

MODERN APPROACHES TO CONSUMER INTERACTION WITH FINANCIAL-BANKING SERVICES

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Abstract:

The emergence of Open Banking and the COVID-19 pandemic have caused disruptions in the global economy and the way consumers use financial-banking services. As consumers avoided visiting branches, banks and other financial service providers, who were hesitant to change their traditional models, had to embrace technology and other changes to stay competitive and meet customer demands. For numerous financial organizations, the current situation has led to a hastening of their digitization efforts both internally and externally. However, for some, it has exposed shortcomings in fulfilling the needs of their customers. As online banking has transitioned from a "nice-to-have" feature to an essential way of life, many new banks have taken advantage of the technological gap. // With online banking evolving from a "convenient option" to a crucial necessity, numerous emerging banks have capitalized on the gap in technology. Therefore, PSD2 has presented a chance for traditional banks to expand their market share and offer their products to customers who were previously unreachable. In recent times, Open Banking has emerged as an emblem of the financial sector's digital and transformative progress. The fundamental principles of the Internet age aim to empower consumers with control over their financial services and lower the obstacles to accessing them. Digital and neo banks represent a new breed of banks that operate solely online with the primary goal of making financial transactions easier for consumers. They offer round-the-clock availability and enable quick and effortless execution of all kinds of operations, aligning perfectly with the current trend towards digitalization. The digital transformation of banks necessitates a fundamental shift in their organizational culture, beginning with the understanding that banks must continuously evolve to meet customer expectations for comprehensive, seamless, and agile services. This article emphasizes the impact of current economic conditions on the actions of financial-banking service consumers and the development of financial intermediaries.

Key words: Customers' Behavior, Digital Banks, Customers' Needs, NeoBanks, Financial-Banking Services, digitization of banks.

JEL classification: G21, G41, D11.

INTRODUCTION

The pandemic has emphasized the significance of technological innovation and the role of digitalization in human society more than ever before (Mistrean, 2021b). From obtaining information in real time to online shopping, digital services offer essential solutions (Mistrean, 2023). Important elements have become the speed of change and adaptation to new conditions (Mistrean, 2021a). More than ever, the pandemic has led to a change in behavior and the formation of new consumer habits, how to do banking - from home and with more confidence online (Mistrean and Staver, 2022; Mistrean, 2021c).

Finance is moving towards a digital future: there is a growing trend among consumers to use digital financial services, while innovative players in the market are adopting new technologies and transforming traditional business models. Digital finance has played a crucial role in helping individuals and businesses navigate the challenges posed by the COVID-19 pandemic.

Recently, changes have occurred worldwide in how consumers can access certain financial-banking and non-banking services (Mistrean, 2020). A growing number of payments are being made digitally and without physical contact, while e-commerce transactions have seen a substantial rise.

A key feature of traditional banks is that they do not share information about their customers with third parties. In today's banking environment, however, changes are significant, progress is imminent, and consumers can choose what information to share and with whom; conditions in which the concept of Open Banking was born, the new way in which banks allow third parties (other providers of financial services) access to consumer data (Tradesilvania, 2020). The consumer can access a broader range of services that better suit their financial needs with increased security.

Open Banking is a concept through which banks become financial service platforms, technically implemented through an "end-to-end" operation that enables the delivery of web-based financial services. (Finanzamania, 2020).

Open Banking, sometimes referred to as "open bank data," is a banking approach that provides other financial service providers with access to consumer financial data from banks and non-bank financial institutions via application programming interfaces (APIs). Open Banking facilitates the integration of accounts and data between institutions for access by consumers, financial institutions, and external service providers. Examples of this process in action include evaluating customer accounts and transaction histories with various financial service options, consolidating customer data and participating financial institutions to generate marketing profiles, or conducting transactions and making account modifications on the customer's behalf.

Thus, they laid the understructure for a banking system based on innovation and cooperation to allow customers to access their accounts through flexible and easy-to-use applications.

The pandemic was an accelerator for the evolution of financial-banking services, determining the rapid growth of the need to innovate the functional processes of the bank in order to adapt to changes in customer behavior. (Tink, 2021).

However, Open Banking introduces a new and secure approach for users to access fast payment solutions and innovative banking products. Open banking paves the way for new products and services that could help both individual customers and companies develop their business and is expected to be the change with the most significant impact in the financial services field after online banking.

THE OPERATING PRINCIPLES OF OPEN BANKING

EU Directive (2015)/2366 on Payment Services in the Internal Market (PSD2) The Revised Payment Services Directive is the act of regulating financial services that have opened the doors to open banking and recognize the impact of "FinTech" on the payment services industry (FinTech is anticipated to have a significant impact on the future financial landscape), eliminating banks' exclusive control over their customers' banking data.

PSD2 represents a significant regulatory effort by the European Union to promote innovation and competition within the financial services industry by establishing an equal playing field for banks, new financial technologies, and other third-party entities (Goranitis, 2021). Thus, its role is to enhance and expand the range of online services accessible to customers. PSD2 aims to intensify security and make payments more secure in Europe, protect consumers from fraud, stimulate innovation, and help banking services to adapt to new technologies on the market (Kuppinger, 2017).

In 2018, PSD2, a key regulatory initiative by the European Union, opened up the European online payment market to new payment providers by granting third parties such as technology companies, merchants, and telephone operators access to bank infrastructure and data. With the consent of customers for the processing and use of their data, these third parties have the ability to initiate payments on their behalf.

However, banks must provide access to their payment infrastructure - API (Application Programming Interfaces), bank account information, and customer data to third parties - TTP that can develop their information and payment services and other services to bank customers.

The "Open banking" model, introduced through PSD2, represents a colossal development opportunity for financial institutions and their clients, who are constantly looking for simpler, faster, and more controllable solutions.

PSD2 determined fundamental changes to payment operations, of accessing the information regarding the accounts, by allowing new "TPP" players such as non-banking institutions, FinTech startups, and online financial service providers to enter the payment services market, wanting the payment services market to ensure equal rights for all participants (Anton, 2018).

Intermediaries will have access to information on banking products and services, including their prices and quality. Customers who give their consent will be able to pass on their information about the transactions to intermediaries they trust, who will offer them personalized advice, making it easier for the customer to identify the best products according to their needs. In this way, Open Banking will allow individual consumers and trading companies to securely transmit their data to other banks or third parties. This allows for easier product comparison and cost management without the need for bank involvement.

Known as Strong Customer Authentication (SCA) (Miron, 2021), with a focus on introducing new data security requirements, PSD2 regulates the activity of new market participants - Third Party Providers (TPPs).

AISPs (Account Information Service Providers) provide online services that allow payment service users to view information from one or more of their payment accounts in one place and offer it to other payment service providers. For customers with multiple bank accounts, these changes will give them access to their account information in one place, based on the services provided by AISP.

Thus, the user has a quick overview of his financial situation anytime. AISP could analyze the customer's behavior and recommend solutions to streamline their transactions: for example, for a customer who saves to recommend the account with the most beneficial interest. However, the most interesting perspective is given by the possibility of analyzing customer data and behavior in real time. When a customer makes a payment transaction, it presents an ideal opportunity for direct marketing or offering additional services. (Anton, 2018).

A PISP (Payment Initiation Service Provider) is a service that initiates payments from a user's payment account held with another provider (such as a bank) on the user's behalf. The main payment methods currently used are bank transfers and payment cards, but they are only available from the bank where the account is held or from electronic money issuers. Payment options are diversified by establishing an IT bridge between a merchant's website and the online banking platform of the service provider. This allows for initiating internet-based credit transfer payments and plays an important role in e-commerce payments (Nistor, 2016). With PISP authorization, merchants like Amazon can acquire a customer's account data with their consent. This allows the merchant to directly initiate online purchases as a PISP, based on the consumer's authorization, eliminating the need for a card or an alternative payment service provider like PayPal. Open Banking will fuel the rapid expansion of financial services and enhance the user experience. Many processes will become simpler and automated. By accessing banking APIs, FinTech companies can offer users ways to enhance their financial experience. For banks and FinTech companies, it is necessary to review the existing workflow and bring a new design to the flow to ensure the elimination of friction, making it valuable for customers.

The benefits of Open Banking consist of the following aspects (Tradesilvania, 2020):

- helps consumers maintain their budget, find the best deals and buy products and services appropriate to current needs;
- through Open Banking, payments are made directly from the bank easily and quickly;
- Open Banking can change the way websites are used to compare prices. If such a site is given access to account information, it will receive results based on its financial profile;
- provides enhanced security without the need to share authentication details other than the bank where it is registered;

- the customer has control over the simple fact that he can choose which services to use, which providers to provide access to personal information, and how long the access period is.

Open Banking satisfies immediate needs and offers already well-defined opportunities that can contribute to increasing the competitiveness of economic agents' businesses and involves wide areas of applicability such as (Georgescu, 2020):

- 1) Management Information Systems ensures the availability of real-time bank account information in systems that help companies make decisions (e.g., tracking cash flow and budget execution for a company that has opened accounts with more than one bank):

- regular connection to the internet / mobile banking applications of each bank in order to take over the last receipts/payments and the current balance;
- manual entry of this information in the financial statements;
- generation of reports (current situations, projections, etc.)

Open Banking allows automating all these steps so that the company can see its current financial position permanently. In addition, account information can be enriched before it can be infused into internal IT systems (for example, allocated by budget category), or it can trigger automated processes (for example, overnight placements for available funds);

- 2) integration of payment flows in the business processes of companies: With the help of Open Banking, payment orders can be automatically sent to the bank as soon as the payroll of salaries is drawn up or a supplier's invoice has become due;
- 3) the emergence of new means of payment for employees: Open Banking opens the possibility of implementing innovative payment flows, with complex mechanisms for managing the rights of initiation and approval of payments, freeing companies of costs and additional effort (currently, the options used involve costs and administrative effort: cash withdrawal is commissioned, cash retention costs, advance/settlement procedures are inflexible and employ the financial-accounting department, bank cards have administration costs, issuing/managing limits/closing cards take time, etc.).

However, the programming interfaces of open banking applications do not exclude some problems such as the possibility of an unauthorized app accessing a user's account and stealing money. However, this is considered an unlikely and rare occurrence.

Concerns are greater regarding simple incidents such as data security breaches due to inefficient security, hacking, or other modern-day security concerns.

ANALYSIS OF HOW BANKS AND CUSTOMERS APPROACH THE OPEN BANKING PROCESS

Given that PSD2 users need time to adopt new technologies, the Covid-19 pandemic has favored this adoption, and consumers benefited from the use of integrated Open banking systems (Unnax, 2021). The transition to open banking is in full swing in Europe, Singapore, and Hong Kong (Hoppe, 2021).

The PSD2 Directive has existed since 2016 and was implemented between 2018 and September 2019 (European countries had time to adapt their national legislation and establish their technical standards on providing data through API). In order to increase innovation and competition in banking, European banks are opening up APIs to share consumer data requested by third parties. Thus, at its launch, only 20-30% of banks had APIs; currently, their number has increased to 80-90%.

The result was an explosion of fintech innovations for consumers, which required the mandatory use of the API standard. In particular, in the UK, where open banking has evolved rapidly, the use by third parties of fintech applications for personal finance management has increased considerably during COVID-19. Thus, 20% of all adults in the UK use fintech platforms such as Mint, Plaid, QuickBooks, and Quicken, and in the case of young adults, during the pandemic, the usage of fintech platforms rose to 50%. Visa and Mastercard in the United States are

quickly adopting fintech (financial technology) into their systems to facilitate open banking. This allows them to establish a payment system that is agnostic, meaning it is not tied to any specific bank or financial institution (Hoppes et al., 2021).

TrueLayer policy chief Jack Wilson (Cruickshank, 2021) said that open European banking is 6-12 months away from the UK and is different in different countries. Many banks have advanced strategies for Open banking, but also many banks that are far behind. The degree of maturity of the Open banking infrastructure is also different. For example, German banks use XS2A, and French banks use STET.

With PSD2, traditional banks have the chance to increase their market presence and reach more customers with their products (Finance, 2020). Central and Eastern European banks have declared high interest in partnerships with financial technologies or other third-party players (Goranitis, 2021). A survey called PSD 2 Voice of Banks (VoB) was carried out among 90 EU banks located in 17 different European countries and found that they estimate that PSD2 will have the greatest impact on the retail-banking segment and on dedicated to SMEs, pinpointing payments and consumer credit as significant prospects.

Generally, banks in Western Europe are more advanced in their PSD2 programs compared to their counterparts in Central and Eastern Europe:

- a considerable portion of banks in Western Europe have implemented a bold PSD2 approach which aims to maintain a market share;
- the large traditional universal banks in Central and Eastern Europe are the most receptive to the prospects created by PSD2 and the majority of them follow a collaborative approach with other entities;
- medium and smaller banks often pursue an approach limited to defensive compliance or have not yet decided on their strategy.

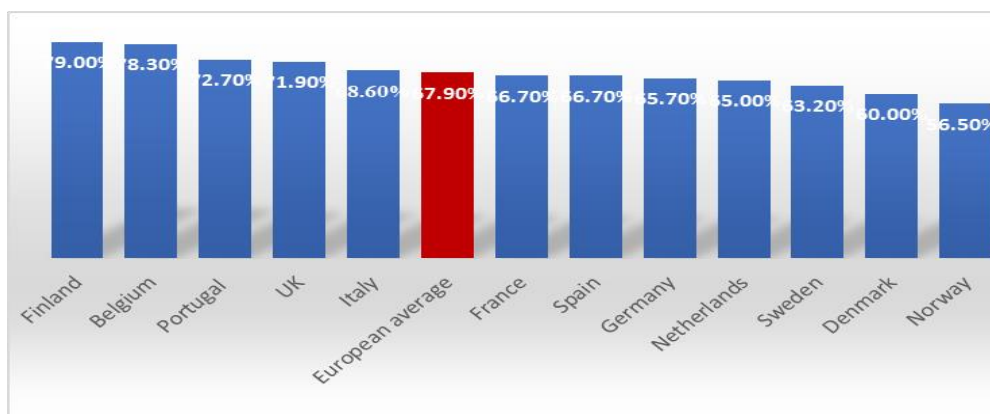


Figure no. 1. The interest in open banking technologies

Source: Own elaboration using data from Tink (2021)

The interest in open banking is different in the European Union countries, the average being 67.9% (figure no.1). The pandemic has increased the interest of consumers in open banking technologies.

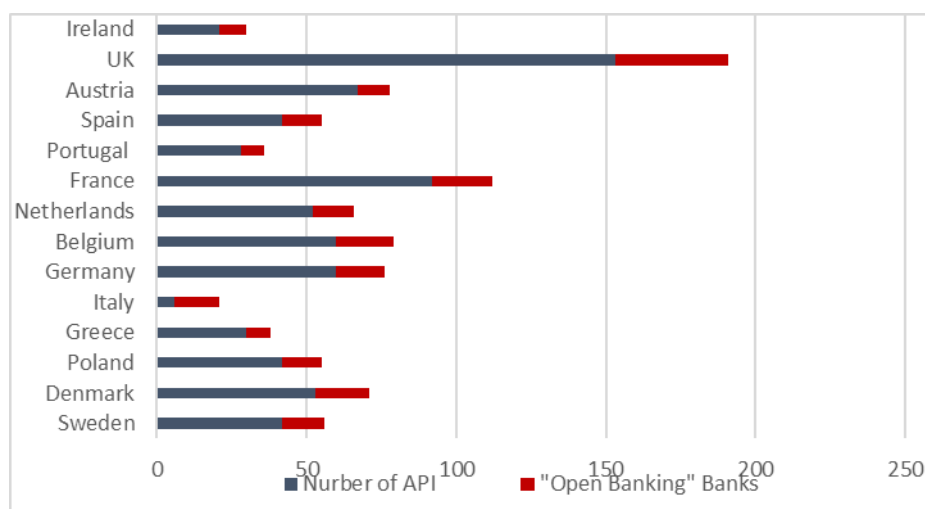


Figure no. 2. Open Banking in European countries

Source: Own elaboration using data from Finanzamania (2020)

The efforts and enthusiasm dedicated to Open Banking differ between institutions, and this lack of commitment complicates the creative process for innovators who depend on this data. At the same time, an innovation that adds value to consumer finance could be delayed by decisions by the banking sector, which has to take on the non-banking competition and does not seem to give up.

For some banks, this situation has led to the acceleration of internal and external digital transformation processes for some, while exposing shortcomings in addressing customer demands for others. With online banking transitioning from a 'nice-to-have' to an essential way of life, many non-bank entities have taken advantage of the technological gap.

Austria	Erste, Raiffeisen
Belgium	BNP Paribas Fortis, AXA Bank, Belfius, KBC, Aion (neobancă)
Denmark	Danske Bank, Arbejdernes Landsbank, Spar Nord
France	BNP Paribas, Crédit Agricole, Société Générale, Banque Populaire, Max (neobancă)
Germany	Deutsche Bank, Commerzbank, Volkswagen Bank, N26 (neobancă), Fidor Bank (neobancă)
Greece	Banca Națională a Greciei, Alpha Bank, Piraeus Bank
Ireland	Bank of Ireland, Allied Irish Banks, Permanent TSB
Italy	Banca Monte dei Paschi di Siena S.p.a., Intesa Sanpaolo, Unicredit
Netherlands	ING, ABN Amro, De Volksbank, Rabobank, Triodos, Bunq (neobancă)
Poland	Bank Pekao, Alior Pay, mBank
Portugal	Millennium BCP, Novo Banco
Spain	Santander, BBVA, Sabadell, CaixaBank, Bankinter, Bankia
Sweden	Nordea, SEB, Svenska Handelsbanken, Swedbank
UK	HSBC, Barclays, Lloyds Banking Group, Standard Chartered, Nationwide Building Society, RBS, Monzo (neobancă), Revolut (neobancă), Starling Bank (neobancă)

Figure no. 3. Open Banking leaders from European countries

Source: Own elaboration using data from Finanzamania (2020)

The market for Open Banking services is growing at the European level, and companies in this sector have significant potential for expansion. SmartPay is the first Open Banking alternative payment solution authorized by the National Bank of Romania in Romania, but it was launched by Smart Fintech just a few months ago compared to Germany, where there are 35 suppliers and over 500 companies authorized throughout the European Union (Hackathons, 2021). The banks that have incorporated the SmartPay service are BRD, BCR, Banca Transilvania, ING Bank, CEC Bank, and Raiffeisen Bank, offering users additional flexibility and proposing their initial collaborations with

online vendors and service providers. In Moldova, the national legislative framework is currently being aligned with the PSD2 provisions required to develop open banking.

The adoption by customers of the new services activated by PSD2 and their willingness to express their agreement on sharing account information with other entities will be essential for the broader success of PSD2. A YouGov survey conducted in 2021 from February 25 to March 27 with 308 respondents across 12 European countries revealed a significant increase in the desire to utilize open banking opportunities during the Covid-19 pandemic. Thus, about 68% of the financial directors interviewed stated that their interest in open banking increased during the pandemic.

TrueLayer and YouGov point out that about 74% of merchants are willing to use Open Banking to reduce payment costs, noting that high costs related to card payments are one of the determining factors (Lanyon, 2021). About 49% of the interviewed merchants mentioned the high cost of Visa and MasterCard payments as being in the top two positions of the issues related to these types of payments, and 31% said it was the most painful aspect specific to them.

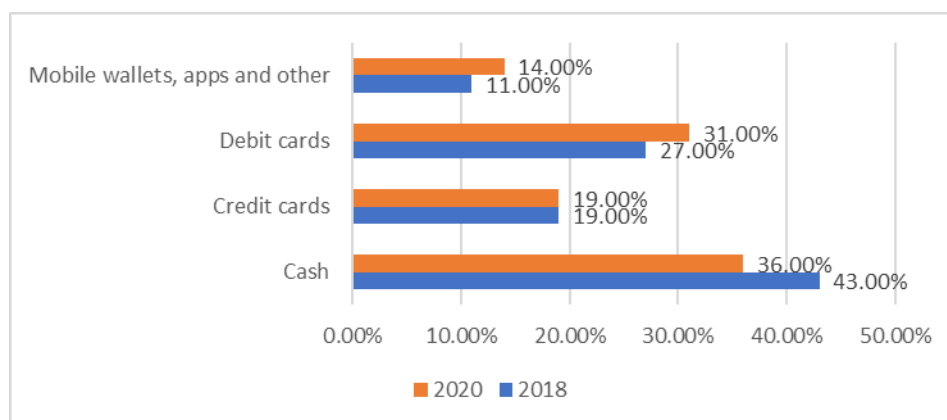


Figure no. 4. The evolution of consumer preferences for used payment instruments

Source: Own elaboration using data from Strategy& (2020)

Open banking payments are accepted as a comfortable one by approximately 63% of buyers. However, credit and debit cards remain the most used to make payments - about 50%, and purchases over GBP 200 reach 63% of payments made. At the same time, digital wallets (Google Pay, PayPal, Apple Pay) are used as the main payment method by about 38% of consumers. In 2020, the use of debit cards reached 31% compared to 27% two years earlier, and the use of apps and e-wallets reached 14% from 11% in 2018 (PwC, 2020).

Analyzing the preferences of customers regarding digital banking and their willingness to adopt new innovative services, which become possible based on PSD2, we can say that even with the move towards digital and mobile banking, a large number of consumers in Central and Eastern Europe still utilize various banking channels, as per the findings of the PSD2 Voice of the Customer (VoC) survey conducted with 6,000 bank customers across Central and Eastern European countries. The Central and Eastern Europe zone was divided into two different categories: in contrast to Romania and Bulgaria, where the share of digital banking channels is less than 20%, more established digital markets such as Slovakia, the Czech Republic, Hungary, and Poland have already achieved a 70% share (Goranitis, 2021). 11 million Central and Eastern European bank consumers are still either 'branch-dependent' or 'internet-based' - those who like better to conduct all their banking online or via mobile devices but are compelled to resort to branch or internet banking, as many transactions are not yet available or supported by mobile banking apps. This part (about one-fifth of bank customers) is an apparent chance for PSD2 contenders to gain a relationship with direct customers through advanced digital offerings, which take advantage of PSD2. Among the surveyed customers, 42% cited superior digital channels as one of the top five reasons for changing to a different financial service provider.

The migration of customers to digital channels led to the closure of about 3-4% of bank subdivisions, and in some countries, their number was much more significant. The digitization that

could have taken years or even decades has been done for several months to ensure consumers' access to the necessary financial services. Currently, approximately 50% of customers engage with their bank via mobile apps or online at least once a week, compared to 32% in 2018. The volume of transactions made in the subdivisions of US banks has decreased by 30-40%.

The Payments and Open Banking survey, carried out online by strategy &, a part of the PwC network, with 3,500 participants from 12 countries (UK, Netherlands, Spain, Switzerland, Germany, Italy, France, Austria, Sweden, Poland, Ireland, Turkey) between August and September 2020, revealed that consumers favor cashless payment methods.

Thus, cash usage is declining in Europe, as evidenced by the fact that only 36% of survey participants reported using cash in 2020, a decrease of 7 percentage points from 2018, the preference for such payments being different from country to country (in Switzerland, it decreased from 60% in 2018 to 45% in 2020, and in Italy, it reached 38% in 2020 compared to 52% two years earlier). The reasons given by Europeans which lead them to continue to use cash at the expense of other payment methods are: of those surveyed, 34% reported using cash only when no other payment options are available, 26% for convenience, 13% for payment security, and 20% to better manage their spending and budget.

The shift of consumers towards cashless payment methods has not resulted in a corresponding increase in their readiness to share personal information with third parties - a prerequisite for the growth of 'open banking. Consumers remain reluctant to provide their data, which slows down the development of online services. (Strategy &, 2020). The hesitation of customers to disclose personal information continues to be a challenge for all financial intermediaries, including both traditional banks and emerging FinTech companies.

Despite the fact that between 18% and 35% of bank customers in various European countries are open to the idea of sharing their account information with a different bank in return for new online services, general knowledge of open banking and its advantages remains limited throughout Europe, especially in Central and Eastern European nations (Goranitis, 2021).

This is happening despite a decrease in customer confidence in banks' ability to manage their data, which was still negatively affected by the transition from their service in the subdivisions of banks to digital channels. Thus, only 37% of respondents stated that they have "high" confidence in their bank to manage their data compared to 51% in 2018, and only 29% have "high" confidence in the bank to manage their financial well-being in the long-term compared to 43% in 2018. It is obvious that consumers are increasingly aware of issues related to privacy and personal data protection (Accenture, 2020).

Accenture Global Banking Consumer Study reveals that during the Covid-19 pandemic, there were behavioral changes, and if customers don't have a strong emotional connection with their bank, they may view banking services as simply another product, the price being the final differentiation criterion (Accenture, 2020) (performed on a sample of 47810 global consumers (the United States, the United Kingdom, Australia, Belgium, Brazil, Canada, China (including Hong Kong), Denmark, Finland, France, Germany, United Arab Emirates, Ireland, Israel, Italy, Japan, Malaysia, Mexico, the Netherlands, Norway, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, and Switzerland) 37% of consumers indicated the quality ratio -price as one of the most important factors (top three) in the relationship with a bank, which represents an increase of 10% compared to 2018.

An important concern of banks is the protection of established relationships with customers. Knowing and reacting in time to behavioral changes will ensure increased customer confidence in banks. To take advantage of PSD2 market opportunities, PSD2 applicants must invest in building client trust and increasing the advantages that PSD2 provides.

CONCLUSIONS

During this period, we feel more than ever how the only constant of our existence remains change. The main factors that lead to behavioral change are, on the one hand, the multitude and variety of data and information that surrounds us and, secondly, technology.

The pandemic and the heightened use of digital interactions and self-service banking have amplified the need for banks to become more digitally advanced. PSD2 encourages banks to actively pursue digital transformation initiatives. Open banking completely transforms the relationship between the financial institution and the customer through multiple digitized banking processes that can be accessed online by consumers of banking services and represents the extension or extension of traditional banking products and services, where the customer is and when he needs them. The goal of these changes is to foster greater competition and innovation within the financial services industry, leading to a broader and improved selection of products that help customers manage their finances. So, the use of open banking contributes to the development of financial-banking services depending on behavior and needs of financial banking consumers by:

- increasing the innovation speed: Open banking platforms offer unlimited and easy access to different categories of customers to their accounts in different banks and countries, and financial institutions can use different databases that contribute to consider accelerating the time needed to market some new services in line with consumer requirements;
- the emergence of various new opportunities: Open banking contributes to improving customer value and increasing customer involvement due to the bank's ability to identify current customer needs and provide personalized services tailored to the needs of each individual;
- increasing operational efficiency: Open banking helps simplify the customer service process by ensuring that data is retrieved and processed in real-time with a much lower level of risk, reducing the acquisition cost.

In an increasingly digital world, bank customers have many options precisely because products and services now mean digital solutions. Investing in technology and launching online solutions is a priority for financial institutions precisely because it means greater efficiency.

The unification of Artificial Intelligence and Machine Learning in financial services and the use of algorithms to better understand customers will lead to the introduction of tailored products and services and the delivery of enhanced digital experiences.

One of the key obstacles banks face in developing Open Banking is finding the right equilibrium between upholding security standards and delivering a positive customer experience while also providing necessary education. Although traditional banks still hold a dependable edge over their rivals, signs of decline are apparent. In light of this, all participants in the market must provide new advantages and rewards to establish trust with customers.

Although Open Banking is relatively new, it will soon become the main trend. Institutions that adopt it earlier will enjoy a competitive advantage for the next period. A unified and innovative financial services industry will be created through the crucial role of Open Banking, the engine that leads to more personalized services, the much faster verification of the customer's identity, and the establishment of a more efficient payment infrastructure.

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