



# OutSystems for **Digital Banking**

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Create a Frictionless Digital Banking  
Experience With the Power of Low-Code

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# Banking Consumers Have Thrown Down the Gauntlet

The retail banking industry is changing and evolving at a breakneck pace. Never before have traditional banks been faced with the extent of innovation that now precedes them. The challenges are many:

- Consumers expect their banks to offer the same kind of a flawless real-time user experience that they have seen in other industries.
- In their attempts to answer the technology gauntlet thrown down by consumers, many banks have either failed to innovate fast enough or not at all.
- A new breed of customer-centric financial solution providers, or FinTechs, is answering the consumer call. They have successfully stolen share of wallet from the incumbents. In 2016, the World Retail Banking Report stated: "Nearly two-thirds of customers across the globe are using products or services from FinTech firms, ratcheting up the threat of the disintermediation of banks."

The current banking model that has operated for decades is fundamentally broken. With the dawn of an open banking ecosystem now approaching, banks will be forced to become more agile and flexible to stay competitive, capture additional revenue, and deliver future-proof solutions.

Having a piecemeal approach to your digital transformation strategy just isn't going to cut it. An end-to-end digital transformation is the only way to create a truly customer-centric business model and stay competitive for years to come. In this eBook, we outline a holistic approach to a banking digital transformation strategy, laying out, step-by-step, the actions for moving from a product-centric organization to a customer-centric one. The result is a frictionless digital banking experience that will attract, win, satisfy, and grow your customer base all while increasing your average customer lifetime value.

## FICO

**reduced  
development time  
by 75% and got to  
market 3x faster  
using OutSystems**

## BlueZest

**mortgage  
application  
approval process  
went from 14 days  
to just 15 minutes  
using OutSystems**

## So What's Holding Banks Back?

With millions of dollars invested in their legacy IT systems, digital banking leaders are often locked into these systems for decades. They depend on the legacy vendor's roadmap to offer new functionality, significantly reducing the ability to adapt to customer needs. Many of the IT employees who were familiar with these systems have either retired or moved on from the bank, leaving a significant skills gap in the IT organization. Commercial off-the-shelf (COTS) solution providers can provide a workaround that offers some necessary digital capabilities. However, these are difficult and costly to customize to the specific needs of the bank's customers. By contrast, there are pure-play FinTech providers, who are eroding margins and are not weighed down with

technical debt; therefore, they can provide an improved digital customer experience across all channels for products such as digital wallet, money transfers, and more.

Digital banking leaders at traditional banks are under tremendous pressure to innovate faster and deliver competitive differentiators, all with fewer resources, legacy systems, and traditional application development methods that can't keep up with the pace of change. They are feeling these pains in all areas of the bank from customer experience to the back-office. The sections that follow tackle each of these challenges and explain how they can be overcome.

"Banks without state-of-the-art digital banking platforms will find it hard to remain competitive in five or 10 years' time. AD&D teams need to plan for **great customer experience** and **business agility**, not bolt it onto decades-old core banking solutions."

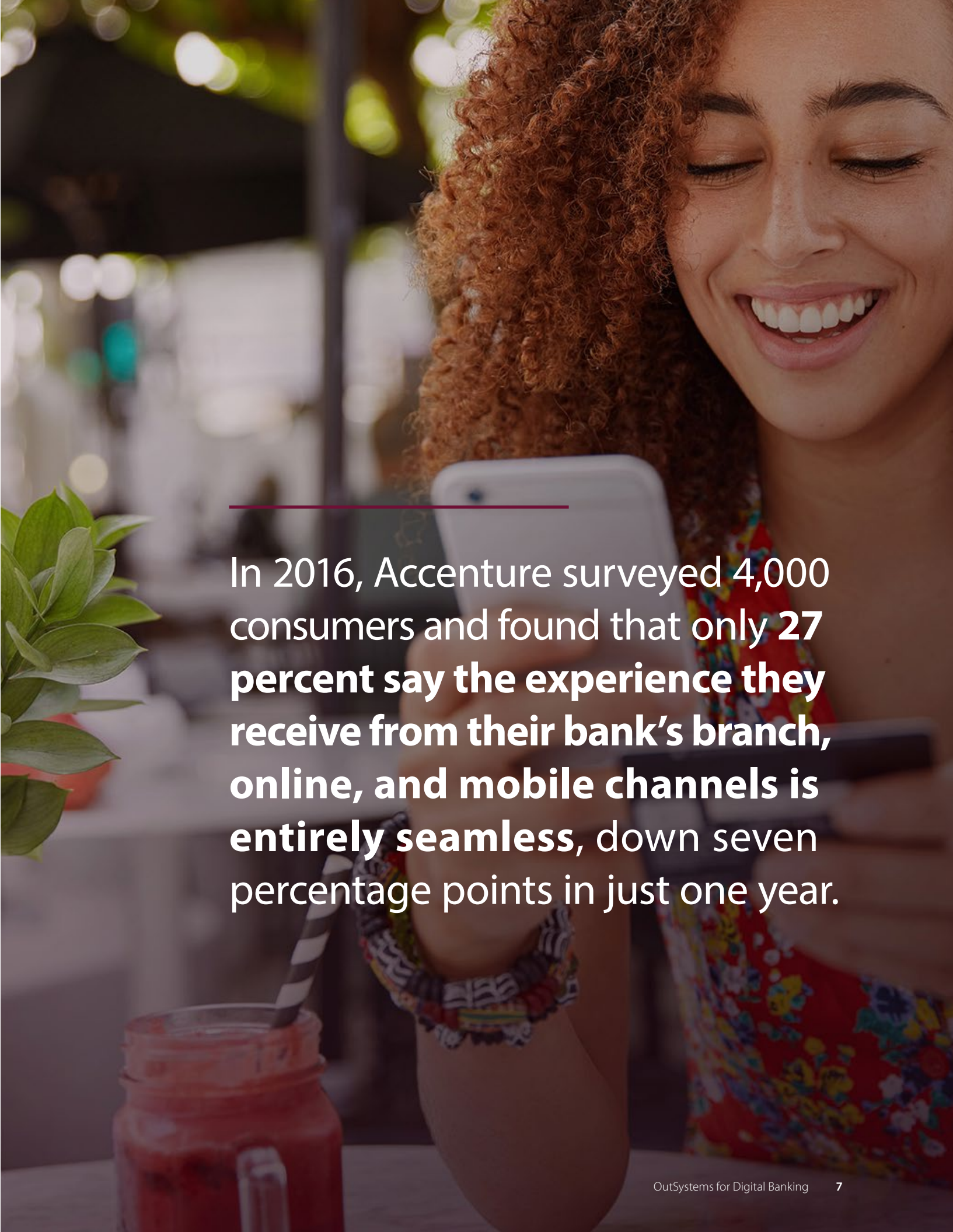
—Forrester

# Deliver a Customer-Centric Omnichannel Banking Experience

The vast majority of retail banks are structured in silos, oriented around products rather than a customer's journey. As a result, the development of a true end-to-end customer-centric omnichannel banking experience is no easy feat. It's critical that banks don't approach the problem from a single banking app perspective or merely digitize a process but rather align their digital transformation strategy to the entire customer journey. By providing a personalized omnichannel experience, they can drive customer satisfaction and increase customer retention rates dramatically.

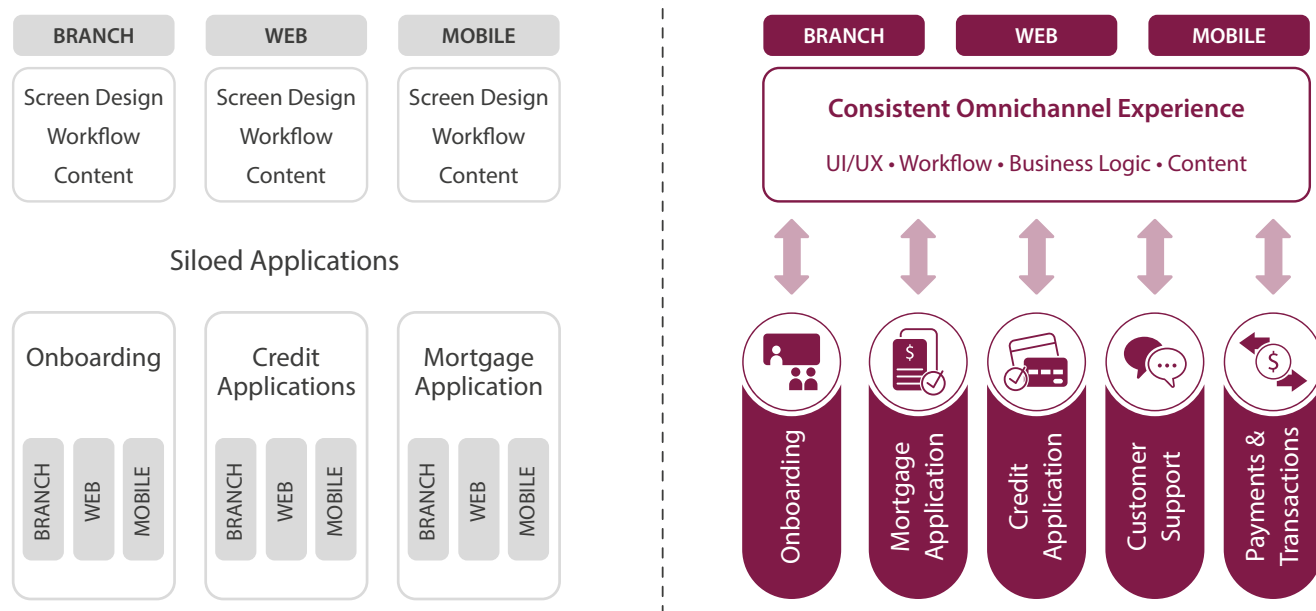
## How Does OutSystems Help Transform the Digital Banking Experience?

OutSystems enables banks to develop and deliver a genuine end-to-end digital transformation in half the time it would take to build applications using traditional development methods. Through the power of low-code, we provide banks a way to move from COTS solutions tailor made to the banks and customers' needs.



In 2016, Accenture surveyed 4,000 consumers and found that only **27 percent say the experience they receive from their bank's branch, online, and mobile channels is entirely seamless**, down seven percentage points in just one year.

## Product Centric Organization vs. Customer Centric Organization



OutSystems is versatile and flexible, enabling a bank to move from a product organization to a customer-centric one that delivers a personalized experience across all channels. Let's take a look at how we help you achieve this by addressing all five phases in the customer-centric digital experience.



## The Discovery Phase

According to Forrester Research, three significant areas influence a person's choice when searching for a new bank: **family and friends, the bank's branch, and online search.** While OutSystems can't help with the first part, we can help a bank provide a superior branch and digital banking experience in the discovery phase and more.

OutSystems enables you to create a wide range of digital banking solutions that can vastly improve the account discovery phase. With the ability to integrate into any marketing automation or CRM solution, you can filter lead flow from your website to enrich, score, and assign leads to the most appropriate action based on your lead metrics.

### User Experience is King

Creating a flawless user experience regardless of the device with OutSystems is easy. Banks can develop, for example, an integrated appointment scheduler that allows users to schedule an in-branch appointment on the web or mobile device that can then be picked up by the bank branch manager. If the customer decides to pause their application

process on one device, and they wish to pick up the process on another device, your internal employees can see where the customer left off and re-engage with the prospect to help them complete the rest of the application.

### Mobile Matters

Over half of all prospective customers use a mobile banking app or a bank's mobile website to assess their products and services before making a decision. With OutSystems, you can create a mobile app or mobile web app in a matter of weeks, using a single code base for Android and iOS. That enables you to provide a consistent experience regardless of where the prospective customer wants to view your product or service. You build the core of your app once and customize for each device in hours, vastly cutting down on development time and maximizing the use of your current IT resources. Because OutSystems makes it easy to provide native mobile features, banks can create a superior mobile user experience by offering features such as facial recognition, barcode scanning, signature capture, and NFC features, to name a few.



Deloitte surveyed more than 3,000 consumers who opened a bank account and found that the most **fundamental attribute** in the process is **speed**; the faster an account is opened, the less likely the customer is to abandon the process.

## The Experience Phase

At the account opening stage, a lot of banks request that the customer come into a branch or use their website or mail documents to verify the person's identity. They are then instructed to fill out long forms that require them to repeat the same information over and over again. The process is fraught with friction that vastly increases the application abandonment rate. With many banks, it takes days for customers to open an account. That timeline has become unacceptable in today's world of high customer service expectations and a technology-savvy generation who need instant responses and expect answers within minutes.

### Reduce the Friction and Speed Up the Process With OutSystems

OutSystems enables a bank to develop a fully digital onboarding process on any platform or channel that a customer wants to use. Because you have the ability to integrate into any third-party system, you can offer your users a mobile or web app that allows user authentication by text message, photo ID, automated ID verification with pre-built integration into the Know Your Customer (KYC) solutions, and links to verify an email address.

Customers get a fast and seamless experience. And, the bank can ensure they can check the user's credentials and meet their regulatory requirements. Intelligent workflow capabilities and pre-populated data in forms reduce the application process significantly, increasing customer satisfaction and reducing the abandonment rate drastically.

### Legacy Core Banking Systems Weighing You Down? No Problem!

Using OutSystems, you can integrate applications into all of your core banking systems, such as Temenos, EdgeVerve, Signature, Silverlake, or proprietary built systems of record. Real-time decisions can be made between the back-office and the customer so that your customer has an account decision in a matter of minutes. You also get the ability to pull more in-depth analytics and build a precise segmentation of the customer that will help form a better understanding of their needs. This in turn enables your bank to develop more personalized products, create website content, design targeted marketing programs towards them, and drive up overall customer lifetime value.

## The Engage Phase

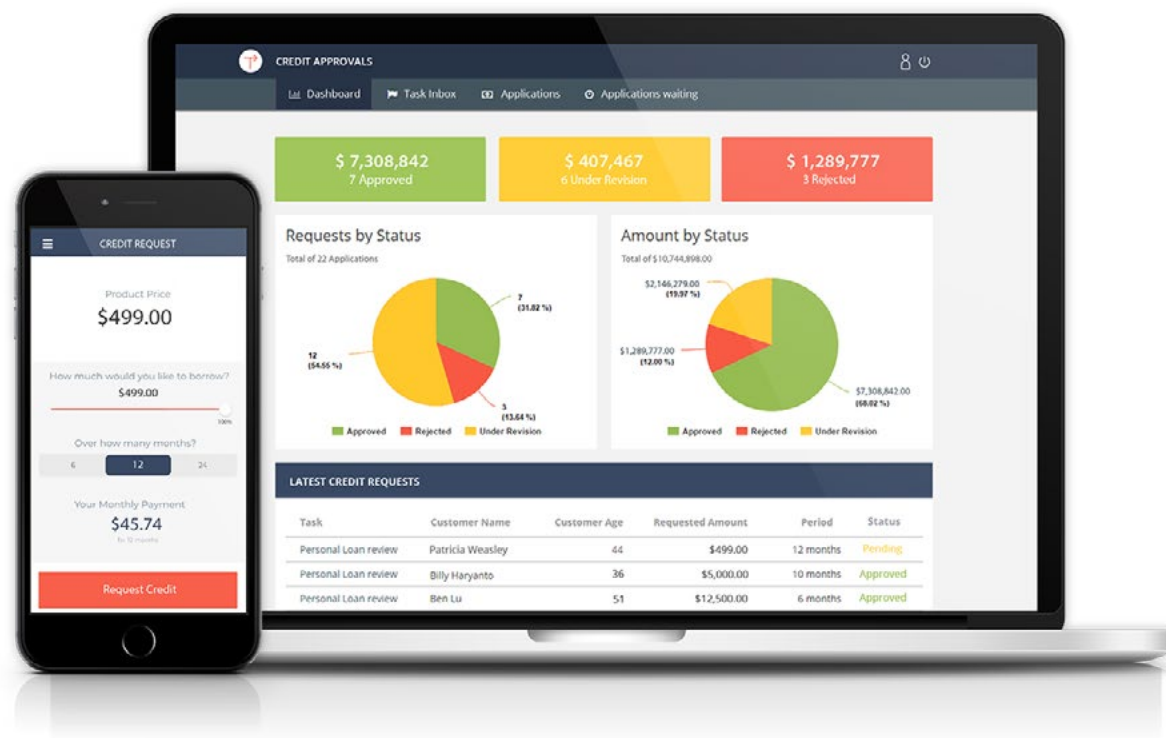
The modern-day banking customer now expects a hyper-personalized experience with extensive self-service capabilities on everything they touch.

### Empowerment

The critical element of a successful customer experience is empowerment. Banks need to empower their customers to access their account services on their own terms and to transact when and how they want. In addition, they also need to make the experience simple and easy to use for any customer regardless of technical ability.

### OutSystems 360

With the OutSystems platform, banks can track the customer experience for a critical 360-degree view of the customer. This allows the bank to provide automated messages and actions based on previous usage or transactions made by the customer. By building customer self-service portals and mobile apps using OutSystems, banks make it easy for customers to view and amend personal details, view transactions, initiate payments, and set up and manage alerts on their account activity



## The Support Phase

Many banks still provide the traditional methods of customer support such as talking to a customer service representative or sending an email. Although such methods of support are still relevant today, the broad spectrum of communication platforms and channels is growing and evolving at a breakneck pace.

### Not Just the FAQs

Despite the proliferation of methods for interacting with customers, banks can often neglect to offer advice and support. A large percentage of banks think that all a customer needs to figure out which products and services are right for them is an FAQ page.

This is not the case. According to a 2018 J.D. Power survey, out of the 58 percent of retail banking customers who want digital advice from their banks, only 12 percent receive it today.

### Move from Reactive to Proactive Support

With OutSystems, banks can transform the support process from a siloed communication channel that simply reacts to customer requests to a proactive omnichannel experience designed expressly for a customer's needs. Using the OutSystems low-code platform, a bank can build a 24x7 customer support application that enables interactions via chat, voice, chatbot, mobile app, and the web and easily integrates into your CRM. The result is improved customer response rates and increased customer satisfaction.

**AI:** integration to analyze the patterns of churn and help upsell customers on new products and services

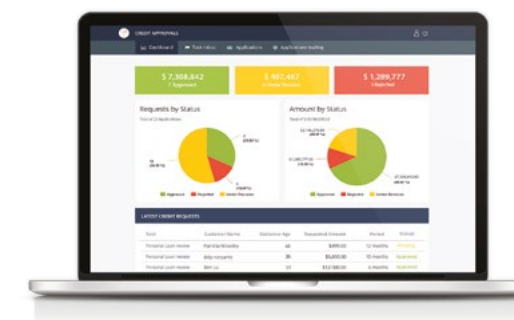
**Case Management:** Resolve cases quickly by providing agents with full context of the relevant case

**Chat Bot:** Integration into custom built or 3rd-party chat bots for intelligent self service

**IVR Integration:** Automatically load customer profile and data once the caller is identified, and launch satisfaction surveys once the call is over

**Operations:** Performing operations on behalf of the customer such as payments, transfers, setting up standing instructions

**Complaints Management:** Capturing customer complaints, following up and routing to concerned teams



**Customer Service Agent Portal:** Displaying the customer portfolio, products, and transactions with the bank for a 360 view of the customer and their satisfaction level with different touch points



## The Retention Phase

Digital channels offer new low-cost and high-margin vehicles for growth and expansion of the customer relationship. Many banks have delivered impressive results by using digital as a differentiator; some banks have seen an ROE of 27 percent with digital channels compared to 19 percent with traditional ones. How? These banks embraced new ways to help customers manage and track their spending. For example, they used artificial intelligence (AI) to offer personalized recommendations of new products, services, loans, and investment opportunities based on customer spending patterns, behavior, and net worth.

With the OutSystems open API layer, a bank can simply connect to any third-party AI solution they prefer such as IBM Watson, Google AI, or AWS AI applications. Then they can integrate AI capabilities with any application they are building with the OutSystems low-code platform. By combining these two powerful capabilities, a bank can quickly build a diverse suite of applications that allow customers to manage their money in a smart way that is personalized to their needs.



Retail bank CEOs expect **digital revenues to dramatically expand to 47% by 2019.**

—Gartner

# Inefficient Processes and Procedures Kill Innovation in Banking

Many banks are drowning in paperwork, manual data entry, and legacy processes and procedures that are crippling their ability to reduce costs, provide consistent data in real-time, streamline their business, and deliver innovative solutions to their customers. All of this coupled with the fact they have to meet stringent compliance and regulatory requirements can impact their ability to be competitive. In the past, many banks answered these problems by throwing people at them or outsourcing; however, adding more people to inefficient processes often makes the process more costly and complicated. Outsourcing reduces visibility into operational procedures. Also, now that GDPR is implemented, outsourcing is risky.

Creating a digital engagement platform for your customers is often wasted if the data and operational procedures powering that platform are inaccurate and inefficient. To provide a seamless service to their customers, retail banks must orient their operational processes and procedures around the customer journey. Many firms over-invest in front-end transformation at the expense of a holistic approach. In a recent survey by Forrester Research, 35 percent of the responding banks indicated that they focus their transformation initiatives on the front-end and channels, while only 8 percent are focused on back-end and business capabilities.

In April 2018, the **average mortgage loan closed in 41 days.**

—Forbes

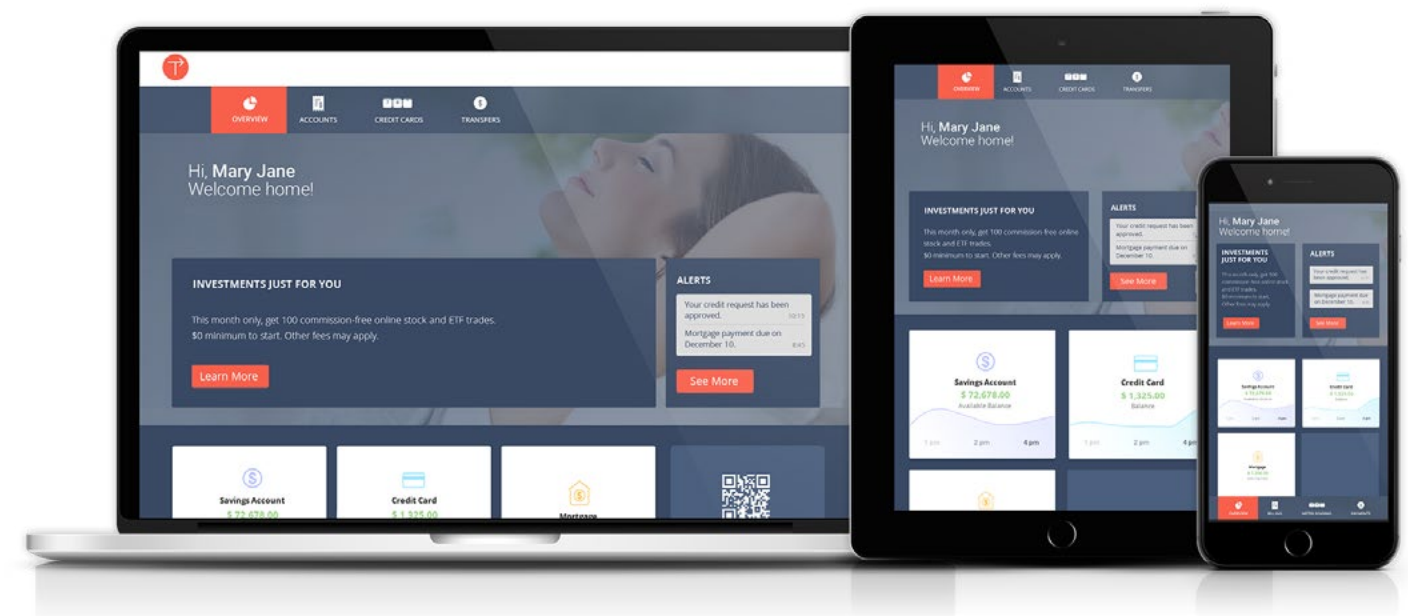
## Focus on Customer Episodes, Not Product

In order to change operational processes, the bank must break its work functions down into customer episodes. Instead of orienting teams and services around products, you orient them to things the customer wants to achieve. For example, “I want to apply for a new credit card” or “I want to extend a current loan.” Cross-functional teams that map to customer episodes enable your bank to move to an agile way of delivering a set of personalized products and services in a seamless customer experience. Your teams are able to share data and customer insights gathered from all channels and are able to react much more quickly to customer needs and requirements.

## Drive Efficiency, Productivity, and Customer Episodes in Your Operations with Low-Code

The OutSystems platform allows a retail bank to replace manual and legacy processes and procedures by rapidly building applications for any channel for a variety of use cases. From a workflow application that is capturing noncritical account information to a sophisticated risk management solution with default probability scoring capabilities that requires deep integration, the OutSystems platform provides a robust solution regardless of complexity.

But how does OutSystems help your bank’s operations move from a product-oriented and siloed organization to a customer-centric one? The OutSystems visual development environment increases development speed by as much as 10 times. Organizations who are either already agile or who want to adopt agile methodology can quickly iterate to keep pace with changing customer needs or regulatory pressures. Why is this important? Agile teams are geared for speed. Faster feedback cycles loop into faster, iterative updates, which means shorter delivery times.





# Banks Are Overdrawn on Their Legacy IT Debt

Walking away from core legacy back-office banking systems just isn't in the cards for the majority of retail banks. With decades of customization, customer data, and investments locked into monolithic systems, banks are tied to them for the foreseeable future. However these legacy systems are prone to inhibiting application development and delivery (AD&D) innovation rather than enabling it. In a recent report on core banking systems, Forrester said "AD&D teams need to maintain up to hundreds of old core banking applications, each representing merely one or a few banking products. Hard-wired business logic and rigid transactional interfaces don't allow quick extensions, and some applications got maintained to death — delivering close-to-zero flexibility and low availability."

As many banks think about moving to a new digital core banking system, they begin to understand the monumental task it will take to do so, as the CIO of a mid-tier regional

bank stated: "We started to build a new core banking system in 2016, and we will be finished in 2020." Taking several years to rewrite an entire system in an alternative codebase, not to mention the multi-million dollar investment needed to do so, isn't feasible for many banks. In 2016, Gartner reported that as many banks try to modernize their current core mainframe systems, they want to avoid simply shifting from one development language to another. "Gartner's clients report a decreasing propensity to develop large volumes of custom code in the future. CIOs are not interested in replacing the current maintenance problem of supporting large volumes of COBOL code with an alternative deployment consisting of large volumes of customized Java or C#, for example.

Banks are therefore willing to stick with a "better the devil you know" approach rather than sinking years of effort and millions of dollars with no certainty of a transformative outcome.

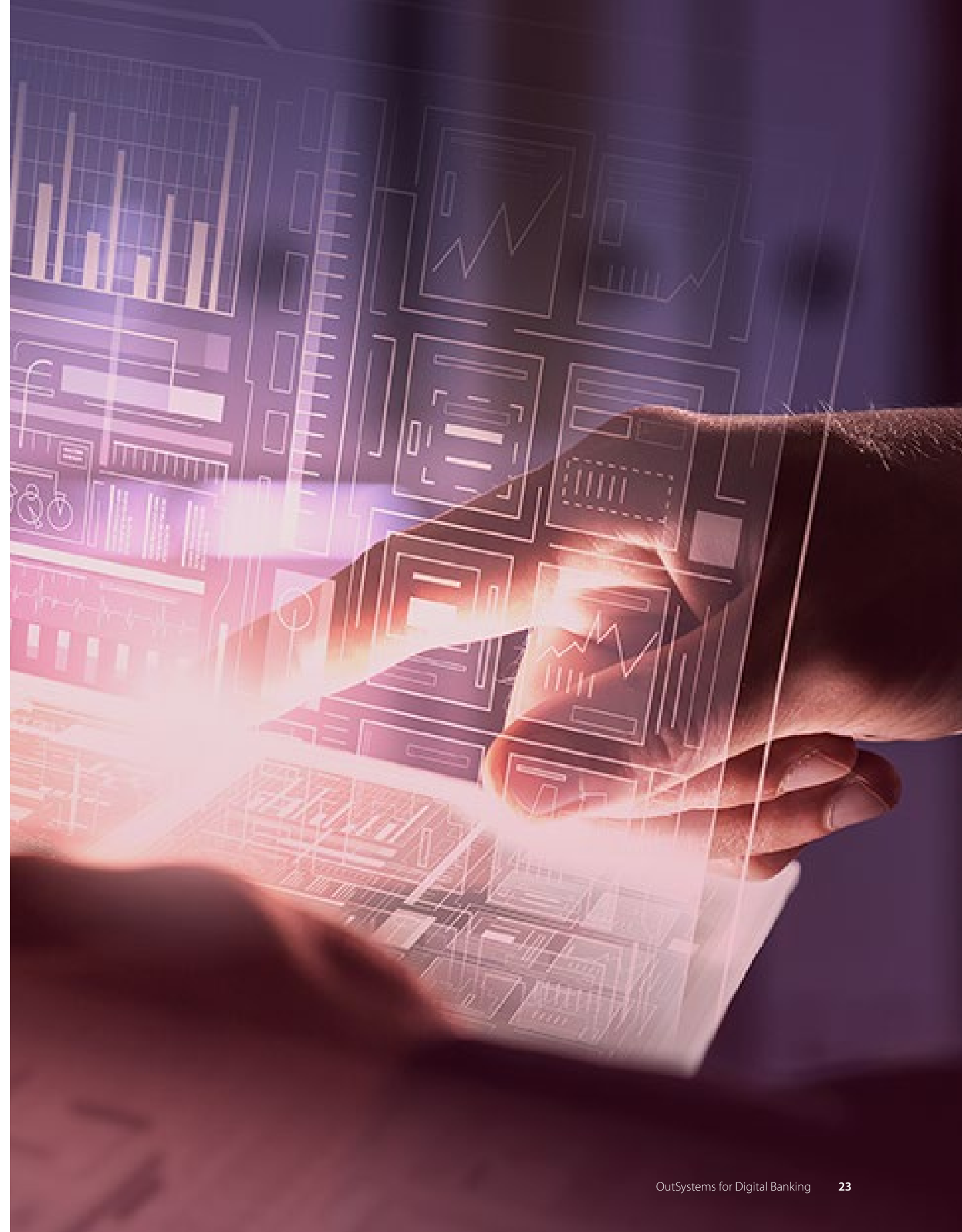
## Leaving a Legacy

For banks that do want to move from a legacy core banking system to a digital one, some key decisions need to be made about their development approach that will greatly impact their business. Because of the monolithic nature of many of these legacy applications, many banks find it difficult to be agile enough to meet the needs of their customers. In response to this, banks are eyeing microservices architecture as a way to break down the complexity of their applications. However, microservices have their challenges, and moving toward such an architecture can cause major disruption in daily operations.

## Use Low-Code to Reimagine Your Core Banking System

With OutSystems, banks, for the first time, have the flexibility to choose between either unlocking the value of their core banking system or replatforming their system into a new modern flexible architecture. Using OutSystems, it's possible to transform legacy applications by placing an API management layer on top of an existing core banking system, which allows banks to consolidate disparate systems into one single view. This gives them greater insights into their customer data and enables them to become more customer-centric and agile.

We understand that taking four years to build a new banking platform is counterproductive; by the time the system is built, customer requirements have changed and new regulations have come into play. It is therefore not unusual for a "new system" to be obsolete from day 1. The OutSystems platform enables banks to replatform their core banking systems in an average of 12 months instead of years. With this low-code approach, a bank can reimagine their core banking system, making it highly scalable and flexible to their customers' needs and allows the bank to become a customer centric organization.



# What Does This All Mean for Retail Banks?

Retail banks are at a critical crossroads in their digital strategy. With FinTech and big tech stealing market share in the high-growth and high margin parts of their business, the technology decisions banks make today will have major implications on their ability to stay competitive for years to come. Banks need to have a robust digital transformation strategy and platform that encompasses all aspects of their business, from omnichannel customer-facing applications to middle office business process applications to their core banking systems.

Bolting on applications from COTS vendors that satisfy only a portion of the customer

journey will lead to poor results. A holistic approach to digital transformation, on the other hand, removes friction points in the customer experience, reducing application abandonment and customer churn. Such an approach requires realigning organization, technology, processes, and procedures, so they focus on customer episodes and provide a frictionless omnichannel experience. Fortunately, there is a platform that enables them to achieve this realignment, while flexing and scaling to their needs. With the OutSystems low-code platform, banks can build and make changes to applications rapidly to meet the ever-evolving needs of their customers.



# About OutSystems

Adopted by a number of leading banks around the world, OutSystems has helped them truly transform their digital capabilities through the power of our #1 low-code development platform. Named by Gartner and Forrester as a Leader in the industry, we are the most advanced full-stack low-code platform in the market. We empower banks to build enterprise-grade applications without the need to write thousands of lines of code, using a visual drag and drop development environment.

Due to the flexible nature of our platform, banks can easily make changes to their application within a matter of hours. Because it's on a single codebase, you only need to update the app once, and it will adjust to other operating systems automatically. As the platform is a full-stack enterprise development platform, it empowers banks to build applications that address a vast array of use cases, from omnichannel customer facing to middle office to rebuilding an entire core banking system. OutSystems is a robust application platform that can transform your end-to-end banking needs.

# What Our Customers Say About Us



**"Our IT team becomes a well-oiled machine running at full speed. With this new confidence, we are convinced we will be able to maintain our position in the market and face the challenges of digitalization ahead."**

—Erwin Kooiman, IT senior manager at Credit Agricole Consumer Finance



**"Moving development to OutSystems has been a great decision for us. We have eliminated the IT backlog that was preventing us from delivering the kinds of innovative solutions that help us stand out as a provider of custom financial services solutions."**

—Izak Joubert, CTO at NES Financial



**"Working with OutSystems ensures unprecedented improvements in efficiency, along with fewer errors."**

—Marco Witteveen, COO GarantiBank



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