# On the Post-Crisis Challenges to Banking

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**Abstract**

*Along with the coronavirus pandemic, other uninvited "agents of change" are also becoming the "new normal" – escalating inflation from rising energy and food prices, economic stagnation, alarming bankruptcies of major banks, rising unemployment, military conflicts, geopolitical upheavals... Both individually and in their "monolithic unity", these radically rearrange the priorities of people and businesses. The following priorities stand out: physical health and emotional condition; personal and family safety; energy efficiency; the importance of personal data; the origin of the product and the chances of development after its purchase; comfort and quality of service; the state of the environment, etc. Against this background, credit institutions must respond adequately to the changed attitudes of their customers and offer appropriate solutions in order to create positive experiences for the customers' "journey".*

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## Introduction

Modern crises affect in a multivariate manner the *behaviour* of bank customers: growing digital affinity; desire for stricter control on business relations; focus on revenue/expenditure dynamics; need to expand financial literacy; decreasing brand loyalty due to degraded quality and high product prices, etc. This radically changes the state of the customers' *financial health* in all its dimensions: the availability of sufficient liquidity to manage short-term expenses (financial security), the protection against anticipated risks (financial resilience), the ability to balance assets and liabilities (financial control) and to accumulate cash to fund future goals (financial freedom). The time has come when the growing "customer power" dictates (or should dictate!) to the banks the *logic of innovations* – from today's predominant customer orientation to the "desired for tomorrow" customer centricity.

This axiom can be "deciphered" without much difficulty. As a driver of innovation in banking, the customer leaves the role of a static observer and a subject serving to "ensure the margins" and becomes an *equal business partner*. This requires the bank to assess its own benefits post factum, i.e. after delivering to the customer an attractive *value offer*. In other words, innovations in credit institutions should be a *function* of the dynamically changing individual (physical, emotional, etc.) and business needs of customers and the possibility for them to obtain the necessary products and services in the most convenient way.

## 1. Innovation highlights from the banks' agenda

The global economy's long-stalled *zero and negative interest rates* "have had the effect of a Big Bang, shattering the fundamental equation of banking (deposits drive lending power), severing the connections between related offerings, and dramatically disrupting valuations and markets" (Abbott, 2023: 3). This is a serious risk for banks, whose "deposit-competition skills have atrophied. That 15 years of no major funding pressure means there is a new generation of marketers with no experience tackling the deposit-gathering challenge" (White, 2023). Due to market distortion, credit institutions neglect to care about the customers' financial health and focus on selling individual products. In turn, consumers looking for alternative ways to create new value have to "expand their portfolio of financial service providers and construct their financial journey using a mix-and-match of the best products drawn from the various silos" (Abbott, 2023: 4).

With interest rates moving in the *"reverse direction"*, "the deposit business is experiencing a renaissance with the private customer business segment profiting the most. The sudden increase in profitability, however, is also likely to increase competitive intensity in the business – both from established and new market players. A "battle for deposits" is looming with potential cash outflows threatening the earnings turnaround. European banks will have to find the right balance between offering attractive returns to their customers while keeping their margins as high as possible. A good pricing strategy, customer communication and a trained sales force will be of paramount importance" (Stickling et. al., 2022: 6)[1].

This trend has been likened to "rocket fuel that ignites banks' product innovation", with the banks expected to "quickly scrap their product silos and redirect their focus to the totality of their customers' financial needs. Innovation will come in the form of offerings similar to that of Amazon Prime: a personalized, integrated set of products and services that deliver a value proposition amplified by a multiplier effect" (Abbott, 2023: 7).

The lack of a definite forecast for the duration of the anti-inflationary interest "boom" does not release the banks from the obligation to revise their strategy for managing the balance sheet structure by creating "more transparent" and realistic price models (deposit and loan interest rates). In their pursuit of service personalization and with the help of data-driven advanced analytics, treasuries can "flag" the deposits of loyal customers who are most likely to "migrate" in search of better returns. Particular attention is drawn to deposits whose amount exceeds several times the customers' expenses in the foreseeable future (3-6 months). However, this approach cannot be taken as universal, as in some countries (e.g. Germany) interest rates are not the main factor that parameterizes the savings behaviour of customers. They are only perceived as a "factor" to increase wealth after reaching a certain amount of assets. More important than these is the need for security (resulting from the effects of the financial and economic crisis), convenience, liquidity, financial education, available income and their dynamics[2], etc. (Scheiderer, 2023).

Most banks dispense with the monthly fee for keeping cash on accounts of individuals and legal entities above a certain amount. There is no limit on the number of transactions from savings accounts and the annual fee on credit cards is abandoned. Credit institutions and unions in the USA (Capital One, Wells Fargo, Bank of America, PNC Bank, etc.) reduce or drop altogether overdraft and shortfall fees. Other major Americans banks (US Bank in partnership with the fintech company Atomic) are introducing automated direct deposit switch. Customers who open new checking accounts with US banks (until now a time-consuming manual paperwork process) can switch their payroll deposit accounts in near real-time. In Bulgaria, UBB and KBC Bank Bulgaria have reduced transfer fees for one year – a positive step for financial relief and stimulation of retail customers to use online and mobile banking. Granted, it is too naïve to believe that treasuries will not compensate

[1] An increase in interest rates on the liabilities results in higher margins, which leads to an increase in profitability. Bank profitability reached a 14-year high in 2022, with expected return on equity between 11.5 and 12.5 percent. The expected long-term growth slowdown will deepen the discrepancy in banks' outcomes depending on their funding profile, geography, and operating model. Banks whose key customer segments are vulnerable to macro shocks will feel the biggest impact. (Dietz et al., 2022: 7, 15). The net interest income of some large European banks dominates their total returns, and their risk costs are too high relative to their operating income. Other banks are less vulnerable to the interest rate environment due to their high non-interest income, while the impact of risk costs on their operating profit varies widely (Bauer et al., 2023). In the US and UK, the impact on earnings of a change in interest rates is diminishing, meaning that banks there are looking for non-interest rate sources of income.

[2] The fact that most German households have little or no savings capacity is an indication of the widening social gap between rich and poor. At the same time, the upward trend towards 'post-savings' (as opposed to 'pre-savings') creates a greater demand for consumer loans (Scheiderer, 2023).

for the "benefits foregone" by increasing other and/or imposing new fees[3]. It is also not surprising that while most credit institutions (including in Bulgaria) are not in a hurry to raise the former, and those "moving" in this direction do so rather timidly, as regards the latter they all demonstrate greater "determination"[4].

The combination of rising interest rates and falling real incomes creates serious problems for customers in need of loans. At the same time, there is an increased interest in the "Buy Now, Pay Later (BNPL)" service offered by a number of competitors (the American companies Klarna, Afterpay, Affirm, Apple, PayPal and Sezzle, the Australian company Zip, etc.), which is considered a "disruptor" of traditional consumer lending.[5] This service simplifies access to loans and creates financial and emotional advantages for customers: convenience and flexibility; interest-free or low-interest financing; the possibility of making a large purchase immediately (without looking for a loan), etc.[6]

BNPL is attracting the attention of young online shoppers who are not customers of any bank. The service has a high frequency of use, making it a cheap channel for acquiring goods. Instead of paying everything upfront, buyers can split the total amount due into several interest-free installments. Depending on the service provider, the loan may be repaid on a monthly, semi-monthly or weekly basis. This "prepayment" can drive growth in new accounts and credit and debit card transactions.[7]

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[3] For the first six months of 2023, the banking system in Bulgaria reported a profit after taxes of BGN 1.7 billion. This growth of 66% (BGN 672 million) compared to the same period last year is mainly due to the increase in interest income (BGN 2.78 billion) and revenues from fees and commissions for banking services (BGN 913 million). Some banks (DSK Bank, Post Bank, CCB, etc.) have increased their fees for: withdrawing money from ATMs in countries outside the European Economic Area; withdrawing money from a bank office; performing intrabank transfers; processing of documents; issuance of certificates, etc.

[4] In the medium term, interest rates move according to two scenarios. "Back on track" describes the transition to a normal, steep interest rate structure with long-term (and higher than the short-term) interest rates. This is possible if the predicted economic downturn passes as quickly as possible and is followed by intense growth. On the other hand, a sharp decrease in inflation would reduce short-term interest rates and cause them to fall below the level of long-term interest rates. The *"inverted for longer"* scenario envisages an inverted interest rate structure necessitated by GDP stagnation or resulting from an expected but delayed recession. Central banks will then continue to pursue a restrictive monetary policy (Bauer et al., 2023).

[5] It is popular with 38% of surveyed consumers in Germany, who also use loans for expensive products (36%), travel insurance or smartphones (35%), which are easily available and can be easily booked at the time of purchase. According to analysts, 69% of the banks surveyed found BNPL to be of great importance to the industry and 59% found its introduction important to them. 23% of the banks in the country are already offering it and 39% are in the implementation or planning phase (Credi2, 2022: 14, 15). About 12% of UK consumers used BNPL to make a purchase in 2021, and by the end of 2022, this number grew to more than one-third of consumers. And more than 2 in 5 BNPL customers have had to borrow money to repay their BNPL loans (Nunez, 2023a). In 2020, the number of consumer loans in the US increased by 530% compared to 2019, and the total financed amount – by 96.8%. The six largest lenders provide over 90% (over 10 million) of the number of BNPL loans in the country. According to information from *Mercator Advisory Group*, by 2024 their volumes will exceed \$100 billion. US banks lose \$10 billion in revenue annually due to their inadequate response to increased consumer demand for timely payment options at the point of sale. *Insider Intelligence* predicts that by 2026, 39% of US Internet users will use a BNPL solution, up from 31% in 2022, and the total value of BNPL payments will grow by almost 90%. This will be only a part of the credit and debit card industry, suggesting longer-term opportunities for BNPL suppliers to increase their share of payment volume (Paige, 2023).

[6] Leading BNPL service providers offer different approaches to attract and retain customers. Afterpay's three-tier loyalty program "Pulse Rewards" includes a combination of "welcome" rewards and early access to sales from favourite brands. The more points customers accumulate, the more rewards they can earn. Klarna's rewards program "Klarna Rewards Club" puts the emphasis not on purchases, but on timely payments. Customers earn points for each purchase, but rewards are added to the shopper's balance when payments are made. Points can be redeemed with partners such as Amazon, Walmart and Starbucks.

[7] The "Apple Pay Later" service allows users to make purchases and pay for them in four installments over six weeks. Before that, they have to apply for a loan from Apple's financing arm within its digital wallet. The service can only be tied to a debit card issued by the investment bank Goldman Sachs and is enabled through Mastercard's installment program. Apple's offering is generally free from fees or interest, but the user's bank may charge fees if there are insufficient funds on the card account to repay the loan (Marek, 2023).

According to research, about 70% of customers would settle their BNPL-transactions through their own bank if they are given a good offer.

When making purchases on different days, many customers make daily payments. This makes it difficult to manage their cash and can generate a downside risk in the event of a missed payment. As the demand for this service increased during and after the Covid pandemic, some companies without a banking license opted to forgo strict checks of the creditworthiness of their customers, resulting in most credit institutions rightly demanding a *regulatory intervention* against all BNPL-suppliers. This would equate BNPL to a classic consumer loan, but would give an advantage to banks, which have already met the high regulatory requirements.[8]

A large number of private customers in Germany (72%) and Austria (82%) are willing to trust their “home” bank for the *Request to Pay* (RTP) service. This service precedes the classic money transfer and can initiate a direct payment from one bank account to another. Instead of the time-consuming activities of money transfer data entry and monitoring of incoming payments, digital processes perform secure, fast and convenient identification in parallel with the extensive exchange of information about amounts, dates, invoice numbers, receipts, warranty or returns, etc.[9] Banks can integrate individual payment options into RTP, for example the already mentioned BNPL or lines of credit.

While *business banking* continues to see an influx of “hordes” of fintech companies and alternative lenders (peer-to-peer lenders, crowdfunding and “buy now, pay later” platforms), in credit institutions it remains burdened by legacy technologies and excessive paperwork. Traditional credit institutions find themselves particularly vulnerable to the loss of small and medium-sized enterprises (SMEs) that migrate to competitors.[10]

The saturation of servicing with digital products and consulting solutions is an objective necessity that is widely and positively welcomed, especially among the *younger* generation of entrepreneurs. Most of them intend to use digital tools more intensively in *financial planning* and *accounting*. Interest in *video tips* is growing. Consumers (especially of generations Y and Z) rely on *responsible business practices* and show an interest in combating climate change, promoting diversity

[8] In general, BNPL users have lower average credit scores than non-users. Second, they have access to traditional credit products, including credit cards and personal loans, though these options tend to be more expensive. Third, they are more likely to be financially strained due to lower liquidity and savings. Fourth, they tend to have a higher likelihood of revolving at least one credit card, and a higher risk of overdraft. According to the US Consumer Financial Protection Bureau (CFPB), there are concerning trends “that could add more fuel to the push for regulation.” BNPL users view this payment method as a cheaper, less risky alternative to other credit products. While many of them view BNPL as a viable credit card alternative, the payment method isn’t currently being regulated the way cards are. This may expose distressed consumers to higher debt risks (Nunez, 2023b). The increased demand for BNPL in the UK motivated the Financial Conduct Authority (FCA) to examine the BNPL market with a view to its urgent regulation (Nunez, 2023a).

[9] Almost two-thirds of 18-24-year-olds in these countries have a preference for the service. If it is not available, almost one in five in Austria (18%) and Germany (17%) is inclined to change their servicing financial center. In this age group, the share of potential migrants is higher – 39% of young Germans and 23% of their Austrian counterparts. Besides traditional bill paying, 48% of Germans and 62% of Austrians are interested in online shopping (Bock, 2022).

[10] A *Bank for International Settlements* publication on small business lending points out that within the period 2016-2019, two well-known US fintech companies (Funding Circle and LendingClub) provided more loans to SMEs than their banking competitors, and this in regions with higher unemployment rates and higher business bankruptcy filings (Cornelli et al., 2022: 9). According to *Capgemini*, over 60% of small and medium-sized businesses look outside their bank for services such as payments and receivables. A study by *The Economist* found that 47% of fintech companies have an increased appetite to provide loans compared to only 28% of traditional lenders. *Roland Berger* found that 86% of small businesses are considering alternatives to traditional bank loans. A *Mambu* study shows that 92% of SMEs are willing to switch lenders to get different (simpler) digital support. There is evidence that data-driven lending systems are the future of this business sector. In other words, by providing access to real-time, orchestrated SME loan origination, data points, and automated decisioning, banks can provide SMEs with access to a more practical digital application process and make more accurate lending decisions with “dramatic efficiency gains” (Lewis, 2022). These trends will intensify due to the wave of new SME owners from generations Y and Z. Small businesses in the USA (with less than 10 employees) are more sceptical about the innovation readiness of the banks serving them, but larger and medium-sized enterprises express satisfaction with the innovative solutions of their banking provider.

and financial inclusion. A large number of banks focus their attention on micro-financing for entrepreneurs and regions without access to banks, on responsible lending to population groups with limited access to bank accounts, etc.

Very useful for this demographic is the wide range of *free consultations* with personalized business management advice. Time, flexibility of the process and additional options (e.g. for live chat) are of priority in *digital account opening* (including in partnership with fintech companies). 24/7 transaction reporting minimizes inactive cash balances, increases efficiency in tracking cash movements and reduces fraud risk. *Online applications* change the procedure of applying for loans – they make it possible to share, download, electronically sign and send the necessary documents through a secure platform with a shared screen.

Practices borrowed from fintech companies (Billie, Mondu, Tranch, Tillit, etc.), namely of targeting BNPL-solutions to SMEs in need of short-term financing, allow the splitting of short-term loan repayments. This unblocks the supply chain disrupted by Covid-19, rising raw material costs and the war in Ukraine.[11] Special loans make it easy for retailers to use a well-timed *revolving line of credit*. The integration of servicing banks into *external platforms* enables them to offer their business clients individual financing options.

The “coverage” of Contextual Banking is expanding. This cash management and trading platform uses machine learning and predictive analytics delivered through “external” application programming interfaces and an omnichannel marketing. The number of customers (medical practices, law firms, insurance agencies, architecture and engineering firms) that prefer *digital channels* for consultation and service is increasing.

## 2. Business partnerships – a necessary compulsion for credit institutions

While some banks try to survive in the turbulent environment by “exploiting” the *existing* “production” infrastructure, others “build” their own infrastructure in cooperation with external partners. Because of their higher cost efficiency, *Systemically Important Banks* have greater opportunities to invest in own and joint digital platforms and projects[12], associate smaller financial intermediaries or “embed” their own products and services into external ones. Thus, they become able to respond to customer needs faster than their competitors. The digitalization efforts of *medium and small banks* face a number of obstacles: a limited technology budget (due to the stronger “pressure” of regulatory costs, among other things); high customer expectations for digital service quality; strong digital competition from start-ups and large tech companies, and neo-banks; loss of market share, etc. In order to generate new revenue, they divest themselves of low-return businesses and position themselves in high-margin niches (other vendors’ platforms).[13]

*Open banking* is gaining an ever-larger popularity among credit institutions. This innovation facilitates the sharing of data (on transactions, investments, loans, etc.) and functional parameters

[11] This finding holds true for *corporate banking* as well. Some forty percent of the respondents (120 credit managers from banks in Germany, including savings banks) to an exclusive *EY* survey for Handelsblatt fear that supply chain disruptions will lead to more credit defaults and a drop in sales for their corporate clients. Thirty-eight percent assumed this would increase companies’ financing needs. Almost 80% of the respondents intend to consider supply chain dependencies when making lending decisions in the future, and half already do so. Another 27% are implementing or planning such an approach (Osman, 2023).

[12] A group of major credit institutions (Bank of America, Citi, Credit Suisse and JPMorgan) launched the syndicated loans platform Versana, which “captures” their data in real time and uses them to directly process the syndicated loan market. It is worth $5 trillion and has potential for growth in the years ahead (Lee 2022). Hoping to fend off growing competition from ApplePay and PayPal, other major US banks (Bank of America, Capital One, JPMorgan Chase, PNC Bank and Wells Fargo) are designing a joint *digital wallet* to hold the Visa and Mastercard debit and credit cards of more than 150 million users. These users must not be in arrears, must have previously used the card online, and provide an email address and phone number (McNamee, 2023).

[13] This strategy is also used by FinTech companies that want to expand their product offerings or “exploit” the logistics (back-office) technology of traditional banks.

onto *Application Programming Interfaces* with third parties (mostly fintech companies) based on the needs, and with the consent of, their customers. They gain access to products/services of profitable competitors that complement the traditional banking mix appropriately.[14] The combination of "traditional/additional banking and non-banking services" provokes completely new experiences for different target groups of customers – corporations, trading companies, service providers, administrative bodies, retail customers, etc.

Strategic partnerships with other financial service providers (FinTech, WealthTech and BigTech companies, neo-banks) within *"open" financial ecosystems* result in particularization and even "granulation" of the value chain in key business areas.[15] Through its vertical integration, it can combine separate services related to consumption or investment: services from real estate agents, credit brokers, trade and the energy industry; mapping surveys for housing intermediation, student loans, pension schemes, recruitment of personnel and starting a career; property renovation and financing, buildings insurance, etc.

The symbiosis between own and "external" products disrupts legacy processes, increases cost efficiency, redirects the focus onto customers and multiplies the offerings of solutions with real added value. This practice enjoys a strong positive resonance also among unbanked people (1.4 billion people according to World Bank data).

"Open" banking offers the opportunity for active participation of customers in the management of the *risks* accompanying the services, as the bank accounts information gives a more comprehensive picture of the financial position of individuals (self-employed marketers) or those with a variable structure of income. With the help of new "open" models and current holistic data, banks are able to quickly and easily determine the creditworthiness of their customers, and hence – to optimize their decisions according to the level of income and expenses.

In contrast to "open" finance, *"embedded finance"* provides customers with access to the functionality of the bank.[16] It combines banking services with applications from non-financial companies (tech, commerce and telecommunications) and other digital capabilities, making

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[14] Until the purchase of the new home is completed, mortgage loan customers contact contractors to find accommodation. Individual product options (holiday loans) are also available based on prior flight and hotel booking transactions and associated costs.

[15] Investments in ecosystems and constellation architectures enable banks to utilize growth opportunities in the era of "open" finance. Seventy-eight percent of respondents to a survey (commissioned by *Sopra Banking Software* and conducted by *Forrester Consulting* among 792 banking executives in 50 countries) cited revenue growth as benefits, 77% – reduced time to market, 77% – increased customer loyalty, 76% – better customer experience, 65% – the possibility of fintech companies supporting the digital transformation of banks, and 49% – the lack of infrastructure to carry out a successful independent digital transformation (Forrester Research. 2022: 22). Two-thirds of respondents are oriented towards collaborative business models under new legislation, 76% believe these are necessary due to ever-higher consumer expectations, and 74% fear these models could pose an existential threat. Seventy-six percent see an opportunity to make them a core part of their digital transformation roadmaps and 77% – of their strategies (Op. cit.: 6-7). To support "green" banking, credit institutions are building partnerships and acquiring FinTechs. NatWest, for example, has partnered with "open" banking platform Tink and sustainability fintech company CoGo to provide customers with carbon tracking analytics (Capgemini. 2022: 15). When asked by the *Digital Banking Report* about changes in existing and future business models, fewer financial institutions express confidence that they will be a universal player in seven years (from 60% today to 42% in 2030). The biggest change in the intention to deploy this business model appears to be the expected increase in participants in "open" platforms (from 8% to 26% in 2030). This can lead to the diversification of products offered by banks and credit unions. Product offerings may change by offering a broader range of financial products and services (for example, in wealth management and investment business) or as a result of serving additional customer segments. As more people conduct financial transactions digitally, banks and credit unions could resell their digital banking capabilities (mobile banking, digital account opening, digital payment) to other traditional banks or alternative providers (Marous, 2022).

[16] By 2030, its market volume is projected to grow to $7.2 trillion – twice the current market price of the 30 largest banks in the world. All financial service providers moving into this space will benefit from this growth (Galileo Financial Technologies, 2022a: 17).

transactions and interactions convenient, simple and continuous.[17] For example, credit products from banks with advantages in different product and market segments are combined on joint platforms. The fully digitized credit process is based on pre-integrated modules of fintech companies with process "steps" – account analytics, risk assessment or digital signature, etc. Customers benefit from low interest rates and a variety of options for repayment of traditional bank loans. By integrating the innovation (digital loan) into their offerings, partners (technology providers) can increase their sales and find new customers willing to pay higher product prices.

Partnerships with innovative companies increase the importance of banking as a service (BaaS), which includes package offerings from non-banking companies (Klarna, Afterpay, Amazon, etc.).[18] Thus, banks can provide their customers not only with adequate and more secure online payment and lending options, but also optimize their digital "journeys"[19]. With "white label" solutions adapted to existing IT structures, an "embedded" financial product can be marketed in just a few weeks.[20] For example, "newcomers" use all the different modules of the BNPL service to build their own offerings with it. The partnership of WebBank with Klarna and Cross River Bank with Openpay is indicative of this. Synchrony Bank (a leading issuer of co-branded cards) has joined with Fiserv to offer marketers "white label" BNPL solutions (Cocheo, 2022).[21]

BaaS solutions pose a great *challenge* for every bank. Compared to traditional outsourcing arrangements that are tailored to the customer's needs, here the new partners rely on standardized solutions delivered via the "cloud". When the credit institution provides end users with loans or deposit accounts through a distributor, it loses some of that control over the risk generated by the third party that it could otherwise exercise independently. Therefore, credit institution must know the scope and risk profile of the "accepted" services and choose a partner with a proven track record.

**Conclusion**

The innovation strategy of bank managements must be based on a *holistic vision* of the design and methodology of change that traces the path of digital initiatives *outside* the banking paradigm. On this basis, the *business model* can transform the abstract ideas "at the top" into a compelling brand that demonstrates a unique identity and guarantees the benefits of the bank's value offering. Modern crises not only further amplify this need; they bring to the surface the *"pain points"* and by remedying them the credit institutions will be more adaptive and empathetic to the financial health of customers.

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[17] Ninety-two percent of financial institutions responding to *PYMNTS* say they are currently implementing or planning to implement an "embedded financial experience" with a variety of goals: 52% aim to innovate their payment processes; 40% – to improve their credit card offerings; about 39% – in lending; 37% – in account opening, etc. (Galileo Financial Technologies. 2022b: 10). "Embedded" financing is considered to take Open Banking to the next level, as companies outside the bank seamlessly embed complex financial products into their own offerings and IT systems through interfaces.

[18] These are often white label products and services that are produced by one company but can be rebranded and resold by another.

[19] According to *McKinsey*, by 2030 the total BaaS market in the European Economic Area and the United Kingdom will reach between $90 billion and $105 billion (Deuble et al., 2022: 3). According to a *Gartner* forecast, by the end of 2024, 30% of banks with assets over $1 billion will launch BaaS, but half of them will not meet revenue targets (Moore, 2022). *Jupiter Intelligence* expects BaaS revenues to increase by $27 billion by 2027 – 240% more than the $11 billion reported in 2022 (Capgemini, 2022: 18).

[20] While "embedded" finance takes the "end-to-end" BaaS model and packages it as an integrated financing option for users of other products or services, BaaS maintains the structure of "embedded" finance. On the other hand, "embedded" finance is oriented towards access ("front-end") to financial services, and BaaS – towards the "back-end" of banking functionality. The former focuses on integrated access to solutions and the latter on the technology foundation that digital banks and innovative non-banking organizations rely on to deliver financial services.

[21] Sixty-three percent of 120 German bank managers surveyed are convinced that "embedded" financing fits their institution's business model, and just over a fifth (22%) do not consider integrated financial services sufficiently attractive in economic terms. Almost two-thirds (62%) of banks wish to win new and especially younger customers from generations Y and Z with "embedded" financial offerings, 54% – to create additional sources of income, and 47% see an attractive potential for "cross-selling" (Credi2, 2022: 5, 6). It is expected that the importance of "embedded" finance (payments) will also grow in corporate business led and managed by representatives of these generations.

**References**


1. Abbott, M. (2023). Top 10 banking trends for 2023. *Accenture*. [Online] Available from: https://www.accenture.com/content/dam/accenture/final/industry/banking/document/Accenture-Banking-Top-10-Trends-2023.pdf#zoom=40 [Accessed 23/09/2023].
2. Bauer, E., & Ostermair, C. (2023). Mittelfristige Zinsperspektiven und Folgen für europäische Banken. *BankingHub*, 01.06.2023. [Online] Available from: https://bankinghub.de/research-markets/zinsperspektiven-europaeische-banken [Accessed 23/09/2023].
3. Bock, Al. (2022). Umfrage: Großes Interesse an Request-to-Pay – Jede(r) Vierte würde dafür neues Konto eröffnen. *BearingPoint*, 27 Juli. [Online] Available from: https://www.bearingpoint.com/de-de/ueber-uns/pressemitteilungen-und-medienberichte/pressemitteilungen/umfrage-grosses-interesse-an-request-to-pay/ [Accessed 23/09/2023].
4. Capgemini (2022). *Retail Banking Top Trends 2023*. [Online] Available from: https://prod.ucwe.capgemini.com/wp-content/uploads/2023/01/Retail-Banking-Trends-Report-2023.pdf [Accessed 23/09/2023].
5. Cocheo, St. (2022). Critics and Bad News Unable to Thwart Growth of BNPL. *The Financial Brand*, June 1. [Online] Available from: https://thefinancialbrand.com/146593/bad-news-about-bnpl-is-a-speed-bump-not-a-game-changer/?edigest2 [Accessed 23/09/2023].
6. Cornelli, G., Frost, J., Gambacorta, L., & Jagtiani, J. (2022). The impact of fintech lending on credit access for U.S. small businesses. *BIS Working Papers*. 1041. [Online] Available from: https://www.bis.org/publ/work1041.pdf [Accessed 23/09/2023].
7. Credi2. (2022). *Embedded Finance: now or never?* [Online] Available from: https://25392664.fs1.hubspotusercontent-eu1.net/hubfs/25392664/2022-05-17_Final_Lay-out_B2B-Studie_GER_144dpi.pdf?hsCtaTracking=e50b4c0f-ef4d-4565-8245-c48292cdf281%7Cd8a7f425-2c26-4d8d-8285-5414294e68dc [Accessed 23/09/2023].
8. Deuble, S., Flötotto, M., Lange, M., Mauerhoefer, T., Murati, A., Pritscher, D. & Stürner, C. (2022). Banking-as-a-Service — the €100 billion opportunity in Europe. *McKinsey & Company*, [Online] Available from: https://www.mckinsey.de/~/media/mckinsey/loca-tions/europe%20and%20middle%20east/deutschland/publikationen/2022-09 [Accessed 23/09/2023].
9. Dietz, M., Kincses, A., Seshadrinathan, & A., Yang, D. (2022). Banking on a sustainable path. Global Banking Annual Review. *McKinsey & Company*, [Online] Available from: file:///C:/Users/User/Downloads/global%20banking%20annual%20review%202022%20banking%20on%20a%20sustainable%20path.pdf [Accessed 23/09/2023].
10. Forrester Research. (2022). *The Future Of Digital Banking*, Revisited, [Online] Available from: file:///C:/Users/User/Downloads/Sopra%20Banking%20Software%20The%20fu-ture%20of%20digital%20banking,%20revisited.pdf [Accessed 23/09/2023].
11. Galileo Financial Technologies .(2022a). *Expanding the Financial Frontier: What Banks and Fintechs Need to Know to Grow Market Share*, January 5, [Online] Available from: https://www.galileo-ft.com/newsroom/ebook-what-banks-and-fintechs-need-to-know-to-grow-market-share/ [Accessed 23/09/2023].
12. Galileo Financial Technologies. (2022b). *Why Core Modernization and Cloud Migration Matters For Banks*, October, [Online] Available from: https://www.galileo-ft.com/blog/why-core-modernization-and-cloud-migration-matters-for-banks/ [Accessed 23/09/2023].

13. Lee, P. (2022). Leading Banks launch digital platform for syndicated loans. // *Euromoney*, March 18, [Online] Available from: https://www.euromoney.com/article/29unr3m0rheubmadfe7ep/banking/leading-banks-launch-digital-platform-for-syndicated-loans [Accessed 23/09/2023].
14. Lewis, D. (2022). Building the future on lessons of the past. // *Global Banking and Finance Review*, Dec 10, [Online] Available from: https://www.globalbankingandfinance.com/building-the-future-on-lessons-of-the-past/ [Accessed 23/09/2023].
15. Marek, L. (2023). Apple rolls out initial BNPL. *Payments Dive*, March 29. [Online] Available from: https://www.paymentsdive.com/news/apple-pay-later-initial-buy-now-pay-later-bnpl-payments-service/646234/?utm_source=Sailthru&utm_medium=email&utm_campaign=Issue:%202023-03-29%20Payments%20Dive%20%5Bissue:49178%5D&utm_term=Payments%20Dive [Accessed 23/09/2023].
16. Marous, J. (2022). Digital Banking Transformation Trends for 2023. *The Financial Brand*, December 19. [Online] Available from: https://thefinancialbrand.com/news/digital-transformation-banking/digital-banking-transformation-trends-for-2023-157279/ [Accessed 23/09/2023].
17. McNamee, J. (2023). Major US banks plan to take on ApplePay and PayPal with a new digital wallet. *Insider Intelligence*, Jan 24. [Online] Available from: https://www.insiderintelligence.com/content/major-us-banks-take-on-new-digital-wallet?utm_source=Newsletter&utm_medium=Email&utm_campaign=B%26P%20Daily%201.24.23&utm_content=B%26P%20Daily%201.24.23&utm_term=Insider%20Intelligence%20Daily%20-%20New%20Suppressions [Accessed 23/09/2023].
18. Moore, S. (2022). *Gartner Says Banking-as-a-Service Will Hit Mainstream Adoption Within Two Years*, Press Release, September 12, [Online] Available from: https://www.gartner.com/en/newsroom/press-releases/2022-09-12-gartner-says-banking-as-a-service-will-hit-mainstream [Accessed 23/09/2023].
19. Nunez, A. (2023a). UK wants industry feedback on proposed BNPL regulation. *Insider Intelligence*, Feb 15. [Online] Available from: https://www.insiderintelligence.com/content/uk-wants-industry-feedback-on-proposed-bnpl-regulation?utm_source=Newsletter&utm_medium=Email&utm_campaign=B%26P%20Daily%202.15.23&utm_content=B%26P%20Daily%202.15.23&utm_term=Insider%20Intelligence%20Daily%20-%20New%20Suppressions [Accessed 23/09/2023].
20. Nunez, A. (2023b). CFPB adds more fuel to the push for BNPL regulation. *Insider Intelligence*, Mar 6. [Online] Available from: https://www.insiderintelligence.com/content/cfpb-adds-more-fuel-push-bnpl-regulation?utm_source=Newsletter&utm_medium=Email&utm_campaign=B%26P%20Daily%203.6.23&utm_content=B%26P%20Daily%203.6.23&utm_term=Insider%20Intelligence%20Daily%20-%20New%20Suppressions [Accessed 23/09/2023].
21. Osman, Y. (2023). Banken nehmen Lieferketten ihrer Kunden stärker unter die Lupe. *Handelsblatt*, 06.04.2023. [Online] Available from: https://www.handelsblatt.com/finanzen/banken-versicherungen/banken/kreditvergabe-banken-nehmen-lieferketten-ihrer-kunden-staerker-unter-die-lupe/29076184.html [Accessed 23/09/2023].
22. Paige, W. (2023). Apple Pay Later 'launching soon' to shakeup BNPL industry. *Insider Intelligence*, Feb 7. [Online] Available from: https://www.insiderintelligence.com/content/apple-pay-later-launching-soon-shakeup-bnpl?utm_source=Newsletter&utm_medium=Email&utm_campaign=B%26P%20Daily%202.7.23&utm_content=B%26P%20Daily%202.7.23&utm_term=Insider%20Intelligence%20Daily%20-%20New%20Suppressions [Accessed 23/09/2023].

23. Scheiderer, St. (2023). Wir müssen Sparen, koste es was es wolle! *Der Bank Blog*, 28. Juli. [Online] Available from: https://www.der-bank-blog.de/wir-muessen-sparen-koste-es-was-es-wolle/retail-banking/37700415/ [Accessed 23/09/2023].
24. Stickling, H.-G., Bauer, E., & Wirtz, D. (2022). Banks' strong performance fuels hope for upcoming quarters. *Zeb.market.flash*. 42. [Online] Available from: https://bankinghub.de/wp-content/uploads/2022/11/zeb_market_flash_2022_issue-42-bankinghub.pdf [Accessed 23/09/2023].
25. White, J. (2023). Deposit Armageddon or Opportunity? How Banks Can Thrive Despite the Rate War. *The Financial Brand*, January 12. [Online] Available from: https://thefinancialbrand.com/news/checking-accounts/deposit-armageddon-or-opportunity-how-banks-can-thrive-despite-the-rate-war-157959/?edigest1 [Accessed 23/09/2023].