

The Future of Banking Awaits

# How can digital banking bring results?



fintense

## How digital banking can bring result?

Today every bank understands that they need to move towards digital banking and almost every bank has their own, unique solution for digital banking.

If we search the Internet for digital banking and its main characteristics, we'll come across many different definitions, descriptions and main benefits and problems.



## Traditional banks have “highly manual and disjointed process”, as described by Strategy& PwC.

Traditional banks were communicating with clients in their branches and all banking processes were “highly manual and disjointed process” as Strategy& PwC company presented it:

In 1960s and '70s the first core banking systems were developed and introduced. The next step was to develop new solutions in order to cover special functions and new services.

The first ATMs were installed in London in 1976. Later on, TV driven VideoTax banking and PCs client-server banking were introduced.

In 1985 The Bank of Scotland offered electronic home banking service. In 1994 Stanford credit Union launched the first website offering banking services. iPhone was an innovative new device (2007) and it accelerated the development of mobile banking. Traditional banks developed their own solutions for digital banking based on software solutions from 3<sup>rd</sup> party or their inhouse developments.



## Traditional banks are implementing one solution for each customer segment and every digital channel in their digital services

Every bank went through implementation of several solutions for different customer segments and different digital channels.

Still today many banks are operating several applications to support digital channels for different client segments. They use different solutions for web retail banking and mobile retail banking, for web corporate banking and mobile corporate, for private banking and SME banking and so on.

For each channel and each segment there is separate solution and in average banks' IT runs five to ten

different solutions only for digital channels.

Banks' information systems combine and integrate between 50 and 6.000 different applications, depending on the size and purpose of the bank. Just integrating, synchronizing, and maintaining banking applications is a huge job for IT organization.

IT organizations in banks are even developing few of the applications themselves ("for competitive advantage") which is increasing the backlog and pressure on IT people. IT organization is leading digital

transformation in many banks and they are late with maintaining existing applications, late in developing new features, late with introducing innovation and late with transformation. And every day there are new requirements popping up on desks of IT staff.

That way many banks end up with several ways to do operation with different processes underneath for same products and services and with banking information system based on spaghetti architecture. It slowly leads to very expensive and complicated operation and information disaster.



## Challenger digital banks are offering banking in new, different way

On the other side competition is coming from new digital challenger banks.

They are approaching banking operation in different way:

1. Start from scratch and cover only digital channels
2. Develop or select 3<sup>rd</sup> party platform with digital characteristics to offer best value for clients
3. Select additional software solutions to integrate with APIs
4. Adding value for their customers using APIs to integrate 3<sup>rd</sup> party services from challenger banks and fintechs
5. Use data to increase value for clients



## Challenger banks are aiming to acquire enough customers before achieving profitability

Challenger banks are in most cases unprofitable and dependent on the investors to finance growth phase. Business model is to get enough customers and only then to achieve profitability. To achieve it, their value proposition is based on digital banking.

Basic account management services are for free, all banking products/ services are digital including digital onboarding. Imperative is that marketing department brings potential clients through digital channels and convince them (with value proposition) to onboard.

In the second step banks offer additional benefits for clients if they subscribe to premium accounts and pay monthly subscription fee. In addition to subscription income, transaction fees on payments and debit card spendings are only additional revenue

for challenger banks until they start to offer loans (including overdraft).

Today there are very few challenger banks and fintechs that are profitable. These are banks with millions of clients and often with operation in many countries. They are mainly focused on special client segments or on the smaller set of banking services. Wise, for example, with focus on international transfer of funds, multicurrency accounts and two main client segments: companies operating in several countries and frequent travelers. Fintechs in the payment niche like Block or Stripe are now expanding their offering slowly entering banking services.

Expanding business model with banking services is part of the strategy of Shopify, Canadian software company with focus on e-commerce solutions.

## Digital banking explained

What are the characteristics of digital banking:

1. Complete communication with clients is self-service through digital channels (again designed and developed for digital world as software solutions that operate on data). It is channel and segment specific and easy to use with minimal friction. It is based on open and transparent content prepared by bank and extended from outside in data from customers, partners, communities, regulators, and administration.
2. Complete collaboration, support, middle and back office operation is transferred to digital world: all banking products/services and underlining processes are designed for digital world and developed as algorithms that are operating on data.
3. Every banking product/service is designed and offered to clients as end-to-end process (E2E).
4. Every E2E process is executed with immediate result in real time (immediate fulfillment).
5. To achieve that all decision making processes are designed for the digital world and implemented in the algorithms based on data.





## Digital content, self-service, collaboration, digital operations, digital decision-making, immediate fulfillment

For example, new clients can sign up for the account and other services using mobile application or web application (onboarding service). Content is available to clients that explains all the conditions openly and transparently. Contract is simple and easy to read without fine print and hidden clauses. All costs and charges are presented in the simple way. It is clear which documents are required and onboarding process is explained step by step including time required for each step. Requested number of forms and data to be filled is not overwhelming. Outcome of the onboarding is clearly described. Process is E2E and outcome is that client opens an account that is functional immediately including virtual debit or credit card and access through all channels. Whole Know Your Client (KYC) process is included as

well as all decisions necessary so that the client may open a new account. E2E immediate fulfillment all done by algorithms based on data.

Same goes for loan origination where the whole process and necessary decisions are done to enable E2E, immediate fulfillment, and outcome is that loan amount is transferred to client's account in short time.

If any new clients want to ask for the loan, two processes (onboarding and loan origination) are combined and executed E2E with immediate fulfillment.

During the processes clients are informed about each and every step and they know where in the process they are and how far there is to the end.



# Case studies highlight the differences between digital banking solutions

There are some interesting case studies that are illustrating differences between digital banking offered by traditional banks and by challenger banks:

Peter Ramsey (@PeterRamsey) is user experience expert and founder of the company Built for Mars ([www.builtformars.com](http://www.builtformars.com)) and he measured user experience in banking industry in UK.

The first case study compares digital services of 12 banks in UK (both traditional and challenger banks) where

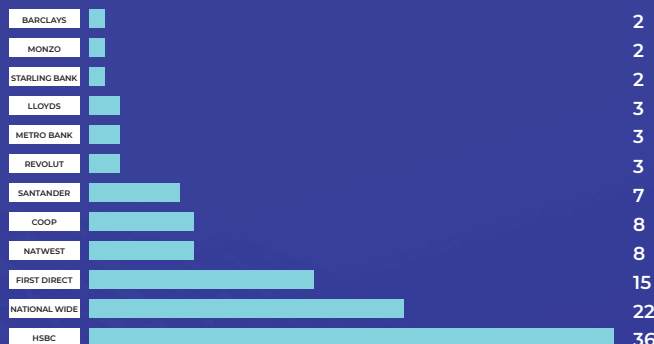
he personally opened accounts. On the first chart Peter presents how many working days are necessary to open an account using mobile application. From start to the end - when Peter received debit card ready to go shopping.

All banks have mobile applications, but only in 4 (3 challenger and one traditional bank) Peter was able to finalize process of opening of the account. In other mobile applications it was necessary for Peter to do additional steps in banks' web application. Comparing number of clicks necessary

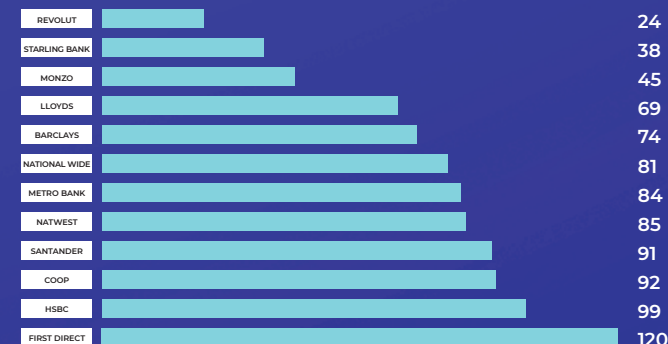
to apply in different mobile apps Peter counted minimum of 24 and a maximum of 120. Difference is almost 6 times.

Difference in number of days to receive debit card to use it in physical shops was even 18 times (min 2 and max 36).

NUMBER OF WORKING DAYS to have an active account



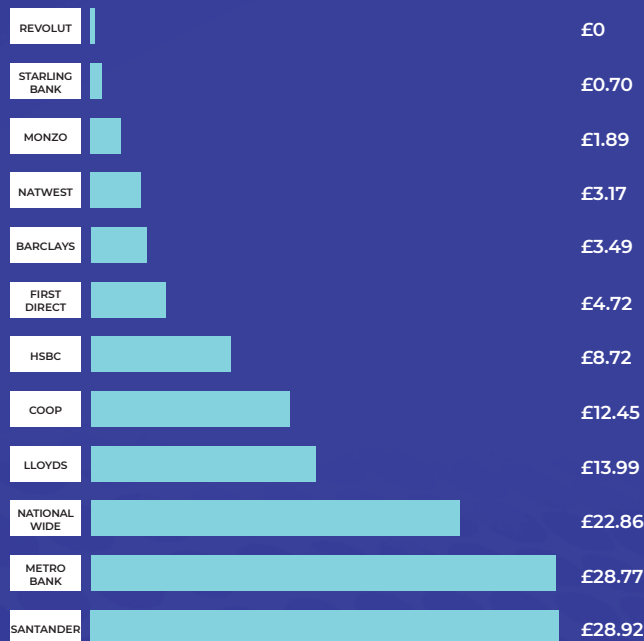
NUMBER OF CLICKS to create an account



The challenger banks were much better and what is interesting they were even faster in printing and sending the debit card by post (physical activity). The challenger banks achieved even immediate fulfillment criteria by providing digital cards, but Peter didn't take that into account for the previous chart.

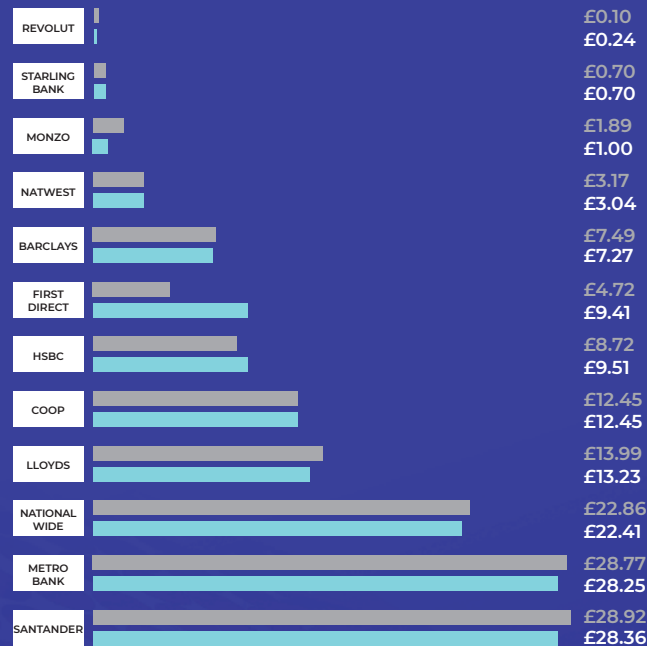
Peter made another case study: He transferred an amount of 100 pounds from each of the 12 accounts to an US account and compared the costs for this process. The real cost of sending the money to US was between 0 and 28,92 GBP!!! Costs consists of transaction fees and costs of the exchange from pounds to dollars.

**THE REAL COST** of sending £100 to a US bank account (USD)



Cost on £ - Sender & FX fees

**THE REAL COST** of sending £100 to a US bank account (USD)



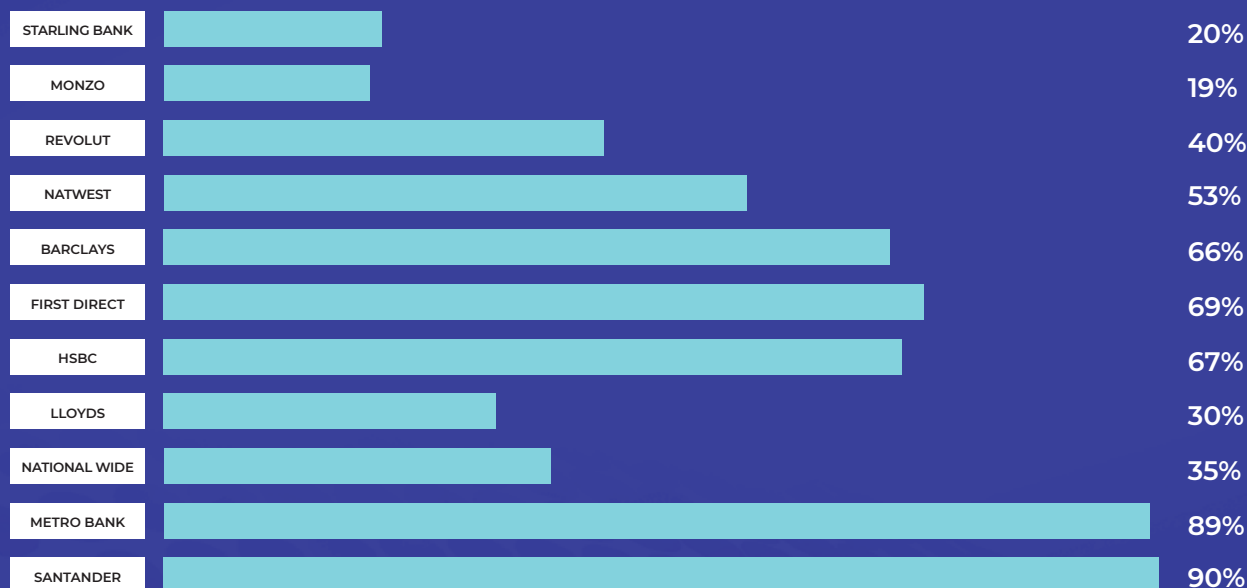
Cost on £ - Sender & FX fees

900 days later he repeated the process (results are in the left chart) and found out that there are minimal changes (presented in the right chart). Actually the third bank on the chart (Monzo) reduced the cost from 1,89 to 1,00 pound as they are now using the partner (Wise) for international money transfer.

All processes that Peter measured are “digital” but some are designed for digital world and some are traditional processes, only digitalized.

The other case study from same exercise was to assess digital openness and transparency when the bank informs a client about the exact costs for the transaction. The banks that charged the most (almost 30%) for transferring 100 pounds to US, informed clients only when almost 90% of the process was already done for this transaction – very late.

**PERCENTAGE INTO PROCESS**  
 before you see fees



Percentage of clicks - ranked by true cost





## Difference between digital banking offered by traditional and challenger banks

While challenger banks are designing complete information system to incorporate all the most important characteristics of digital banking, traditional banks must consider many other parameters.

Traditional banks have profitable business and a large number of loyal clients. They must preserve the existing business including the part of the business that operates in the physical world, mainly in their branches. They need to integrate new digital operation with existing one. They need to assess

their existing information system and decide what to design from scratch and what they will keep and integrate in the new information system.

They need to assess capabilities of their IT organization and to optimize which tasks will IT take over and which tasks will be offered to outside consultants, vendors, and partners. Goal is that the internal IT organization keeps control over information system (with expansion to banking operation) and supports innovations to speed up digital transformation.

## Successful digital transformation in banks requires resolute decision-making, prioritizing real changes over quick wins, and starting with an overall assessment and design of a digital business model for the bank.

For success of digital transformation in the bank, the management of the bank must make a resolute decision to make real changes and not go for quick wins. Digital transformation must start from overall assessment and design of digital business model for the bank. Based on digital business model, the leadership team needs to design a new digital operational model. Digital operational model integrates digital operations together with information system into operational – information system. Because all operational processes are designed for digital world and all

banking processes move to software solution (algorithms) working on data. The next step is to assess capabilities of the existing information system and to design the new one. If the existing information system starting from core banking supports real time (STP) processing applications can be used in the new system. Selected applications, that are becoming a part of digital banking, must be integrated in one modern digital platform to offer real digital banking. It must offer easy integration with other parts of the information system and fast expansion

and adjustment to satisfy new client needs as they appear. There are other requirements that a platform for digital banking must satisfy like security, omnichannel approach, great user experience, data collection from outside in and many others.

Introducing digital platform helps and speeds up digital transformation. Nevertheless banks need to innovate their business model and define all other steps that would help to make successful digital transformation.

## DIGITAL BANKING PLATFORM – one platform for all digital channels and all customer segments

If bank decides for new 3<sup>rd</sup> party platform for digital banking they keep their core banking solution and integrate new 3<sup>rd</sup> party platform that takes over complete communication and collaboration with clients through all digital channels. It is one platform for all channels and segments.

The implementation of properly selected 3<sup>rd</sup> party platform for digital banking takes 6 months to 1 year depending on complexity of banks' operation. To overcome limitations of the core banking solution new digital banking platform must provide easy API integration with core and other application (risk, security) and workflow automation. New platform

will reduce the load on IT organization and enable further innovation. The next step is to integrate (or replace and implement) from as few as 50 up to 6000 applications that are a part of the information system of the bank.

For instance if payment system method is not in real time and is too expensive, the bank can replace it with a new one or integrate solutions offered by fintechs or modern systems. Reducing costs and increasing speed of payments bank will satisfy requirements of new clients and increase banks' competitiveness. Banks need to choose digital banking platform which satisfies most important characteristics of digital banking and offer real value for

the clients through digital channels. Banks must replace old and expensive 3<sup>rd</sup> party connections and methods for financial services with more efficient digital ones. Fintense is such a platform for digital banking which supports and speeds up digital transformation of a bank. The other part of digital transformation of any bank includes organizational steps, new decision-making charts in operation which are a combination of the AI rules, algorithms and controlling processes. It includes access security, data security and new legal aspects of digital economy. New designs of digital processes in HR with main concern how to assess, select and hire digital talents, to name a few.

## Traditional banks are operating two business models

By introducing digital platform traditional banks are starting to operate two business models: traditional physical and new digital business model.

For a bank, that is the way to keep their loyal clients and stay relevant for them and to keep profit while at the same time addressing the needs of new clients. Future steps need to search for the best way to integrate these two business models into a hybrid business model. Permanent innovation of both business models is the way to do it. When digital banking provides enough data for proper analyses of all channels bank needs to assess the business results in each and every channel.

When a bank starts getting a significant percent of financial services done through digital channels (when the number of digital onboardings, digital transactions, digital loan origination and number of digital users and digital sessions start increasing) it is the time to reduce and change the network of branches.

To become more digital, a bank can in there branches and other places install kiosks, self-service terminals, cashin and cash-out ATMs, automatizing communication and collaboration with clients and offering more and more devices for self-service, conversational and digital only banking.



## Converging two business models into one hybrid model

Simultaneously, bank needs to work on the transformation of banking processes in the branches to unify both physical and digital processes or at least to bring them closer. Digital onboarding can be used in the branches instead of traditional physical process of onboarding. Digital loan origination process can replace the physical one eliminating paper forms and paper documents collection and digital decision-making process can replace credit committee meetings. Digital banking processes, designed for digital world, can replace old and slow physical processes to improve user experience, speed and reduce cost of operation. Physical and digital business model converge to improve banking services.

Other innovation is to use digital ecosystem in both operations (physical and digital) to increase value. For example, many banks are using Wise digital services for cross country and cross currency transactions. Wise digital services speed up cross border transactions and reduce cost for clients and for the bank. It also increases transparency (by informing clients about every important change during transaction) and assures better user experience that way. Introducing such service as a standard for complete operation brings conversion of both business models into one hybrid model.





## Further steps of digital transformation

Digital transformation is a continued process of searching for improvements and innovations.

Better usage of data is a great opportunity for banks. Constant analyses of all collected data both inside-out and outside-in about clients, services, transactions, time spent in different parts of the digital applications, but also about the competition, potential partners and about the market.

Dash boards and big data reports are used for further improvements.

For creating new services or for better segmentation and personalization

of existing services. Banks are now offering for SME clients cash management reports, or income and cost trends analyses to help companies to better manage their assets and to improve their business.

And new services based on data need to be available to clients through all channels including the physical ones.

Again, there is a space for inclusion of partners from digital ecosystem in joint innovation. Goal is to increase the value for clients, bank, local community and society.

# To Compete with Challenger Banks

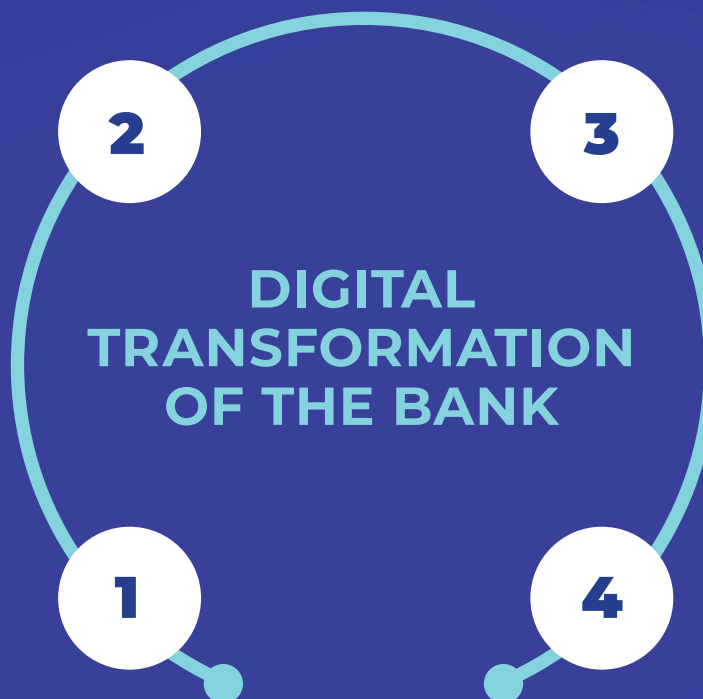


## E2E SW AUTOMATION

E2E software automated banking processes and decisions enable that financial services became low-cost operation

## DIGITAL DATA DRIVEN

Self-service software operation based on data (outside in and inside out) with complete processes and decisions in digital world



## IMMEDIATE FULFILLMENT

Services are delivered with immediate fulfillment and that results in great UX and client satisfaction

## OPEN & TRANSPARENT

Clear and transparent presentation of the offering and rules for each digital service. No hidden clauses or small letter surprises

## Future - Disrupt the disruptor

1. Collected data and additional outside in and inside out data are used to increase value for the clients, bank, partners and other stakeholders
2. AI and big data – Properly used data will increase value for the clients, bank, partners, and other stakeholders. For all services AI components will help automate processes, make decisions, and offer analyses, comparison, advise and recommendation. Using big data AI will help clients to better understand trends and financial capabilities to make better decisions and investments. For bank AI will reduce risk and help making better decisions.
3. Higher level Job To Be Done (JTBD) - Invisible banking - Solving more important jobs for clients. Including mortgage into higher level (JTBD) for clients - real estate offering.
4. Invisible banking - Digital Banking is moving from vertical to horizontal industry and supports other industries. Payments, loans and other services are invisible and included in partners' higher level services for clients.
5. New architecture - Cloud based solution with integration (API) layer
6. Market place for partners' offers. Expanding value proposition with 3rd party financial services offers and offers from other industries. Increase value for the clients.



# To Disrupt the Disruptors in the Future

1

## Transferring banking to Digital

Transferring all banking processes and decisions into digital world = AI, software automated, data driven processes

2

## Higher JTBD

Solving more important jobs for clients. Including mortgage into higher service (JTBD) for clients - offering real estate

3

## Invisible Banking

Digital Banking is moving from vertical to horizontal industry and supports other industries. Payments, loans and other services are invisible and included in higher level services for clients.

6

## Conversational Banking

Using AI banking will be conversational, often invisible and integrated in other services

5

## Big data

Using big data AI will help clients to better understand trends and financial capabilities and to make better decisions and investments.

4

## AI

For all services AI components will make decisions and offer analyses, comparison, advise and recommendation

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