



Making the most out  
of digital banking platforms

## **7 tips for a future-proof digital strategy**

in association with



**IBS**intelligence





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## Overview of the digital banking trends

I visit my bank every day, sometimes five times a day! This may have sounded incredulous a decade ago. But the sophistication in digital banking technology over the years has made it possible for a customer to access all his banking services virtually through a mobile platform, without having to step into a branch. But the evolution of digital banking does not stop here. Today's customers

view financial services in the same lens as their other online lifestyle services, be it shopping on e-commerce platforms or accessing media content on Over-the-top (OTT) media platforms. Naturally, customers expect banks and financial institutions to offer the same sophisticated and hyper-personalized experience and convenience provided by these online lifestyle services.

In the 2020 digital banking adoption survey by Master Card, 62% of all respondents expressed an interest in switching from physical banking to digital platforms in 2020

Until 2020, banking digitally, while fast evolving, was still largely seen as the preferred mode of banking for the millennials and the younger population. This trend saw a sharp change in 2020, with the Covid-19 pandemic driven lock-down and social distancing norms forcing the need for contactless banking. The event has not only catalyzed the adoption rate of digital banking but also spurred banks and financial institutions to examine the full spectrum of services and their ability to deliver them through digital channels. With customers becoming more dependent on online and mobile apps due to quarantines and

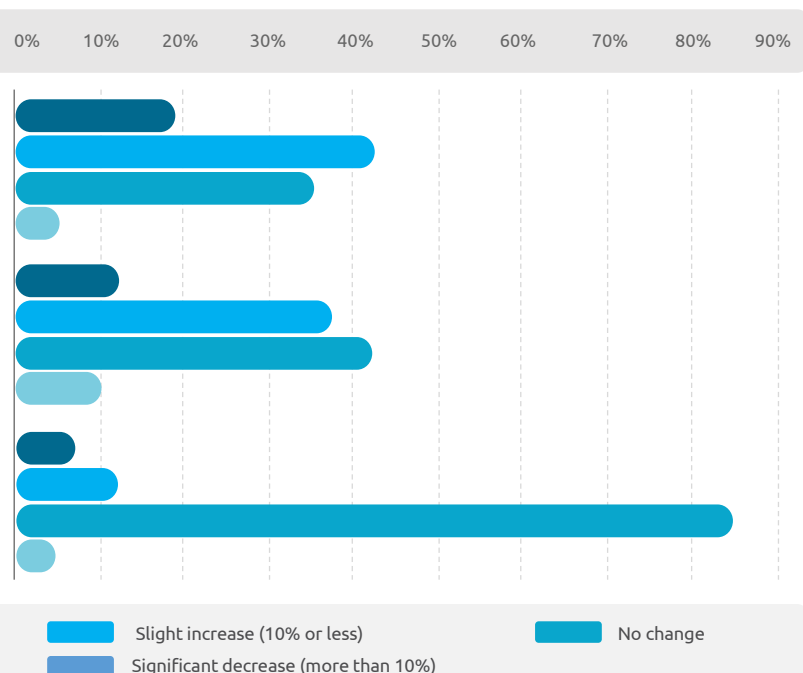
social distancing practices, it is only a matter of time before the demand for more advanced services will become a standard request for banking customers. As the pandemic continues to evolve the way in which customers interact and transact has fundamentally shifted to digital platforms – with video conferencing, online shopping, and remote education booming. Similarly, with lockdown restrictions previously limiting access to physical banks, the majority of customers have been exploring new banking solutions which will make their current financial routines easier and safer.

### Budgetary changes to the digital strategy of EU Banks

Spending on digital innovation / new technologies (e.g. for new digital and remote business channels for existing and new clients)

Spending on IT upgrade and maintenance

Investment in non-bank FinTech firms / start-ups (e.g. acquisitions, participations, venture capital)



Source: EBA Risk Assessment Questionnaire for banks, December 2020

*Around 67% of UK respondents and 59% of EU respondents believe Open Banking is viewed as an opportunity in their organizations. Similarly, 70% of UK financial institutions and 58% of EU financial institutions have a clear strategy in place for Open Banking.*

*- Survey by Tink, 2020*



This exponential rate of change in digital adoption clubbed with the overnight need for remote working is driving the banking sector's need to have a robust and resilient tech infrastructure in place to allow banks to continue to function and continue serving customers. The recent EBA Risk Assessment Survey for Bank conducted by the European Banking Association in December 2020 highlighted around 60% of EU banks reported increase in their spending on digital innovation / new technologies.

One of the key enablers in helping the financial services industry meet the demands of today's digital-savvy banking customers is Open Banking. Quite prophetically, the Open Banking framework adopted by the financial service providers across markets even before the pandemic started is now set to become the blueprint on which the entire digital banking ecosystem is being built. While the Payment Services Directive 2 (PSD2) in Europe was the first regulatory framework for Open Banking, other regions / markets are also actively working towards developing an Open Banking ecosystem. Open Banking, which enables banks to share customer data through application programming interfaces (APIs) with relevant third-party providers, paves the way for customization and personalization of financial products for the

end consumer. With the pandemic accelerating the shift toward digital channels, Open Banking is expected to be more widely adopted as more financial institutions concentrate on the digital transformation of products and services. Consequently, many new Open Banking use cases are likely to emerge across markets that deliver immediate value to businesses and consumers alike by enhancing customer engagement and improving access to services.

The rapid transition to digital banking has led to regulatory policies being tied to financial services with most of these regulations tied to protecting the new data-driven economy.

The current market is the ultimate litmus test for the digital capabilities of banks and financial institutions. Those with outdated or legacy systems will need to quickly revamp their technology infrastructure. While most banks are already involved in some form of infrastructure modernization, a clear digital banking platform strategy is imperative. In this whitepaper, IBS Intelligence in collaboration with Software Group delves into the strategies and tips to consider to be able to make the most out of a digital banking platform.



# Strategic considerations for implementing a digital banking platform



## 1. Integration with legacy infrastructure

More than half of the banks in two of the most developed banking markets globally – Europe and the US – use outdated legacy infrastructure. Many banks still use core banking systems built on COBOL, often with a maze of software customizations made over the years. This makes it difficult for banks to easily integrate with other systems, thus, creating data silos and constraints in front-end digital banking experiences. Legacy system integration is needed to provide end-to-end journeys, integrating multiple systems in the bank.

The ideal solution is to overhaul the entire legacy infrastructure, with a modern API-based system. However, this may not be possible in some cases, and too often, modernization is neither cheap nor easy. Examples of such instances include the \$749 million project cost incurred by Commonwealth Bank of Australia to replace its core COBOL platform or the ~\$400 million cost incurred by TSB from customer compensation, fraud losses and other expenses.

This is why many banks have utilized alternative fast-to-market remedies such as an enterprise integration platform to achieve system compatibility, and digital banking platforms to leverage the investment in legacy systems where possible. With such solutions, banks can decompose their technology infrastructure into reusable microservices that are easily integrated. Further, platforms also enable banks to adhere to Open Banking standards such as centralized ID Management

and Strong Customer Authentication (SCA) for their ecosystem of customers, employees, agents and partners.


## 2. Customer Journey mapping and UI / UX - omnichannel capabilities

As banks gradually transition their entire suite of services to a digital banking platform, the role of a differentiated UI and customer journey mapping in creating a superior user experience has become an important factor.

A common fallacy in the approach adopted by incumbent banks is to assume that mere cosmetic changes to the front end platform will improve the customer experience. The bank must take into account a digital banking solution that meets all the relevant requirements and is also able to integrate, automate, and streamline surrounding processes and applications, thus providing an omnichannel experience to the end consumer. Successful fintechs and challenger banks/neobanks across the globe have shown what connected operations can do, having been built with digitized processes from day one.


For UI/UX to be consistent but at the same time offer a tailored local market experience, it is important to introduce a configurable common design system which serves as the foundation for every market, while at the same time aligning to local market specifics. This approach not only improves the user experience, but also contributes to faster time to market and lower product development costs.

**USE CASE** Allianz Bank partnered with Software Group for an end-to-end digital transformation journey


**Challenges Faced**

Allianz Bank wanted to eliminate the reliance on manual work and make in-house processes as streamlined as possible by digitally transforming the entire workflow. Customers' time was wasted on paper with multiple signatures. Hence, the bank's strategy was to become paperless and enhance the digital banking offerings to their customers.



**Solutions Offered**

The bank partnered with Software Group to move to a digital platform that is also visible to customers. The solution enables customers to submit credit applications online which are processed and automatically sent without relying on paper. The COVID scenario has helped accelerate the online process gaining acceptance from customers. Initially, the bank had a plan to move at least 25% of existing customers to online application by 2025. However, the pandemic speed fast the process and the bank was able to move this percentage of customers in 2020 itself.



**Benefits**

Allianz Bank has witnessed an increased number of customers using their digital banking platform daily and reduced branch visits. The bank can focus on retail customers and develop a platform that is competitive to their peers in the European market.


**3. Seamless on-boarding**

In many ways, the on-boarding experience is the moment of truth for a bank's digital banking capabilities. It often sets the tone for the customer perception and banking relationship going forward.

Today, the on-boarding process for many of the banks continues to be lengthy and complicated due to unfriendly online


forms, compliance-driven mandatory branch visits and high abandonment rates.

Banks need to ensure their digital banking platform is able to deliver a frictionless and engaging end-to-end onboarding experience, both, for prospects as well as for existing customers. For seamless digital on-boarding, banks need to consider three key aspects – speed, efficiency and servicing - that are critical for a bank to compete in today's competitive market.




**SPEED**

- Quick paperless onboarding
- Frictionless with minimal or no manual intervention



**EFFICIENCY**

- Automatic data capture
- Automated digital KYC AML verification



**SERVICING**

- 24/7 availability of portal for onboarding
- Smart virtual assistant to support onboarding



*The most effective way to deploy and manage large applications is to have functions implemented in modules, with these modules communicating together through APIs. APIs enable modules to operate independently and facilitate communication with other modules when necessary. Today, when banks offer their services through cloud computing, the logical way is to manage these modules by deploying them as microservices. Cloud applications have automated the co-ordination and monitoring of microservices in different deployments, ensuring that a continuous service layer is provided across all locations and customer touchpoints, minimizing cost and resources to maintain an efficient online banking infrastructure.*

**- Dr. Habil Olaka, Chief Executive Officer, Kenya Bankers Association**



#### 4. Secure API infrastructure

As banks upgrade to an API-based and Open Banking aligned technology infrastructure, it becomes critical to ensure additional measures in securing API-access to a bank's valuable data and services. Banks need to make certain that their digital banking platform provides a secure and reliable way of integrating with the third-party ecosystem, be it on-cloud or on-premise.

Secure API access to systems that were originally closed exposes banks to additional risk. Established banks have been using private APIs for years to make up for the shortfalls of legacy systems. Banks must rely on API Management to ensure all stakeholders have the access necessary to enable banking services. Without effective API management, they risk falling out of compliance

with current industry standards and digitally-focused regulations that will come in the future. When open APIs are developed and integrated correctly, the exchange of data keeps customer information safe and secure. But for some financial organizations, secure API management can seem easier said than done. Banks will need to consider the scalability of their security infrastructure as the business grows and the interaction with third-party platforms increases.

#### 5. Leverage platform reusability for innovations with quick time to market

Historically, one of the biggest constraints faced by banks in adapting to new market requirements has been the monolithic architecture of their technology infrastructure. Most modern banking software solutions have realized



this challenge and have evolved or natively started with a modular architecture. A modular architecture enables the reusability of common functionalities when building digital banking solutions. This translates into better configurability, lower customization requirements, higher cost-efficiency and a predictable total cost of ownership.

Modular architecture has now evolved into a **microservices architecture**, which breaks down the application into its smallest components which are independent of each other but work together to accomplish the same tasks.

Modern banks are increasingly adopting this architecture, due to its ability to make fast iterations from prototype to a live version for large and complex software applications. This also makes it easy for banks to frequently upgrade their software applications and keep the technology up to date.

## 6. SaaS approach for a scalable model

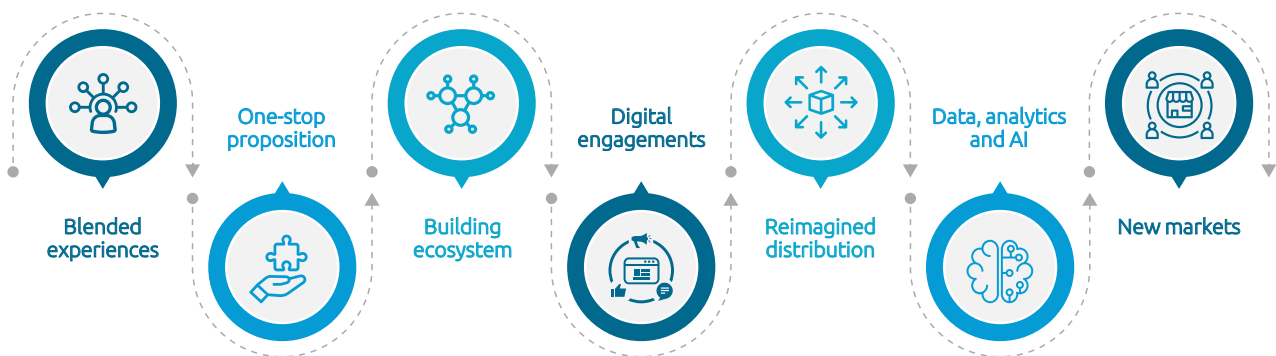
Last but not the least, the scalability of the solution is one of the most important considerations that banks need to factor in when implementing a digital banking solution. Key performance expectations of digital banking systems are their high availability, ability to handle large volumes of data requests and scalability across geographies. For all these three requirements, a SaaS model is the best fit due to the inherent scalability and resilience of cloud platforms. For local banks, a SaaS model offers cost flexibility as the primary benefit, while for global financial institutions the primary benefit is the multi-tenancy i.e. the ability to deploy the solution across multiple markets simultaneously which results in faster go-to-market. Banks need to consider a digital banking solution that has a native SaaS capability and a modular microservices-based architecture which renders horizontal & vertical scalability to the solution.

*Times of COVID have taught banks to run a thin cost architecture to succeed under varied circumstances. To run a low-cost infrastructure banks have no choice but to provide solutions through technology. As only through technology can banks provide a standardized customer experience and by getting on the cloud, banks can convert their capital expenditure model into an operating expenditure model. Scaling up on the cloud is much faster than otherwise. To build a low-cost architecture, which has become the need, companies need to make investments in technology and try to service all customers by providing a standardized customer experience.*

**- Raju Buddhiraju, Chief of Wholesale Banking, Commercial Bank of Qatar**



# Making the most out of digital banking platforms: 7 tips for a future-proof digital strategy



## 1. Blended experiences

While digital banking aims to move the entire banking service to a digital platform, the customer's need to speak to bank personnel at a branch cannot be entirely ignored. Consumers would still prefer walking into a branch for addressing complex transactions or if they need advice for a particular financial service. However, a bank branch can no longer operate in the traditional format if the bank needs to remain competitive. The COVID-19 pandemic has pushed branch-using consumers toward digital channels, and many

are now attuned to the convenience offered by mobile and online banking. Banks will need to blend this digital banking experience with human interaction at branches.

An omnichannel interface is paramount here, for branches to seamlessly pick up customer account activities and service requests originating on other channels. The bank's digital platform also needs to be sophisticated enough to leverage emerging technologies such as AI, analytics, augmented reality amongst others, which will become the construct on which modern digital branch experiences can be built.

UnionBank was the first bank in the Philippines to launch the smart branch leveraging 5G technology for seamless connectivity with the internet of things (IoT)-enabled services. The smart branch offers self-service kiosks, personified robot assistants, and uses artificial intelligence to better anticipate customers' preferences and behaviours. This sort of experiential banking is likely to become the norm for branch models world over. To offer this sort of capability, UnionBank started a major digital transformation journey back a few years ago and aims to convert the entire bank into a digital bank.

## 2. Integrate with 3rd party VAS services & partners to offer a one-stop solution for customers

The change in the profile of today's banking consumer is not just limited to the preference of digital channels. Consumers place a greater emphasis today on the experience in addition to financial consideration when choosing their banking partner. The democratization of financial services, made possible with fintech and big tech companies entering the

financial services market, has widened the choice of financial services for the end consumer. The customer expectations from banks are, therefore, to go beyond offering traditional deposits and loans and become an enabler for all of their current and latent financial needs that are embedded within their lifestyle. Banks need to approach their digital banking strategy with a **platform mindset**. This would translate into investing in a native API-based solution that enables seamless integration with external applications while ensuring data

UK's Starling Bank is a good example of platform monetization. A major portion of the bank's revenue comes from fees earned through aggregated partner services such as insurance, loyalty schemes, accounting solutions, as well as mortgage products.

security. In addition, relying on a digital banking platform on a microservices architecture is again essential to ensure resilience and easy integration with third-party services. A microservices architecture also lowers the risk of breaking integrations used because they are very adaptable.

### 3. Monetize the opportunity of building an ecosystem

While the primary benefit of building a digital banking platform ecosystem is superior customer experience, it also opens up new revenue streams for banks. The immediate revenue potential is through the active use of the bank's platform by its existing and new customers. This provides opportunities for cross-sell and up-sell revenues.

In addition, banks can consider multiple revenue models that leverage its API-based platforms. Some of these include charging for accessing its API channels, revenue-share with the bank's platform partners or fee-based revenue through a banking-as-a-service model. The common observed model is for banks to earn a referral fee from third-party fintech partners for listing and selling their products on the banking distribution channel. With a sophisticated digital banking platform, banks can also take a banking-as-a-service approach and earn fees from third-party providers for the use of their APIs and banking technology rails. In the long term, bank APIs can also become products in their own right which can be marketed as a service for smaller banks to use.

*Besides gaining new customers and resultant revenue through fintech partnerships, adopting a digital platform also allows existing customers to start using your services more frequently. By using more services from our bank as the channel, the activities that they perform on provider apps will shift to us, thus creating more revenue opportunities.*

*- Mr. Georgi Zamanov, CEO, Allianz Bank Bulgaria*



Mobile payments, wallets, merchant engagement: Offering a payments plan as part of a comprehensive digital banking strategy is imperative for banks. However, to compete in this dynamic environment, banks need to meet the expectations of digital natives and deliver diverse tools to customers to help them make smart decisions across a range of financial services. Banks possess considerable strength in payments, including control of customer data and access to large customer pools. Banks have opportunities to use real-time payments infrastructure to offer digitized customer experiences and improve flexibility and cost of their operating models by leveraging APIs and offering payments-as-a-service. Moreover, banks have a range of opportunities to collaborate with Fintechs to drive economies of scale, set new market standards, and fill capability gaps. Bank-led wallets are gradually becoming the new buzz for consumers. Advantages such as security, time saver, expenditure tracking, and lucrative discounts are driving customers towards bank-led wallets. For example, Payit is UAE's first fully featured digital wallet, powered by First Abu Dhabi

Bank (FAB), with a vision to help UAE evolve into a cashless society. Designed to be easy to use by anyone and everyone, it enables customers to pay utility bills, split bills with friends, send money worldwide, cash out, pay government entities or shop at their favourite stores using attractive promocode and cashback. The bank has also recently launched a Digital Marketplace integrated with Payit to support retailers, SMEs and local businesses in moving online. The marketplace allows small and medium businesses to list and sell their products and services on the platform conveniently and make them accessible to a growing base of Payit customers.

### 4. New innovative distribution channels

Digital banking channels that are able to provide customers with multiple touchpoints and ease of access are more effective and help build a long term relationship with customers. Banks' typically siloed processes have hindered the industry's efforts to deliver consistent customer experiences. However, innovative digital channels are



Payconiq is a bank-led, closed-loop payment system in the Benelux (primarily Belgium) facilitated by QR code payments. The Payconiq wallet allows users to pay online and in-store, transfer and request money from friends, and more, protected with bank level security. Merchants can accept payments by having their customers scan a QR code, hit a button online or scan the code from an invoice.

playing a paramount role in the bank's overall customer experience, fostering consistent, reliable, and customer-focused online, and mobile channels. When looking to scale their reach beyond traditional distribution channels (branches, ATMs, online and mobile banking), banks are also leveraging innovations, such as **Agency Banking** - an established branchless banking distribution channel in Africa and an upcoming channel in other regions. It is an alternative distribution strategy in which traditional retail banking uses authorized agents to expand the reach of the branch network.

##### 5. Integrate analytics, scoring, segmentation to know your customers better and provide personalized offers

Digitalization initiatives in the banking industry in recent years have enabled banks and FinTechs to have deeper insights of their customers, based on the analysis of hundreds of customer data points. Banks are gradually embracing advanced analytics to gain powerful insights into customer behaviour and respond faster to their changing needs. These data points, which include behavioral and

psychographic indicators, such as social media footprint, device preferences etc., are used to identify microsegments within existing broad customer categories and offer a hyper-personalized experience to the individual consumer. This ensures greater customer-centricity translating into increased revenues, customer satisfaction, and loyalty.

Banks are adopting a wide range of analytics solutions to better align themselves with customers. By leveraging analytics, banks can ensure granular customer segmentation, more effectively predict customer behavior, design personalized products and services, and reach out to prospective customers. The integration of analytics and AI enables banks to leverage vast amounts of structured and unstructured data in a game-changing way.

Measuring the impact of banks' customer experience efforts needs to go beyond surveys. Banks need to determine how customers feel across the entire customer journey and assess the impact of banks' CX strategies and investment. Measuring customer satisfaction using outbound surveys along with sentiment analysis of opinionated unstructured

*Many banks are still struggling with the notion of the digital banking platform. As some products with the same marketing names exist, banks might be convinced that implementing such products means their digitalization goals are reached. The key to better customer insight is definitely in the analytics and intelligence layer that is fed by tracking tools embedded into all touchpoints and operations. Such an approach enables detecting key behavioral patterns of client that support the identification of new client segments.*

*- Mr. Mitja Ucakar, Senior digital transformation advisor for banks*



data (based on natural language processing) can be one of the first steps for banks. Beyond NPS, banks should also consider customer journey analytics to discover micro journeys within macro journeys.

## 6. Address the needs of specific market segments through tailored experiences

The evolving banking landscape, cutting-edge competition, and rising customer expectations are driving the banking industry to keep up with new trends to tend to customers promptly. Customer experience has become an important aspect of every strategic approach. Banks need to be digitally transformed to deliver a consistent banking experience whether it is online or offline. Digital banking

platforms are enabling banks to provide not just tailored experiences but also identify niche customer segments and provide them with highly customized products. This in turn helps banks drive new revenue opportunities. For example, banks can capture the SME market through better digital propositions and also expand to the underbanked segments. Digital banking innovations such as specialized banks for minority communities, mobile banking services specifically for teenagers, and mobile only banking for students are further examples for tailored, niche market opportunities.

Below are some examples of Fidelity Bank, and the steps they took to reach out to new customer segments through digitally transforming their distribution via agency banking.

### USE CASE

Fidelity Bank Ghana implemented Agency Banking Solution to increase market growth



#### Challenges Faced

Fidelity Bank has significant experience in the inclusive finance field. The bank aims to be among the top three banks in Ghana based on key performance indicators including quality of deposits and return on equity. To achieve this goal, the bank is relying on innovative technology and an insights driven marketing strategy to market its products to customers. In 2017, the bank served less than 1 million customers and wanted to increase this number to 3 million by 2024. To ensure growth, the bank realized digitalization is the road to follow, and adopting highly flexible delivery channels will ensure cost-effectiveness and improve customer service.

#### Solutions Offered

Fidelity Bank partnered with Software Group and started a mutual project from March 2017. The bank selected Software Group to go mobile with agency banking and started using the agency banking solution that covers the full life-cycle of agent operations including mini-statements, deposits, withdrawals, balance inquiries, and float requests. The project also included work on back-end operations and integrations with third-party systems, agent setup and management, fees, commissions, user management, limits configuration, location management, and reports.

#### Benefits

The main benefit the bank experienced after implementing the agency banking solution from Software Group was improved stability and performance of their systems. This resulted in increased trust in the agent network and significantly enhanced customer experience. Over a 3-year period, from 2018 to 2020, agency banking drove a 300% increase in transactions and a 600% increase in transaction value for Fidelity Bank Ghana.

## Outlook

Given the developments over the past year, the coming years will continue to require banks to adapt to changing consumer behaviours. The banks who will succeed are the ones with a platform that can give them the flexibility to respond rapidly to these changes. Banks and financial institutions need to be engaging with customers who are utilizing new or non-traditional channels as this is a huge opportunity to attract new customers through the convenience, design, and delivery of a particular channel. For example, more vulnerable customers might feel most comfortable discussing their situation through webchats rather than over the phone.

Banks will need to continuously incorporate key technologies like AI, Big Data analytics to improve their customer experience. The need to process data into actionable intelligence and to act in real-time is one of the focus areas for the financial services industry.

This is expected to drive revenue and profitability more directly in the future. The next evolution of digital banking platforms is to provide Banks and financial institutions with the ability and flexibility to change the way they interact with their customers based on the context of the exchange.

*Today, digital banking platforms to the greatest extent are focused on replicating existing banking products and services. And there is a very limited if any relation to other products and services that the customer may need. In less than ten years time, things will be very different. When a customer opens the omnichannel or web platform of any financial provider there will be a much wider array of solutions and services that they can see and access out of this single platform. This is the future and this will be based on data analytics and behaviour tracking that will support the digital banking solution to be able to provide customized products and services to customers that are not offered today.*

**- Mr. Georgi Zamanov, CEO,  
Allianz Bank Bulgaria**



### Sources

<https://www.softwaregroup.com/>

<https://www.mastercard.com/news/europe/en-uk/newsroom/press-releases/en-gb/2020/november/life-under-the-new-normal-accelerates-digital-banking-adoption-across-europe/>

<https://www.mastercard.co.in/en-in.html>

<https://www.eba.europa.eu/risk-analysis-and-data/risk-assessment-reports>

[https://financialit.net/news/open-banking/tink-study-uk-financial-institutions-amongst-most-positive-eu-toward-open-banking#:~:text=Two%20thirds%20\(67%25\)%20of,EU%20wide%20average%20of%2059%25.](https://financialit.net/news/open-banking/tink-study-uk-financial-institutions-amongst-most-positive-eu-toward-open-banking#:~:text=Two%20thirds%20(67%25)%20of,EU%20wide%20average%20of%2059%25.)

<https://www.companynewshq.com/company-news/personal-finance-utilities-company-news/life-under-the-new-normal-accelerates-digital-banking-adoption-across-europe/>

<https://www.socialbeat.in/blog/top-10-digital-wallets-in-india/>

<https://dzone.com/articles/fintech-continues-to-disrupt-the-digital-api-econo>

<https://www.revechat.com/blog/customer-experience-in-banking/>



## About Software Group

Software Group is a global technology company specialized in digitalization and integration solutions for financial service providers. More than 200 customers in 70+ countries have already accelerated their business through our DigiWave Digital Banking & Insurance Platform and digital-first solutions.

Some of Software Group's customers are organizations such as the Bill & Melinda Gates Foundation, MasterCard & MasterCard Foundation, International Finance Corporation (IFC), the World Bank, Asia Development Bank, 7 of the 10 biggest Microfinance networks, Asia Confederation of Credit Unions (ACCU), Allianz Bank Bulgaria, Atlantic Bank, Bank South Pacific, Commercial International Bank Egypt, and others.

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