

Is this the best way to do digital transformation in banking?

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9/25/2017

Match borrowers with lenders directly and there is no need for intermediaries anymore. So when digital disruptors squeezed their way into financial services industry, one could think banks were doomed.

Nimble financial technology companies (fintechs) are luring customers away with better online service, lower fees, and cheaper transfers. Consider a huge cost of digital transformation for banking corporations and you see legacy players can have a hard time catching up with the newcomers.

Apparently, the banks were not going to simply give up. Over the last five years, they spent tens of billions of dollars setting up innovation hubs, buying competitors, and changing operations.

Deutsche Bank is one of the great digital transformation examples in banking. The bank established an R&D center [with over 400 developers](#) and brought in several vendors to enhance its digital capabilities. But Deutsche Bank is a global company with hundreds of billions in assets, and the media generally focuses on the “big guys”.

What about community and regional banks?

When it comes to digital capabilities, most of them played the waiting game. As a result, the majority of community banks find themselves losing out on both ends:

- Large banks threw billions of dollars to become sustainable digital players.
- Fintech startups brought the innovative financial technology to the table in the first place.
- Small banks have none of those advantages.

They find themselves squeezed between global banks with deep pockets and agile fintechs. Moreover, technological innovation is extremely challenging and costly for the community and regional banks. Switching to digital rails often gets prohibitively expensive – they simply cannot afford to bet a fortune on transformational initiatives.

After all, around 80% of [digital transformations fail](#).

This post offers a way out for community banks. A strategy of digital transformation in banking with a reasonable budget and clear achievable results.

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Roadmap of digital transformation in banking

It's not all bad news for community banks. Studies show they are actually [better at banking](#) than the big guys. It is also possible that the regulatory climate [will change in their favor](#) in the near future.

Small banks also have distinct advantages over fintechs, e.g. diversified services, established brands, loyal customer base, community support, focus on security, and more. They just need to utilize these strengths in the new digital environment.

Community banks can't throw the money around but they can play a smarter game. This calls for a cautious and actionable approach to banking digital strategy. A plan with clear stages that allows a bank to transform on a relatively low budget. Let's call it:

Start small, Add platforms, Scale success

This cautious strategy allows to transform a bank in iterations focusing on process automation. Here is the roadmap:

Roadmap of digital transformation in community banking:



STAGE 1: START SMALL

- Fast and secure iOS app connected to an existing backend.
- Multi-factor authentication with Touch ID or Face ID.
- Robust & highly secure solutions for the core functionality.
- Cloud-based solutions for the supporting tasks.
- Automate tasks without changing processes.
- Add self-service kiosks & video tellers at the branches.



STAGE 2: ADD PLATFORMS

- Improved UX by a user data.
- Further platforms and devices: Web, Android, Apple Watch, & Alexa.
- Mobile wallets, contactless payments, etc.
- External services: credit card points, retail discounts, cash-backs, etc.
- Data analytics that allows to make tailored offers.
- Add digital payments: PayPal, Venmo, and Zelle.
- Chatbots to automate user interactions.
- MultiBanking, personal finance advisory, etc.



STAGE 3: SCALE SUCCESS

- New backend connected to an existing app.
- Better processes to support the new IT infrastructure.
- Redesigned back office operations for new technologies.
- Machine learning for cyber security and data analytics.
- Unique selling propositions with fintech services.

Stage 1: Start small

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Clients call for zero human interactions. They don't want to wait in queues and go to the branch to carry out every transaction. Wasting 30-60 minutes just to check the balance or perform other routine operations is extremely frustrating, especially for the millennials.

Interestingly, even SME and corporate clients often spend hours in queues each month. Small businesses pay banks huge transaction fees, so they, too, require fast and convenient service. A mobile application can cover a large chunk of the routine workload and is a viable solution for retail and business customers alike.

Therefore, start by automating user-bank interactions. Focus on the most important functionality for modern consumers – mobile experience.

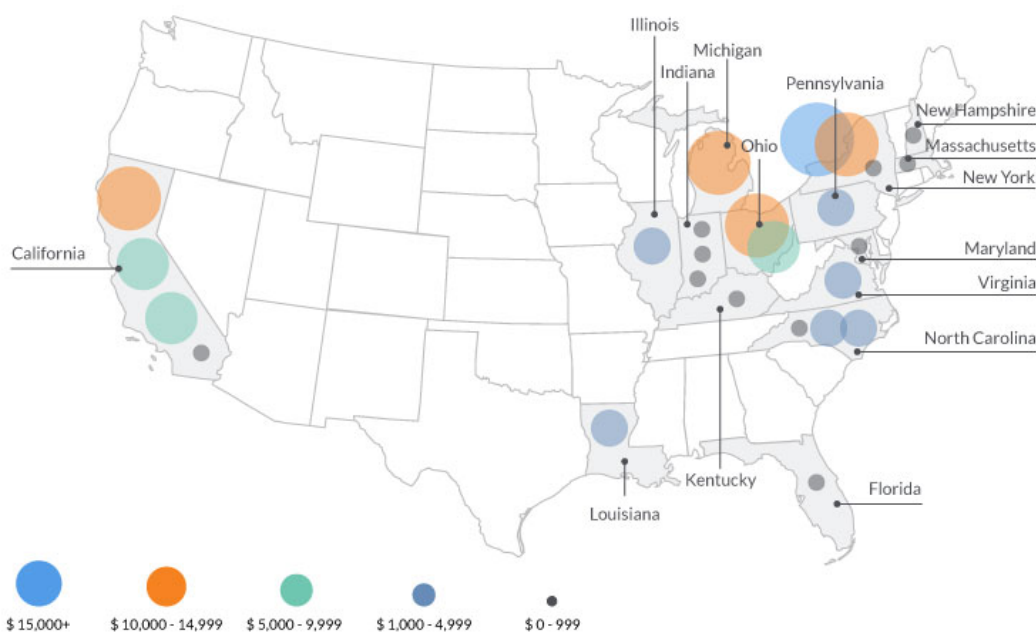
Create a fast and secure mobile platform and a customer-facing app with intuitive UX. It will allow users to perform the most popular operations from their device. Just up to 12 actions, e.g. check balance, order transaction statement, pay the bill, etc.

That's it.

Over 60% of bank customers aged 18-44 use mobile banking and the number is steadily growing, [a study by Federal Reserve claims](#). That is one of the most sought by digital capabilities, but the majority of small- to midsize retail banks lack good mobile experience.

We've analyzed 25 US community banks to understand how well users rate their mobile apps. Here's the list:

List of community and regional banks



Assets (million \$)

- New York Community Bank \$48,000
- Bank of Hope (BBCN) \$14,000
- Apple Bank for Savings \$13,000
- United Bank \$12,578
- Third Federal \$12,430
- Opus Bank \$7,700
- Park National bank \$7,300
- Mechanics Bank \$5,600

- Platinum Home Mortgage* \$4,000
- Coastal Credit Union \$3,000
- Southern Bank \$2,500
- National Cooperative Bank \$2,000
- MidSouth Bank \$1,940
- Penns Woods Bank \$1,400
- PBI Bank \$955
- Northway Bank \$890
- Peoples Financial \$805

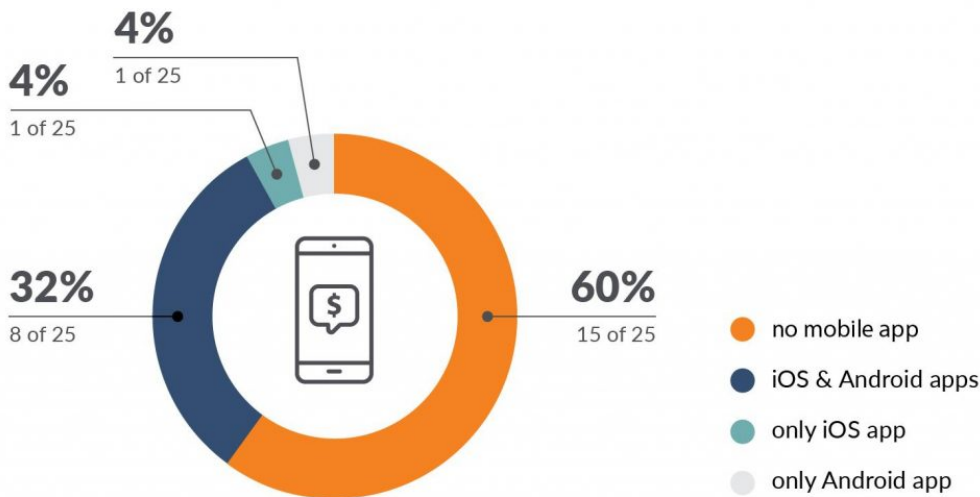
- Patriot Bank \$757
- First Harrison Bank \$743
- Winchester Savings Bank \$560
- Bank of Glen Burnie \$388
- Fountain Trust \$365
- Kentland Bank \$308
- New Resource Bank \$250
- OptimumBank \$120

* Estimated

The findings are quite intriguing. It turns out, only 10 out of 25 banks have some mobile application.

Here is the breakdown:

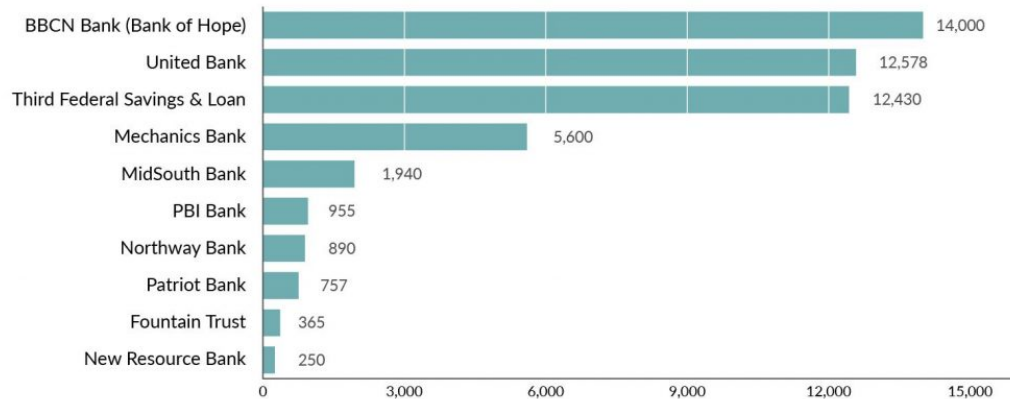
US community banks and mobile apps



5 out of 10 analyzed apps have Google Play rating 3.9 or less:

Community banks: Google Play ratings

Assets (million \$)



Google Play rating



Therefore, as of September 2017, 80% of the analyzed banks have no mobile app or a weakly performing one.

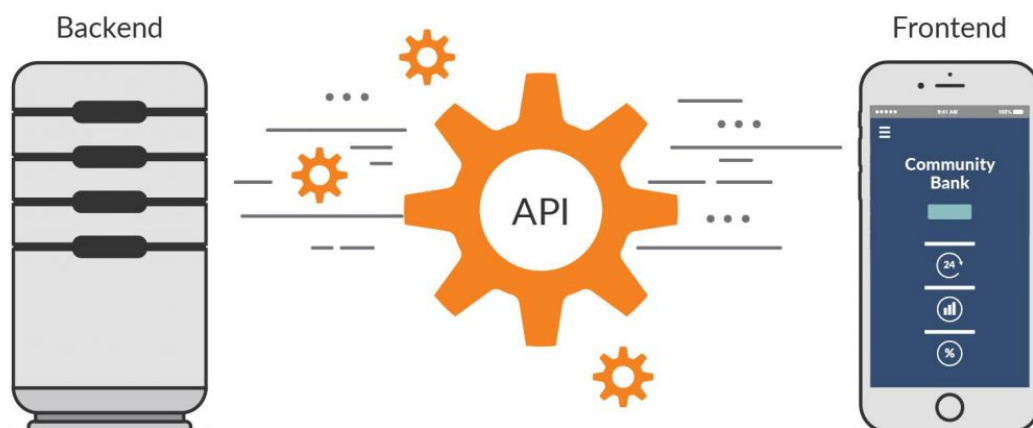
Simply providing a decent mobile app will help them automate routine customer interactions and greatly enhance their digital capabilities.

Workflow

We saw several high-profile digital transformations in banking in 2017, e.g. Deutsche Bank, ABN Amro, and the likes. Compared to these full-scale campaigns, launching a robust mobile platform seems like a relatively trivial project. If outsourced, it can be set up and implemented within several months and with a reasonable budget.

What's more, retail banks can start mobile platform development right away without the need to change their internal processes. In this scenario, a bank uses an open API to connect its existing legacy architecture with a newly created mobile application. The system simply extracts data from the backend and presents it to the user through an app.

APIs connect mobile app and legacy system



At the “Start small” stage, a bank can implement further changes that will not require dramatic redesign of the internal processes. The solutions here include video tellers and self-service kiosks at the branches as well as automation of some existing back-office operations.

Here are the key features of the first transformational stage:

- **Launch a secure mobile app with great UX.** It gives clients a convenient access point to all key financial transactions eliminating the need to visit the branch.
- **Start with a single application (e.g. iOS)** built in compliance with all existing regulations. A robust and secure system with ultimate data consistency. Two-factor or multi-factor authentication with Touch ID or Face ID. On-premise solutions for the key functionality and possibly cloud-based for the supporting tasks.
- **Add self-service points at the branches.** Automated kiosks decrease hours of teller operation and require less staffing. This feature is critical for retail customers and SMEs alike.
- **Automate some back and middle office** tasks without changing existing processes.

Implementation

It is hardly possible for a bank to develop a sophisticated mobile platform in-house. Luckily, there are digital vendors, vastly experienced in the financial sector. They build fast, secure, and robust solutions for all popular platforms, including web, iOS, and Android. Suitable vendors are already familiar with the security, compliance, and further requirements of such development.

We build robust solutions for financial services industry. Security. User experience. Compliance.

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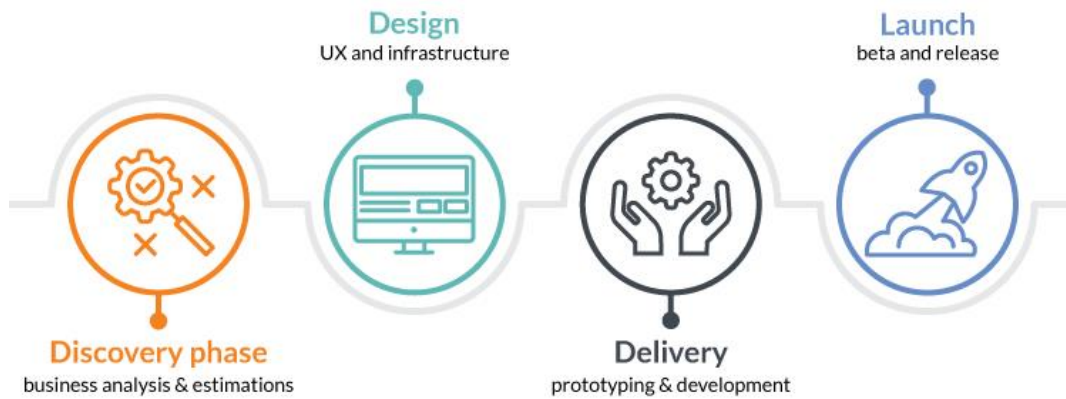
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Offshoring and nearshoring are viable options as well, as they can mean further cost reduction. Notable vendors

that create solutions for financial service industry are in the Czech Republic, Romania, Estonia, Poland, and Ukraine. For North American and European banks, outsourcing to these countries offers 25-50% cost savings without compromising quality.

Implementation phases usually look as follows:

Development stages for the banking mobile app



Once you have an up-and-running mobile app, you can build up its capabilities and add support for new platforms.

Stage 2: Add platforms

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With the first platform up and running, you can port it to other platforms and devices. You can already use data analytics to boost client mobile service and increase customer engagement. At this stage, you can analyze how users behave with the app to make tailored offers.

A mobile platform also offers many integration possibilities ranging from [the highly sought](#) reward programs and mobile wallets to digital payments and chatbots.

Workflow

Analyze user behavior to improve your app and support more devices:

- Polish application UX.
- Add further platforms and devices, e.g. web, Android, Apple Watch, Alexa, etc.
- Analyze user journeys to draw conclusions and anticipate customer needs.

Extend app functionality:

- Add mobile wallets, contactless payments, mobile check deposits, and more.
- Add other services: credit card points, retail discounts, cash-backs, rebates, and more.
- Add digital payments like PayPal, Venmo, Zelle, or Stripe.
- Extend app functionality with fintech solutions, e.g. MultiBanking, personal finance advisory, etc.
- Add chatbots for Facebook Messenger, WhatsApp, Snapchat, and other messengers. 80% of all client inquiries are outright straightforward and you can easily automate them with chatbots. There are ready-to-use solutions and you can seamlessly integrate them with the banking app.

More platforms and extended functionality



Stage 3: Scale success

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Merely adding an app to an AppStore is not a complete digital transformation in banking. There is no way a legacy bank can successfully launch an innovation digital banking strategy without changing its internal processes. Hence, a mobile platform should be an inception point, not the final destination.

The next step is to introduce a new backend system and to remodel the underlying processes.

Some community banks might want to skip that stage, as it requires a thorough redesign of the operations. However, there are two important implications to consider:

1. First, legacy banks face rising transaction costs and a decline in teller transactions. Process reorganization addresses both of these issues simultaneously.
2. Second, sticking with the old backend can jeopardize future improvements of the mobile application. Just look at how quickly technologies evolve. Fail to change the legacy system, and any significant app upgrades will be impossible within two to three years after its launch.

This stage is the most challenging part of the digital innovation in the banking sector. Banks are generally pretty clunky, so the resistance to change inside the organization is usually the biggest issue.

This calls for a huge effort from the management to fully back the transformation and properly communicate all coming changes. More on the importance of top management involvement in the transformational initiatives in [our white paper](#).

Luckily, as long as the app proves its worthiness, it is easy to demonstrate how digital technologies bring value to the bank and its employees. It should be a strong point in pushing for further changes.

Workflow

When a bank already has a fully functional mobile app, it's time to change the backend system and to redesign the underlining processes. After that, newly created core systems can be connected to an existing mobile application with APIs.

The new infrastructure will greatly boost the functionality of the mobile platform.

At the third stage of digital transformation, a bank can pursue one of the two options:

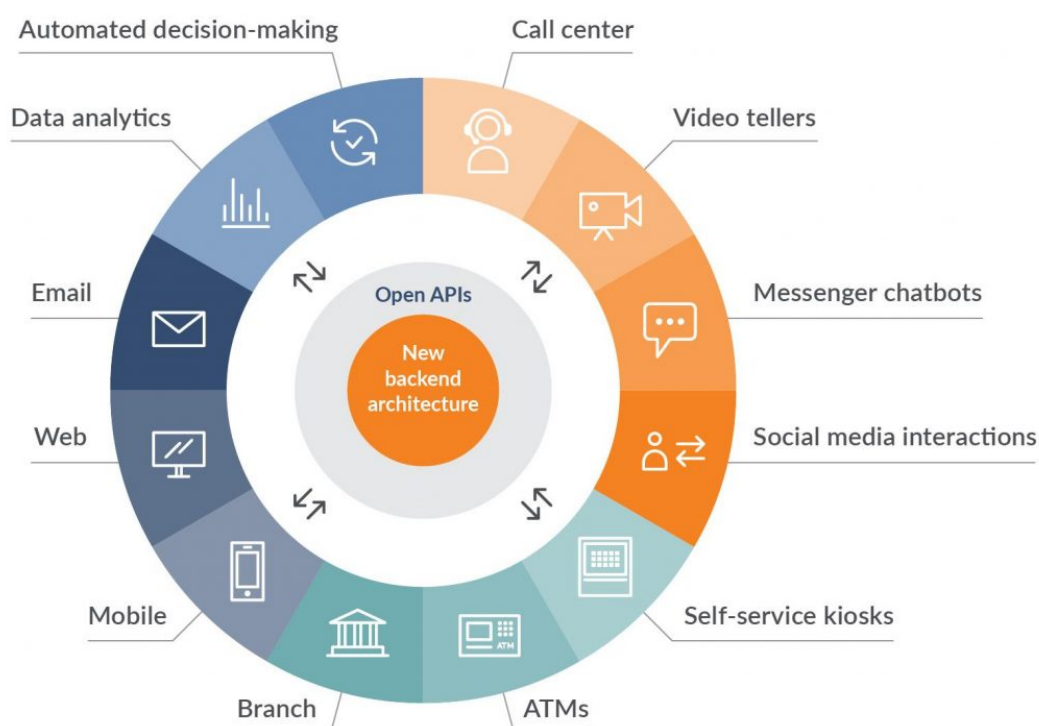
1. **A multichannel system** is a cheaper alternative that fits well into small bank's constraints. On the downside, it is still siloed and can have scalability issues.
2. **An omnichannel platform** offers several advantages such as tailored marketing, better tracking of the

customer touchpoints, and more. Still, this is a more expensive alternative and its implementation requires more effort from the team. Omnichannel and the underlying microservices backend infrastructure have made a lot of buzz lately, but they often get extremely challenging to implement. [This article on ZDNet](#) gives more details on the matter.

Irrespective of the path chosen, the development phase still implies the upgrade of the system. Here are the key features of the final stage:

- Create backend platform and link it to existing mobile and web applications.
- Redesign back and middle office operations to support the new IT infrastructure.
- Integrate machine learning to boost cyber security and automate data analytics.
- Deeper collaborate with fintechs to create unique selling propositions.

Omnichannel banking platform



Drivers for success

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Start by finding a suitable vendor

Make sure your solutions provider has proven experience in fast, secure, and scalable apps and can choose the best tech stack for the project. [Dedicated development team](#) is probably the best delivery model for this strategy.

Next to cross-platform mobile development, the vendor has to be fully familiar with the financial services industry including compliance and strict security regulations. Domain knowledge is also essential for handling common financial technology development issues such as the logic behind financial operations, ultimate data consistency, and the high load.

The following project functions can be outsourced:

- Business analysts
- Software designers

- Project managers
- UI/UX designers
- Software programmers
- Quality assurance

Launching a decent mobile application requires a lot of effort from the bank's team, too. The CTO and the head of the customer experience department have to be fully involved in the project. This way you can make sure the application fully matches your customers' expectations and your backend capabilities.

Keep employees informed about the changes

Fear, uncertainty, and opposition accompany any change initiative. Still, when people are badly informed, the resistance can get really ugly. Communicate the transformation is essential for the bank to survive. Assure people that the change will not happen overnight. They will have plenty of time to accommodate to the reorganization.

Strategy pros and cons

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For most of the 6,000+ banks in the US alone, this seems like the most viable digital transformation strategy. Why?

It is cost-effective, evolutionary, and scalable.

The price of implementing such strategy is the lowest compared to other alternatives. Global financial organizations have huge resources they can allocate to change their operations, but most banks in the world are relatively small. Given these limited capabilities, a "discount" transformational strategy is the way to go.

This strategy also fits well into the risk-averse culture of the community banks. Small financial institutions are slow on picking up digital trends because they fear it is just "another stylish thing". Starting with something that has already proven its worthiness for other banks (mobile platform) should convince the opponents of the change.

Once the mobile platform starts bringing value to the bank, pushing for further changes should become easier.

Pros

- Cost effective digital transformation.
- Low risk: the investment is spread over a longer period.
- At the early stages, no need to change internal processes dramatically.
- Each stage of the strategy is an autonomous digital transformation.
- Moderate employee resistance due to the slower pace of the change.

Cons

- The slower speed of the change can hold the company back.
- Employees can get tired of the never-ending change initiatives and become demotivated.
- Can be challenging to go through all the stages and tempting to abandon halfway through.

Notes on the strategy

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Integrating with existing digital solutions

The roadmap describes a situation when a bank has not started any transformation at all: there is just a basic website and no support for mobile platforms.

In reality, this is rarely the case. Most banks have taken steps towards better online services. Keep in mind, this doesn't change the overall transformational strategy described in this post. You can integrate any existing digital solutions in the bank's arsenal with the new platform. This can decrease or increase the timeframe of the first stage depending on the case.

Choosing the first platform

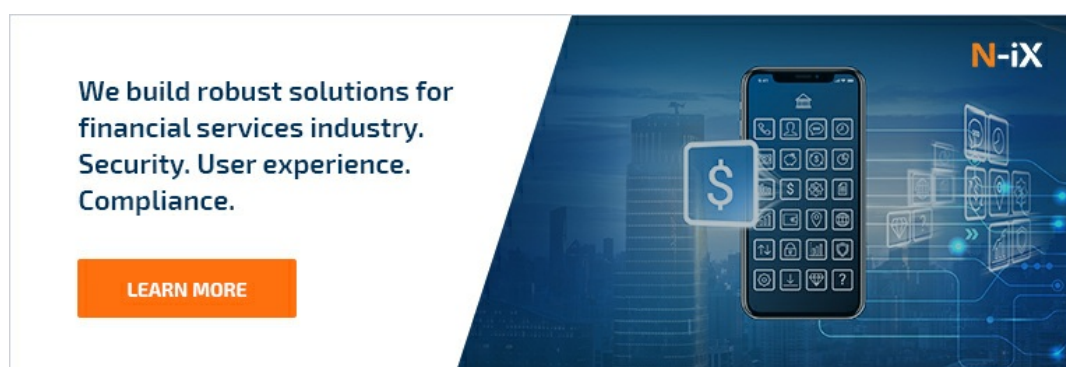
In most cases, it makes sense to start with the mobile platform and add web functionality at the later stages. However, in some cases it may be vice versa. It remains for the bank's management to decide which platform they need first: web, iOS, or Android.

This does not affect the overall strategy though. You still start with one platform (web, in this case) and add others at the later stages.

Additional materials

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Find the key points of this banking digital transformation in ppt presentation on SlideShare. You can clip the most useful slides or download the digital banking strategy as pdf. The comments are very welcome, too.



The advertisement features a dark blue background with a city skyline and a smartphone displaying a mobile banking app interface. A large white dollar sign icon is positioned to the left of the phone. The N-iX logo is in the top right corner. The text on the left reads: "We build robust solutions for financial services industry. Security. User experience. Compliance." Below this text is an orange button with the text "LEARN MORE".