-type: none"> <li>- Banks should aim to produce solutions according to the needs and expectations of their customers based on the life cycle of their customers, and to offer the right products accordingly.</li> <li>- The service offerings in packages that combine different services enable customers to have a simpler, faster and safer experience.</li> <li>- Digital applications where many activities such as tracking invoices, borrowing loans, evaluating insurance offers, and shopping, can be done together provide the opportunity to reach a wide audience. It should also facilitate the storage of detailed data on customers, by enabling customized marketing activities.</li> </ul>	<p><b>Tinkoff:</b> Tinkoff, Russia-based online bank focusing on lifestyle banking, helps customers with many services such as those enabling them to assess their personal expenses, deposit their savings, buy movie tickets, and make hotel reservations.</p> <p><b>Bank of America:</b> Potential product and service lists are presented according to the life cycle plan with the «Family Life Banking» program. While options such as savings calculations and car loans are offered for younger segment, service plans such as credit card travel savings are recommended for the mature segment.</p>
Creation of digital applications that follow the life cycle of customers and combine different services				

## Strategy Components (2/5)

Component Relationships		Strategic Benefit	Important Points	Market Applications
<b>Customer</b>	<b>Training</b>	<ul style="list-style-type: none"> <li>- Provision of development feedback to the bank by the user who has increased his competence in making the right financial decisions</li> <li>- Raising awareness of the users about the points that will positively distinguish participation banking products from conventional ones.</li> <li>- Increasing the use of digital services offered</li> </ul>	<ul style="list-style-type: none"> <li>- The training content to be offered on digital banking services and digital financial literacy should be customized in line with the needs of the target customer segment.</li> <li>- Participation banking principles should be effectively transferred to stakeholders in the ecosystem.</li> <li>- Feedback from users who benefited from the training should be evaluated.</li> <li>- The possibility of making the training support offered to the target customer segment a part of the relevant banking service should be utilized by the banks.</li> </ul>	<p><b>Albaraka Banknote:</b> It is the first financial literacy platform among participation banks where rich content about economic and financial developments is shared.</p> <p><b>MoneySmart:</b> It is a platform created within the scope of the Australian Securities and Investments Commission (ASIC) National Financial Literacy Strategy for users to benefit from.</p> <p><b>ULearnMoney:</b> The portal, which continues its activities with the support of the Ministry of Education of Malaysia, provides trainings on finance and investment to different user groups.</p>
<b>Product</b>	<b>Business Model</b>	<ul style="list-style-type: none"> <li>- Preparing digital-specific/adapted products suitable for customer needs</li> <li>- Designing sustainable and innovative digital business models</li> <li>- Continuous improvement of income and expense structures with a digital focus and an operational efficiency perspective</li> <li>- Ensuring sustainable profits with digital solutions</li> </ul>	<ul style="list-style-type: none"> <li>- Sustainable, innovative and digital business solutions and digital-specific/adapted products should be integrated and digital transformation should be accelerated in banks.</li> <li>- New customer onboarding is facilitated thanks to the focus customer groups created by considering customer needs and experiences. More effective additional product offers and campaign applications can be made to the existing customer base through digital solutions.</li> <li>- By integrating digital-specific/adapted products into their business models, banks will improve their operational costs and more easily achieve continuity in providing sustainable profits.</li> </ul>	<p><b>Garanti BBVA:</b> With the Bonus Dijl credit card it offers, it ensures safe shopping before the physical credit card is received by the customers. The plastic version of the credit card contains only the name of the cardholder.</p> <p><b>Abu Dhabi Islamic Bank (ADIB):</b> Amwali, an Islamic digital offering aimed at young people aged 8-18, offers banking solutions and access to financial information in a personalized way under parental control.</p>
<b>Product</b>	<b>Channel</b>	<ul style="list-style-type: none"> <li>- Improving the customer experience with the right information and service delivery</li> <li>- Creating digital banking alternative business models</li> <li>- Improving the ability to analyze customer data</li> <li>- Establishing the customer alert/notification mechanism</li> </ul>	<ul style="list-style-type: none"> <li>- The tendency to make branchless transactions has increased with the Covid-19 outbreak. Banks should improve customer experience with product-channel structures tailored to digitalized customer preferences and needs rather than traditional product/channel structures.</li> <li>- Special opportunities and means offered to customers in transactions that can be carried out quickly and easily via digital channels through branches or ATMs should be increased, which will in turn increase customer satisfaction.</li> <li>- Bank notifications should be made at the right time and to the right person through digital channels according to customer characteristics.</li> </ul>	<p><b>Nomo:</b> Established as a subsidiary of Kuwait-based Boubyan Bank, Nomo is a digital bank that operates based on Islamic principles. In addition to daily banking services, investment opportunities in line with the principles of participation banking are also offered.</p> <p><b>N26:</b> N26 offers a completely customer-centric mobile banking experience. In addition to the main account, there are interfaces that offer sub-account services and opportunities to save and cooperate with partner companies.</p>
<b>Product</b>	<b>Organization</b>	<ul style="list-style-type: none"> <li>- Gaining insights into customers' digital behavior and preferences</li> <li>- Adapting products to current trends and meeting the changing customer expectations</li> <li>- Increasing the focus on products and services to be offered through digital banking</li> </ul>	<ul style="list-style-type: none"> <li>- Within the scope of digital product management, it is critical to examine digital market trends and customer needs and expectations. Therefore, customer segments should be created and segment-based needs should be determined.</li> <li>- By creating target segments and developing the products on a segment basis, it should be ensured that the right products appeal to the right customers.</li> <li>- It is important to restructure the existing product portfolio in line with customer data and feedback and to remove inefficient products from the portfolio. In this context, customer satisfaction should be increased by including products aimed at improving the digital experience of customers in the portfolio.</li> </ul>	<p><b>JP Morgan:</b> It has a Digital Innovation team, which monitors digital banking trends and identifies market opportunities. The team develops ideas for optimizing existing products, services and business models or developing new ones. The institution also has the AreaX program, which is responsible for the initial product development of ideas put forward by the Digital Innovation team. The team of developers, designers and product managers develop prototypes and test the viability of the product within 6-12 weeks.</p>
<b>Product</b>	<b>Technology</b>	<ul style="list-style-type: none"> <li>- Preparing innovative products with higher added-value</li> <li>- Developing personalized digital product offerings</li> <li>- Providing cost advantage in the sector</li> <li>- Increasing operational efficiency</li> </ul>	<ul style="list-style-type: none"> <li>- Banks should improve their technological infrastructure in order to increase efficiency in competition, personalized and innovative product design needs, and operations in the sector.</li> <li>- Banks that use technology more widely, from product design to customer relationship management, will be more successful in customer satisfaction and product offering efforts.</li> <li>- For this purpose, technological applications are determined and implemented in order to digitally integrate the products developed in accordance with the focus-customers and the market. Banks should consider carrying out these studies in cooperation with different institutions as well as within their own organizations.</li> </ul>	<p><b>Monzo:</b> It has established a structure called Monzo Labs where it receives product reviews from existing customers and gathers ideas for new product development. In addition, it determines the order of priority of the application by publishing product road maps and voting on the features.</p> <p><b>Hellobank:</b> It was designed by BNP Paribas for customers to access mobile and internet banking quickly, easily and anytime. Banking, insurance, loan and savings products are offered.</p>

## Strategy Components (3/5)

Component Relationships		Strategic Benefit	Important Points	Market Applications
<b>Product</b>	<b>Innovation</b>	<ul style="list-style-type: none"> <li>- Increasing competitiveness with conventional banks, which are comparatively more advantageous in product diversity</li> <li>- Turning the one-on-one communication (relationship banking) factor prioritized by participation banks, into an advantage</li> <li>- Possibility to create products and services specific exclusively to the digital banking environment</li> </ul>	<ul style="list-style-type: none"> <li>- The integration of prominent products in the global Islamic finance sector into the Turkish ecosystem should be considered.</li> <li>- An effective marketing strategy should be developed by taking into account the customer segment which the designed product appeals to.</li> <li>- The means by which feedback and requests can be received from the customer on a product basis should be diversified.</li> <li>- Innovation methods should be established for developing digital banking products in accordance with participation banking standards.</li> </ul>	<p><b>Kuveyt Türk:</b> Working together with Eximbank, the institution has launched Eximbank Participation Finance Loan in compliance with Islamic principles for exporting customers.</p> <p><b>MAE:</b> Maybank introduced the first e-Wallet application in line with Islamic principles through the Maybank2u platform in 2020.</p>
Creation of new product designs in compliance with participation banking rules; determination of certain product designs with customers				
<b>Product</b>	<b>Training</b>	<ul style="list-style-type: none"> <li>- Developing the workforce that will provide the consultancy that the customer may need regarding digital banking products</li> <li>- The workforce's adaptation to the rapid development in products and services</li> </ul>	<ul style="list-style-type: none"> <li>- Along with the new products developed to be presented to the user, the training contents regarding the products focused on digital banking should be updated.</li> <li>- Examples of successful practice in banking and other sectors should be included in the institution's training program.</li> <li>- The knowledge and experience of participation bank employees and customer ecosystem on financial tools and products compatible with Islamic principles should be kept up to date.</li> </ul>	<p><b>Plains Capital Bank:</b> The bank, which transfers digital banking products to its employees through game-based product simulations in cooperation with LemonadeLXP, won a gold award at the Brandon Hall Excellence 2020 Awards with this training application.</p> <p><b>Standard Chartered:</b> The Bank aims to train its 8000 employees on 9 basic subjects, including Digital Banking and International Banking, with the diSCover Lab, which it has implemented in its Singapore office and named the Netflix of Learning.</p>
Creating training content for digital banking-oriented products and including it in the institution's training program and calendar				
<b>Business Model</b>	<b>Channel</b>	<ul style="list-style-type: none"> <li>- Integrated and consistent channels being important for customer satisfaction</li> <li>- Meeting customer expectations of digital banking channels</li> <li>- Aligning the digital banking business model with conventional channels</li> </ul>	<ul style="list-style-type: none"> <li>- The experience offered in banking channels is one of the elements that offers choices which do not urge rational thinking, as is the case with product prices. For the purposes of customer satisfaction, omnichannel banking solutions should be integrated and should be consistent in all channels.</li> <li>- Customers expect a consistent digital experience with the same UI and UX no matter which channel they use for their banking transactions.</li> <li>- One of the biggest challenges in aligning banking business models and strategy is customers' expectation of speed, reliability and stability in digital banking channels. If all banking channels do not meet these expectations, customers with different channel preferences will turn to other banks.</li> </ul>	<p><b>UniCredit:</b> It uses ASEE's Digital Edge interface in all its channels in order to provide an integrated user experience from all channels to its customers, which are part of its digital business model.</p> <p><b>ABN-AMRO:</b> Thanks to a recent investment in Microsoft 365, ABN AMRO uses Microsoft Teams to enhance its omnichannel portfolio that offers several options to customers to choose from, including video banking.</p>
Aligning the bank's channel strategy with digital-oriented business models; making the service that the customer will receive from all channels integrated and consistent				
<b>Business Model</b>	<b>Organization</b>	<ul style="list-style-type: none"> <li>- Adopting innovative business models compatible with technological developments</li> <li>- Expanding product and service range</li> <li>- Expanding customer interaction points with partnership scenarios</li> </ul>	<ul style="list-style-type: none"> <li>- In order to implement digital-oriented business models compatible with technological developments, a transformation strategy should be determined within the institution.</li> <li>- Big data, data analysis, artificial intelligence, robo-advisory, machine learning, blockchain etc. technologies must be integrated into operations.</li> <li>- Scenarios such as considering partnership scenarios within the scope of digitalization and the correct positioning of the structures to be cooperated, within the institution, the inclusion into the organization of the structure that will enable the transformation in this respect, the determination of separate performance indicators, or providing investment by leaving the structure outside the institution, should be evaluated by the banks.</li> </ul>	<p><b>Albaraka Garaj:</b> In 2017, Albaraka Türk launched Albaraka Garaj, an Startup Acceleration Center, where entrepreneurs with technology-based projects are supported with incubation and acceleration opportunities. With this initiative, the Bank became the first Participation Bank to establish a startup acceleration center.</p> <p><b>Hepsipay:</b> In 2015, Hepsiburada launched Hepsipay initiative, which is its 100% subsidiary, and thus stepped into the online payment field.</p> <p><b>Guild Entrepreneurship Center:</b> Kuveyt Türk established the Guild Entrepreneurship Center to support technology-focused startups and ensure growth.</p>
Aligning the organization and setting up separate agile organizational units to create and operate digital-oriented business models				
<b>Business Model</b>	<b>Technology</b>	<ul style="list-style-type: none"> <li>- Technological infrastructure being important for digital banking</li> <li>- Making banking platforms more powerful and agile</li> <li>- Ensuring rapid adaptation to digitalization-oriented banking</li> </ul>	<ul style="list-style-type: none"> <li>- While the technological infrastructure is of great importance in digital banking, adaptation to new technologies should be achieved quickly in the rapidly-changing banking world.</li> <li>- Technological infrastructure investments are of great importance in the banking business model in order to avoid any disruptions in the works and to ensure the continuity of digital-oriented banking services.</li> <li>- Banks should make it possible to create their own ecosystems by strengthening the link between Fintech-Bank with API and by developing new cooperation strategies.</li> </ul>	<p><b>TD Bank:</b> As one of Canada's largest banks, it has signed an agreement with Microsoft and keeps its IT resources on Microsoft Azure, and benefits from fast customer analyses and cloud technologies.</p> <p><b>Albaraka Türk:</b> With its APIs, it has performed many electronic money and payment institution integrations to date, such as Param, Ozan, Ininal, and Sipay.</p>
Defining technology infrastructure and requirements to support digital-oriented business models				
<b>Business Model</b>	<b>Innovation</b>	<ul style="list-style-type: none"> <li>- Ensuring efficiency and continuity through intersectoral studies</li> <li>- Increase in technological investments</li> <li>- Diversification of the product range</li> </ul>	<ul style="list-style-type: none"> <li>- In order to meet customer needs and to stand out in competition, banks' technological infrastructure should be used and cooperation should be made with institutions from other sectors.</li> <li>- With innovative business models, it is possible to provide a quality customer experience at a much lower cost than traditional methods.</li> <li>- Along with digitalization, regulatory regulations and new product needs, there are prominent actors emerging in the financial services sector, apart from banks, such as fintechs.</li> <li>- Thanks to the services that proceed based on business models created outside of the standard structure, the services offered to the customers will become more customized and target segment-oriented.</li> </ul>	<p><b>Yielders :</b> It is a crowd-investment real estate platform that enables investment without mortgage, interest or hidden fees, with its ethical investment model.</p> <p><b>ING:</b> It has partnered with Kabbage, which provides funds directly to small businesses and consumers through an automated lending platform. Thus, it will be possible for ING to serve its existing customers with greater efficiency and on a greater scale.</p> <p><b>T.O.M. Dijital:</b> It aims to provide innovation-oriented payment and consumer financing services for the unbanked population.</p>
Designing business models outside the standard structure to provide solutions to the customer in the digital field				



## Strategy Components (4/5)

Component Relationships		Strategic Benefit	Important Points	Market Applications
<b>Business Model</b>	<b>Training</b>	<ul style="list-style-type: none"> <li>- A uniform understanding of the business model and functioning of digital banking/participation banking by ecosystem stakeholders</li> <li>- Ensuring that the customers understand the participation banking system and ensuring uniformity among them</li> </ul>	<ul style="list-style-type: none"> <li>- Standard training plans should be established to ensure harmonious cooperation with the ecosystem stakeholders.</li> <li>- In line with global developments, the aim should be to keep the training programs up-to-date and to increase the knowledge of the employees in the ecosystem about financial tools compatible with Islamic principles.</li> <li>- The training setup and business model for the players in the ecosystem, the relevant departments within the institution, customers and business partners, should be conveyed through the right channels.</li> <li>- Training contents should be designed to teach banking customers about both Participation Banking and digital banking products together.</li> </ul>	<p><b>IFSB:</b> With its e-learning platform, the Islamic Financial Services Board offers users access to a set of e-modules designed to facilitate capacity building in Islamic banking regulation and supervision.</p> <p><b>Participation Banks Association of Turkey:</b> Trainings on participation banking ecosystem and participation banking applications are organized for participation bank personnel and other stakeholders on the training portal.</p>
Designing training content dealing with the concept/business model, and method of implementation of the work that is to be done with the internal (related departments) and external stakeholders (customers, business partners)				
<b>Channel</b>	<b>Organization</b>	<ul style="list-style-type: none"> <li>- Shaping the channel management in line with current trends and meeting the changing customer expectations</li> <li>- Increasing channel efficiency and profitability with the adoption of new interaction channels</li> </ul>	<ul style="list-style-type: none"> <li>- In order to adapt to the rapidly developing technology and the changing customer expectations, banks should review their channel strategies in line with customer preferences and behavior and focus on omnichannel management.</li> <li>- Within the scope of omnichannel management, the organizational structure should be reviewed, roles and responsibilities should be redefined, and key performance indicators should be determined.</li> <li>- In order to increase digital channel efficiency, technical infrastructure and data competencies need to be developed. In addition, the integration of systems should be ensured in order to facilitate the transition between channels.</li> </ul>	<p><b>La Banque Postal:</b> It launched Ma French Bank, a digital bank. Operating as a completely digital bank, Ma French Bank carries out its customer onboarding process through branches.</p> <p><b>Capital One:</b> It has opened fully-equipped coffee shops serving through the coffee shops it owns, or serving as a co-working space, where banking transactions can be carried out. In these areas, one-on-one customer service can also be obtained from the bank personnel.</p>
Increasing the focus within the organization on channel management of digital channels; defining roles and responsibilities to work in partnership with business units and IT (Information Technologies)				
<b>Channel</b>	<b>Technology</b>	<ul style="list-style-type: none"> <li>- Providing efficient service in digital banking channels with technological infrastructure investments</li> <li>- Rapidly meeting the changing customer expectations</li> <li>- Providing uninterrupted service in digital banking channels</li> <li>- Customization of the channel structure and the services offered thereby, on a customer basis</li> </ul>	<ul style="list-style-type: none"> <li>- Considering digitalization, banking services and customer expectations, which are in rapid change in today's world, extra attention should be paid to technological infrastructure investments in all banking channels in order to keep up with this rapid change.</li> <li>- The aim of banks should be to lead the sector in transformation projects by integrating the ecosystem created by digital banking channels with innovative solutions and a customer experience-oriented approach.</li> <li>- For the purposes of customer experience, a strong technological infrastructure should be established and uninterrupted service should be provided to customers in banking channels.</li> </ul>	<p><b>US Bank:</b> American US Bank's mobile application offers services such as the ability to talk to a human agent within the application and perform ID authentication through the application when calling customer services.</p> <p><b>N26:</b> One of the leading companies in online banking, N26 was established on cloud technologies with a conscious decision, and has managed to stay agile against technological innovations and to grow rapidly. Within five years, it has grown into a global bank with 5 million customers.</p>
Determining the technology infrastructure required for digital channels; ensuring integration with conventional channels and customer experience journey flow				
<b>Channel</b>	<b>Innovation</b>	<ul style="list-style-type: none"> <li>- Maximizing the user experience with new generation innovations</li> <li>- Access to banking services anytime, anywhere</li> <li>- Increasing service options and providing end-to-end service with omnichannel experience</li> <li>- Diversification of banking services</li> </ul>	<ul style="list-style-type: none"> <li>- The financial services sector must be transformed from a traditional in-person experience to an omni-channel experience where users can perform transactions and check account information anytime, anywhere.</li> <li>- Users use many different channels, including mobile, internet and physical branches depending on their preferences. Banks should also keep user satisfaction at the highest level in channel setup with new innovations in digital channel diversity.</li> <li>- Serving customers through different and innovative channels enables institutions to differentiate themselves in the field of digital banking.</li> </ul>	<p><b>Wells Fargo:</b> It works with NCR to bring a series of industry-leading innovations to life. These innovations range from cash and check processing innovations to high-contact concierge solutions delivered via self-service devices and next-generation materials that increase the longevity and availability of physical channels.</p>
Diversification of digital channels and designing the channel setup to provide better quality service to the customer				
<b>Channel</b>	<b>Training</b>	<ul style="list-style-type: none"> <li>- Creating a guideline on the digital banking journey</li> <li>- Ensuring the safe adoption of the transition from conventional channels to digital channels</li> <li>- Customers' trust in digital banking channels</li> </ul>	<ul style="list-style-type: none"> <li>- Training content should be designed to enable customers to discover the right reflexes they need to adopt in order to make use of digital banking services, advantages, and transactions in full security.</li> <li>- Individuals who cannot or have not yet accessed digital banking services for certain reasons should be informed about the features of digital banking.</li> <li>- In the training content, individuals should be able to discover digital banking services, advantages and security reflexes while making transactions.</li> </ul>	<p><b>Digital Wallonia:</b> Digital Wallonia, Febelfin and Wallonia's digital public spaces network is working jointly to offer a series of free awareness sessions aimed at informing the Belgian public about the advantages of digital banking.</p> <p><b>Svenska Bankföreningen:</b> In cooperation with the Swedish Banks Association, an information sharing project including a website, printed materials and lectures was created in order to reach senior consumers and high-level institutions with information on digital banking</p>
Designing training content on the structure and features of digital channels, their difference from conventional channels, and joint operation of thereof				
<b>Organization</b>	<b>Technology</b>	<ul style="list-style-type: none"> <li>- Adopting innovative business models compatible with technological developments</li> <li>- Flexible team structure that supports innovative products and services</li> </ul>	<ul style="list-style-type: none"> <li>- In order to implement digital-oriented business models, it is important to initiate the digital transformation process within the organization. In this context, corporate culture and organizational structure should be reviewed.</li> <li>- With the digitalization of business processes, roles, responsibilities and competencies should be redefined in line with technological developments.</li> <li>- In order to respond to market dynamics and changing customer expectations, banks should adopt a flexible and lean team structure with fast decision-making capability.</li> </ul>	<p><b>BBVA:</b> In 2019, it adopted the agile organizational structure approach and redesigned its operating model. Within the scope of this re-design, the 33,000-person central services department operating within the group has changed the way it works, and has transformed itself into small autonomous teams. BBVA is the first major organization to complete the agile transformation of central service functions at all its subsidiaries worldwide.</p>
Designing a technological organizational structure that will work with agile method, and implement new features in sprints, with the organizational structure created to design and operate digital-oriented business models				



## Strategy Components (5/5)

Component Relationships		Strategic Benefit	Important Points	Market Applications
<b>Organization</b>	<b>Innovation</b>	<ul style="list-style-type: none"> <li>- Flexible team structure that supports innovative products and services</li> <li>- Increasing competitiveness with the development of adaptability to changing trends</li> <li>- Expanding customer interaction points with partnership scenarios</li> </ul>	<ul style="list-style-type: none"> <li>- A flexible team structure with rapid decision-making competence should be formed within the institution, and the institution should be able to adapt quickly to market expectations and technological developments.</li> <li>- Adoption of omnichannel management and blending of digital and physical channels should increase customer interaction channels while supporting the launch of new products.</li> <li>- Banks should take steps to establish partnerships with external companies, expand their range of products and services, and enter different sectors.</li> </ul>	<p><b>ING:</b> In 2015, ING initiated the agile transformation process. In this process, the institution formed multi-disciplinary teams consisting of a small number of people and aimed to take the customer experience to the next level by enabling the teams to present the products in a more customer-centric, faster and more flexible way.</p> <p><b>Goldman Sachs:</b> Goldman Sachs, the world's leading investment bank, launched the Apple Card in cooperation with Apple in 2019. The Apple Card initiative is the first credit card introduced by Goldman Sachs.</p>
<b>Organization</b>	<b>Training</b>	<ul style="list-style-type: none"> <li>- Employees' dominance of digital channels ensures the learning agility of the organization</li> <li>- Increasing the quality of internal communication, especially communication between IT (Information Technologies) and other units</li> <li>- Forecasting organizational development needs with training activities</li> </ul>	<ul style="list-style-type: none"> <li>- Educational contents should be kept up-to-date in line with constantly changing digital trends.</li> <li>- With methods such as gamification and micro-learning, the content of the trainings should be permanent.</li> <li>- The channels through which bank employees can access training content should be diversified. (For example: Learning Management System (LMS) platforms, virtual classrooms, video, blog, e-book)</li> <li>- Options such as increasing employee motivation and providing performance measurement opportunities should be evaluated by including scoring in the trainings.</li> </ul>	<p><b>Yapi Kredi:</b> With Blockchain, the Bank aims to increase the digital competence of its workforce with programs such as Digital Transformation in Finance, Financial Management and Statistics Applications in Excel, Digital Transformation in Banking and fintech.</p> <p><b>The Ninja Project :</b> The platform, created by BBVA in 2016 to enable its employees to develop their digital competencies through gamification, contributes to the adaptation process of 9000 employees from seven countries to new technologies.</p>
<b>Technology</b>	<b>Innovation</b>	<ul style="list-style-type: none"> <li>- Ensuring end-to-end adaptation of new technologies; designing digital channel management</li> <li>- Facilitating new product service delivery</li> <li>- Increasing channel efficiency</li> <li>- Operational cost management (infrastructure and service optimization)</li> </ul>	<ul style="list-style-type: none"> <li>- The use of technological infrastructure in banking business models and channel structures allows banks to better benefit from the opportunities in the market.</li> <li>- By incorporating new technological structures into the business model and channel structures, efficiency should be achieved in terms of cost and customer onboarding.</li> <li>- Improving channel cost management, increasing systematic channel performance, and reaching wider customer bases can be achieved with technology-based channel management.</li> <li>- With new technologies; new product and service delivery through channels becomes faster and easier while it becomes also possible to rise to a more competitive position in the market in terms of prices.</li> <li>- It would be beneficial to consider the performance of joint studies with institutions focused on reducing the operational costs of participation banking in the country.</li> </ul>	<p><b>JP Morgan:</b> JPM, in partnership with DBS and Temasek, founded technology company Partior to develop a blockchain-based payment platform. Partior aims to eliminate the inefficiencies of the current cross-border payment model.</p> <p><b>WeBank:</b> WeBank, the first digital bank established in China, believes as the world's largest digital bank that the concept of Open Banking should go beyond the concept of API banking, and therefore WeBank launched The Three Open's proposal to promote fintech innovations.</p>
<b>Technology</b>	<b>Training</b>	<ul style="list-style-type: none"> <li>- Facilitating access to education through digital platforms/tools/channels</li> <li>- The trainings being recordable /re-watchable</li> <li>- Providing flexible training programming</li> <li>- Customization of training programs</li> </ul>	<ul style="list-style-type: none"> <li>- Since it is not always a practical method to carry out all internal trainings in a physical environment, institutions should digitalize the appropriate ones according to the type of training.</li> <li>- Banks should attach importance to technological infrastructures/platforms both in order to adapt to the new working order and to enable their employees to access their training flexibly anytime, anywhere.</li> <li>- Thanks to the technological infrastructure that will enable bank trainings to be accessed via digital channels, trainings should be recordable/re-watchable.</li> </ul>	<p><b>Vakıfbank:</b> Due to the pandemic in 2020, it strengthened its technological infrastructure and gave 79.15% of its trainings through digital learning channels with e-learning and video trainings.</p> <p><b>HSBC:</b> With the HSBC University program, the online training of the employees allows them to study at the pace they determine and at the time that suits them. It is especially important for employees who choose flexible work or remote work.</p>
<b>Innovation</b>	<b>Training</b>	<ul style="list-style-type: none"> <li>- Increasing the number of customers who can confidently make their financial choices and are familiar with banking products/services</li> <li>- Increasing awareness by providing interaction between companies in the sector</li> <li>- Addressing new customer needs with innovative training and information</li> </ul>	<ul style="list-style-type: none"> <li>- A financial literacy strategy should be established and/or areas for improvement in the current plan should be identified.</li> <li>- The integration of successful practices within and outside the sector into the business processes of institutions should be considered.</li> <li>- In order to make financial education more effective and to increase the number of users it will reach, digital tools should be used.</li> <li>- The trainings to be offered should be made a part of the products/services offered in the field of digital banking.</li> </ul>	<p><b>Erste Bank :</b> The Bank-sponsored Financial Life Park is an educational institution for innovative financial education, promoting knowledge of monetary matters and helping young people acquire the skills they need to manage their personal finances responsibly and independently.</p> <p><b>EVERFI:</b> It has contributed to the processes of creating their own financial literacy solutions for more than 850 financial institutions, including HSBC Bank USA.</p>

## Socioeconomic Status (SES) Grouping

SES groups can group individuals according to their economic and social status.

SES Group A	SES Group B	SES Group C1	SES Group C2
<ul style="list-style-type: none"> <li>▪ Almost all of them are university graduates and approximately 30% have graduate degrees.</li> <li>▪ Nearly half of them are paid professionals. (Lawyer, Doctor, Engineer, etc.)</li> <li>▪ Close to 10% are white collar workers with more than 20 employees.</li> <li>▪ 25% are business owners of various sizes. (nearly half of them do not have employees)</li> <li>▪ The spouses of nearly 40% of MIGs (Main Income Generator) who have a spouse are working.</li> <li>▪ 20% of households save money.</li> <li>▪ 30% go to holiday resorts/hotels for vacation.</li> <li>▪ Nearly half of the households have a library.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The university/postgraduate ratio is close to 60%.</li> <li>▪ Nearly 35% are graduates of 2-year university or high school.</li> <li>▪ 60% of them are civil servants, technical personnel, experts. (non-manager)</li> <li>▪ 15% are business owners of various sizes. (most of them have 1-5 employees)</li> <li>▪ The spouses of 30% of the MIGs (Main Income Generator) are working.</li> <li>▪ 13% of households save money.</li> <li>▪ 20% go to holiday resorts/hotels for vacation.</li> <li>▪ 30% of the households have a library.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 60% of them are High School graduates (20% Vocational High School); 10% of them are graduates of undergraduate programs or higher.</li> <li>▪ 40% are tradesmen, shopkeepers; 30% are skilled workers. (High school graduate)</li> <li>▪ Nearly 15% are civil servants and technical staff.</li> <li>▪ Nearly 15% are retired.</li> <li>▪ The spouses of 13% of the MIGs (Main Income Generator) are working.</li> <li>▪ 5% of households save money.</li> <li>▪ 20% go to holiday resorts/hotels for vacation while nearly 40% visit their relatives.</li> <li>▪ Nearly 20% of the households have a library.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Nearly 20% of them are high school graduates, the rate of secondary school and lower education graduates is 80%.</li> <li>▪ Most of them are primary school graduates and regular workers are close to 60%.</li> <li>▪ About 10% work alone as mobile.</li> <li>▪ 20% are retired and not working.</li> <li>▪ The working rate of the spouses of MIGs (Main Income Generator) whose have spouses is below 10%.</li> <li>▪ 70% of them do not go on vacation, and 25% of those who do go to their hometown to visit their relatives.</li> <li>▪ 10% of the households have a library.</li> </ul>

The background features a dark blue gradient with a glowing network of white nodes and lines. A hand is visible on the right side, pointing towards a bright light source within the network. The bottom half of the page is white with a faint, light blue geometric pattern.

# **ANNEX 2**

**Resources**

**Lists of Tables and Graphs**

**List of Abbreviations**

## Resources (1/5)

- Architech 2021 Open Banking Research
- Abclifeliteracy official website
- AFI Global Digital Financial Literacy
- Akbank Annual Report 2020
- Albaraka Portföy official website
- Albaraka Türk Participation Bank Annual Report 2020
- Albaraka Türk official website
- A.T.E. Group
- Bank of America official website
- Banktrack Banking on Climate Chaos 2021
- Basit A. H. and İrfan H. The Global Islamic Fintech Report, 2019
- BRSA Banking Sector Monthly Bulletin
- Beehive official website
- Bloomberg Technology
- Business Insider K-Shaped Recovery Definition
- Caizcoin official website
- Caizcoin whitepaper
- CIBAFI Global Islamic Bankers' Survey 2020
- CNBC News
- ComPay official website
- DenizBank Annual Report 2020
- Dergipark A Research on Participation Banking and Sustainable Development Activities 2021
- DIFC Fintech Can Help Islamic Finance Sector Innovate and Grow 2020
- Ecolytiq official website
- Emergen Research Artificial Intelligence in BFSI Market
- Emergen Research Big Data Analytics in BFSI Market 2020
- EmergenResearch Blockchain Technology in BFSI
- EmergenResearch Security in BFSI Market
- Ethis Ventures official website
- European Banking Federation Financial Literacy Playbook For Europe
- European Banking Federation The use of Cloud Computing by Financial Institutions
- EY Global Fintech Adoption Index
- EY How Banks Can Play A Stronger Role in Accelerating Financial Inclusion
- EY How Covid-19 Has Speed Up Digitalization for the Banking Sector
- EY Why Financial Literacy Programs Benefit Both Your Clients and Your Firm
- Fasset official website
- Fibabanka Annual Report 2020
- Financell official website
- Financial Times
- Finlit Partners official website
- Finterra official website
- Fonbulucu official website
- Forbes
- Forrester Covid-19 Stokes The Chatbot Hype In Financial Services
- Garanti Bank Sustainability Report
- Garanti BBVA Annual Report 2020
- Global Islamic Fintech Report 2021
- Global Workplace Analytics State of Remote Work Covid Edition
- Grandview Research Robotic Process Automation 2021
- Hello Gold official website
- IBM Banking on Open Hybrid Multicloud
- IDnow. official website
- IFHUB Magazine Big Data Analytics and Islamic Banking 2019
- IFN Financial Innovation Report 2020
- IFN Fintech Malaysia Shifts Islamic Fintech Gear the World Takes Notice 2021
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- IFSB Working Paper Series Digital Transformation In Islamic Banking
- ILO Monitor Covid-19 and The World of Work Seventh Edition
- IMF The Promise of Fintech: Financial Inclusion in the Post Covid-19 Era Departmental Paper
- IMF World Economic Outlook April 2021
- Institute for Policy Studies Global Billionaire Wealth Surges \$4 Trillion Over Pandemic
- Investree official website
- Islamic Financial Services Industry Stability Report 2021
- Islamic Fintech Report 2018
- Kabbage official website

## Resources (2/5)

- Participation Banking Strategy Update Report 2021-2025
- Kestrl official website
- KT Portföy official website
- Kuveyt Türk Participation Bank Annual Report 2020
- Kuveyt Turk official website
- La loca aventura del ahorro official website
- Lewis Marketing Banking on Blockchain
- MasterCard Newsroom
- Mastercard official website
- MDEC Islamic Fintech Report 2020
- MobiKwik official website
- Monzo Annual Report 2021
- Monzo official website
- Mordor Intelligence Big Data in Banking Industry
- N26 official website
- NakitBasit official website
- Oney official website
- Paobank official website
- Paycell official website
- PayHalal official website
- PayPal official website
- Paysafe Group Sapio Research Lost in Transaction Consumer Payment Trends 2021
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- Prisma official website
- QNB Finansbank Annual Report 2020
- Qonto official website
- Rahim S. & Mohamad Z. & Abu Bakar J. & Mohsin F. & MD İsa N. "Artificial Intelligence, Smart Contract and Islamic Finance", Asian Social Science 2018
- Rain.bh official website
- Research and Markets Global Digital Banking Platform Market Report 2020
- Statista Blockchain Market Share By Industry
- Statista Online Banking Users Worldwide
- S&P Global
- Presidency of the Republic of Turkey Finance Office
- Ta3Meed official website
- CBRT official website
- The Economist Intelligence Unit Digital Frontiers New Banking Imperative
- The Financial Brand
- The Guardian
- Tinkoff Bank official website
- TKBB Smart Assistants Summary Report
- TKBB official website
- TKBB Turkey Participation Banking Handbook 2021
- TKBB Digital Onboarding and Branch Customer Onboarding Summary Report
- Turkcell 2020 Integrated Activity Report
- Turkcell 2021 2nd Interim Activity Report
- Turkcell Finansman A.Ş. Consolidated Annual Report 2020
- TÜİK
- Banks Association of Turkey Digital, Internet and Mobile Banking Statistics
- Ulearnmoney official website
- UN News
- UNCDF official website
- Vakıf Katılım Bank official website
- Velocity official website
- Venture Skies Digital Banking
- Vomsis official website
- World Bank Global Findex
- World Bank Group Islamic Fintech to Improve Financial Inclusion Leveraging
- World Bank official website
- Yapıkredi Annual Report 2020
- Yielders official website
- Ziraat Bank Annual Report 2020
- Ziraat Participation Bank official website



## Resources (3/5)

**The following sources have been used when examining and comparing the banking legislation structures of the USA, European Union, United Kingdom, Brazil, Hong Kong, Malaysia and Turkey:**

- AFI Global - KYC Innovations, Financial Inclusion and Integrity In Selected AFI Member Countries
- Bank Negara Malaysia (BNM) e-KYC Policy Document
- Bank Negara Malaysia (BNM) Licensing Framework for Digital Banks
- Bank of England New Bank Start-up Unit/ New bank authorization process
- BRSA Regulation on Remote Identification Methods to be Used by Banks and Establishment of a Contractual Relationship in the Electronic Environment
- BRSA Regulation on Information Systems and Electronic Banking Services of Banks
- BRSA Draft Regulation on the Operating Principles of Digital Banks and Banking as a Service
- BNM Licensing Framework for Digital Banks
- Central Bank of Brazil website
- Central Bank of Brazil - Communiqué 33,455 of April 24, 2019
- European Banking Authority (EBA) Final Report on the Draft RTS SCA and CSC under PSD2
- FDIC- Financial Patriot Act Section 326-Customer Identification Program
- Federal Financial Supervisory Authority (BaFin) Circular 3/2017 (GW)- video identification procedures
- Financial Conduct Authority (FCA), A review of requirements for firms entering into or expanding in the banking sector: one year ten
- Hong Kong Monetary Authority - Authorization of Virtual Banks
- Hong Kong Monetary Authority - Minimum Criteria for Authorization
- Hong Kong Monetary Authority - Guide to Authorization
- Hong Kong Monetary Authority - Supplement to the Guideline on Prevention of Money Laundering
- Knowyourcustomer.com - KYC Around World (Hong Kong)BaFin Market Entry
- Open Banking Implementation Entity (OBIE) official website
- Eleventh Development Plan of the Strategy and Budget Authority of the Presidency of the Republic of Turkey
- The Joint Money Laundering Steering Group (JMLSG) Rules Prevention of money laundering/ combating terrorist financing

## Resources (4/5)

The following sources have been used for market application examples included in the strategic component cards:

- ABN AMRO Bank official website <https://www.abnamro.nl/en/personal/index.html>
- ADIB Bank official website <https://www.adib.ae/en/Pages/Amwali-child%20-%20new.aspx>
- Alrajhi Bank official website <https://www.alrajhibank.com.sa/en>
- Albaraka Banknote official website <https://banknot.albaraka.com.tr/>
- Albaraka Garaj official website <https://www.albarakagaraj.com/>
- Albaraka Turk official website <https://www.albaraka.com.tr/tr>
- Ally Bank official website <https://www.ally.com/>
- US Bank official website <https://www.usbank.com/index.html>
- Bank of America official website <https://www.bankofamerica.com/>
- BBVA official website <https://www.bbva.com/en/>
- Capital One Bank official website <https://www.capitalone.com/>
- Citibank official website <https://www.citi.com/>
- Digital Wallonia official website <https://www.digitalwallonia.be/en>
- Everfi official website <https://everfi.com/>
- Financial Life Park official website <https://www.financiallifepark.at/en/welcome-to-flip>
- Garanti BBVA <https://www.garantibbva.com.tr/tr>
- Goldman Sachs official website <https://www.goldmansachs.com/>
- Hello bank official website <http://www.hellobank.com/>
- Hepsipay official website <https://www.hepsipay.com/>
- HSBC official website <https://www.hsbc.com.tr/>
- IFSB official website <https://www.ifsb.org/>
- ING Bank official website <https://www.ing.com.tr/en>
- Swedish Banks Association official website <https://www.swedishbankers.se/en-us/>
- J.P. Morgan official website <https://www.jpmorgan.com/TR/en/about-us>
- Kabbage official website <https://www.kabbage.com/>

## Resources (5/5)

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The following sources have been used for market application examples included in the strategic component cards:

- Kuveyt Türk Bank official website <https://www.kuveytturk.com.tr/>
- La Banque Postale official website <https://www.labanquepostale.com/en.html>
- Guild Entrepreneurship Center official website <https://www.loncagirisim.com/>
- Maybank official website <https://www.maybank2u.com.my/home/m2u/common/login.do>
- Moneysmart official website <https://moneysmart.gov.au/>
- Monzo official website <https://monzo.com/>
- N26 official website <https://n26.com/en-eu>
- Nomobank official website <https://www.nomobank.com/>
- Odebank official website <https://www.odeabank.com.tr/>
- Plainscapital Bank official website <https://www.plainscapital.com/>
- SeniBankan official website <https://www.seninbankan.com.tr/>
- Standard Chartered Bank official website <https://www.sc.com/en/>
- Swedbank official website <https://www.swedbank.se/en>
- Tayyab official website <https://tayyab.kz/en>
- TD Bank official website <https://www.td.com/us/en/personal-banking/>
- TFX Target official website <https://www.tfxtarget.com.tr/Sayfalar/Ana-Sayfa.aspx>
- Tinkoff official website <https://www.tinkoff.ru/eng/>
- TKBB Education Platform official website <https://tkbbegitim.org.tr/>
- Ulearnmoney official website <https://ulearnmoney.com/>
- Unicredit Bank official website [https://www.unicredit.it/en/about\\_us.html](https://www.unicredit.it/en/about_us.html)
- Vakıfbank official website <https://www.vakifbank.com.tr/>
- Webank official website <https://www.webank.it/webankpub/wbresp/home.do>
- Wells Fargo official website <https://www.wellsfargo.com/>
- YapıKredi official website <https://www.yapikredi.com.tr/>
- Yielders official website <https://www.yielders.co.uk/>

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## List of Abbreviations

<b>AAOIFI</b> Accounting and Auditing Organization for Islamic Financial Institutions	<b>SC</b> Securities Commission Malaysia
<b>AI</b> Artificial Intelligence	<b>SCD</b> Direct Credit Society
<b>API</b> Application Programming Interface	<b>SEP</b> Peer-to-peer Loan Company
<b>ATM</b> Automated Teller Machine	<b>SES</b> Socioeconomic Status
<b>CAGR</b> Compound Annual Growth Rate	<b>SME</b> Small or Medium Sized Enterprise
<b>CIBAFI</b> General Council for Islamic Banks and Financial Institutions	<b>TODEB</b> Association of Payment and Electronic Money Institutions of Turkey
<b>DLT</b> Distributed-ledger Technology	<b>UN</b> United Nations
<b>EBA</b> European Banking Authority	<b>UNCDF</b> United Nations Capital Development Fund
<b>ESG</b> Environmental, Social and Governance	
<b>FAST</b> Instant and Continuous Transfer of Funds	
<b>FCA</b> Financial Conduct Authority	
<b>FX</b> Foreign Exchange	
<b>Fintech</b> Financial Technology	
<b>HR</b> Human Resources	
<b>ICM</b> Malaysia Islamic Capital Market	
<b>ICO</b> Islamic Cooperation Organization	
<b>IEA</b> International Energy Agency	
<b>IFC</b> İstanbul Finance Center	
<b>IFSB</b> Islamic Financial Services Board	
<b>IMF</b> International Monetary Fund	
<b>IT</b> Information Technologies	
<b>KYC</b> Know Your Customer	
<b>LMS</b> Learning Management System	
<b>ML</b> Machine Learning	
<b>OBIE</b> Open Banking Implementation Entity	
<b>OJK</b> Indonesia Financial Services Authority	
<b>P2P Lending</b> Exchange of Information, Data or Assets Between Parties Without a Central Authority	
<b>PEP</b> Politically Exposed Person	
<b>PFM</b> Personal Financial Management	
<b>POS</b> Point of Sale	
<b>PSD2</b> Payment Services Directive 2	
<b>RPA</b> Robotic Process Automation	
<b>RTS</b> Regulatory Technical Standards	
<b>SaaS</b> Software as a Service	
<b>SAMA</b> Saudi Central Bank	

You can contact the TKBB (Participation Banks Association of Turkey) for your questions and more information requests. You can follow our social media accounts to find news, developments and more about participation banking.

*To access the digital version of the report:*



-  [tkbb.org.tr](http://tkbb.org.tr)
-  [tkbbdanismakurulu.org.tr](http://tkbbdanismakurulu.org.tr)
-  [tkbbegitim.org.tr](http://tkbbegitim.org.tr)
-  [katilimfinans.com.tr](http://katilimfinans.com.tr)

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- participationbanksassociation 
- katilimfinansdergisi 
- KatilimFinans 
- katilimfinansdergisi 
- katilim-finans 
- Katilimfinans 



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