

## Case Study: Banking

# Redefining the Mobile Banking Consumer Experience

A large U.S. bank holding company intended to improve communications with its customers through innovation and automation. It turned to Cognizant to provide a secure application for customers to manage their finances.

A few years ago, a large U.S. bank holding company decided to revamp its mobile banking application and replace its legacy platform. Given our long-standing relationship, it partnered with Cognizant Digital Experience to deliver this new platform and solution. Most recently, the team designed and developed futuristic mobile applications that helped the bank's customers better manage their finances and grow their assets through simple interactions.

## Tapping a Trusted Partner for a New Mobile Platform

Cognizant started working with the company over 10 years ago. Over this time, we helped it plan, upgrade and replace its legacy vendor banking platform. This included moving from a predominantly web-based experience to the next generation of mobile banking by developing applications for iOS and Android devices. It also involved integrating mobile activity, analytics and reporting into its business process management as well as other productivity and sales channels.

## At a glance

A U.S. bank holding company wanted to improve communications with its customers and determine better ways to support them. Cognizant helped double the traffic on mobile from 30% to 65%, across the banking customer base. We continue to roll out new features and enhancements such as personalized dashboard, enhanced security for card control and customization, push notifications and augmented reality to expand the company's application capabilities and build a consistent platform across its lines of business.

## Outcomes

- Consistently ranked among the top three in the U.S. Banking Mobile App Satisfaction study
- 3.5M active users supported on a personalized mobile banking platform
- ~1.7M logins per day on mobile channels
- 100% increase in both iOS and Android app ratings
- Zero maintenance window

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The universal application development project was initiated – specifically to help the company build a new mobile app environment to replace the existing platform. This implementation involved creating personalized digital banking experiences for customers that allow them to organize, engage and manage all aspects of their financial lives.

The mobile app for iPhone, iPad and Android devices is a complete banking experience that enables customers to pay bills, send or receive money with Zelle, make transfers, get their credit scores and locate a local branch.

## Collaborating to Deliver a Scaled Agile DevOps Model

Our team worked with the client to deliver functional products in a seamless, collaborative fashion, measuring key performance indicators along the way. Cross-functional agile teams – consisting of both onsite and offshore product owners, developers, technology architects, solution architects and scrum masters – worked in parallel to ensure fast-paced delivery with continuous innovation and integration.

Optimally sized pods of approximately eight to 10 people focused on specific objectives and were responsible for delivering parts of the overall solution. Three teams worked in tandem on individual “journeys” to develop the personalized dashboard features that users could customize based on what they were most interested in, including accounts, payments and transactions. Users were able to further customize the theme of the dashboard and upload images.

Development teams applied industry best practices to design, code, develop, test and perform quality control. These agile pods could be quickly scaled up to meet project requirements. Decoupling elements of the overall engagement and having teams working in parallel reduced risk and tightened the project timeline.

## Designing and Developing the User Interface

Cognizant architected, designed and built the mobile application. In addition, we implemented new native screen designs for iPhone, iPad and Android devices. To develop the user interface, we used Android SDK and iOS (xCode IDE) and a thin Java layer that uses RESTful web services to connect with TIBCO services. We implemented responsive web design (RWD) for the portal portion of the solution, enabling seamless access to the portal across desktops, smartphones and tablets. Additionally, we implemented an extendable enterprise bounce-back framework for email and SMS to handle any emails that are not deliverable.

Application features include:

- **Receipt capture** – collects and allows users to view digital merchant receipts from point of sale transactions and store them in the cloud
- **My banker** – schedules or cancels appointments (by phone or in person) with an assigned banker
- **Mobile check deposit** – uses Fiserv for convenient check deposits
- **Credit score report** – pulls credit score and quarterly updates from Equifax
- **eBill presentment** – provides an electronic view and delivers bills via online banking
- **Personal financial management (PFM)** – presents a view of all financial accounts in one place to manage expenses, set a budget, save for personal goals and improve overall financial wellness
- **Person-to-person payments (P2P) integration through Zelle** – makes real-time transfers to other major bank customers

- Cardlytics** – offers deals based on transaction history
- Mortgage rate tracker** – shows the past year of trending-rate graphs for a variety of mortgage products

Cognizant contributed the following innovations to the applications:

- Quick view balance** – allows customers to view their account balances without logging in
- Biometric authentication and facial recognition** – authenticates on the mobile device using Apple’s Touch/Face ID and detection and recognition features

- Apple watch (notifications/alerts)** – view upcoming payments and scheduled transfers on wearable devices
- Payments using Siri kit** – enables person-to-person money transfer
- ATM fraud detection (machine language)** – an ML model using R language to detect ATM frauds
- Jenkins setup** – integrates continuously with automated build process and deployments using a centralized Jenkins build server
- Log automation** – eliminates manual effort to search log files, resulting in annual savings of USD \$15,000 per year



Cognizant’s award-winning mobile banking application.

## Ranked Number One in Customer Satisfaction

This mobile banking app rose to the top spot in customer satisfaction among the 10 largest U.S. national banks' apps – with top performance in the information/content and speed factors. Nationwide recognition for this kind of award was not expected and is a first for this bank.

Across the banking industry, traffic on mobile channels increased from 30% to 65% since the inception of the project. In support of this continued shift in engagement, we continue to develop and roll out new features and enhancements for the bank and are expanding the application to build a consistent platform across lines of business.

New features include:

- **Personalized dashboard**
- **Card control** – turn cards on/off as well as set limits based on amount, transaction type and location for both debit and credit cards
- **Card personalization**
- **Estimated wait time**
- **Push notifications & alerts** – allow deposit, payment and security alerts in addition to push notifications
- **Integration with other channels** – including branch (MyBanker), phone (estimated wait time) and ATM (receipt capture)
- **Security** – enables biometric authentication, device fingerprinting, risk assessment and multifactor authentication through KBA, OTP, fraud prevention and logon history
- **Augmented reality (AR)** – displays card offers using AR views

We're also enhancing the experience for specific customer segments such as:

- **Small business** – with the addition of premium features like ACH and wire payments, multi-user access, enhanced MCD limit and Quicken/QuickBooks
- **Wealth** – to manage features such as 401(k), brokerage, trust, MyAdvisor and other financial plans

## Learn More

To learn more about Cognizant Digital Experience, please visit: <https://www.cognizant.com/cognizant-digital-business/interactive-services>

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## About Cognizant Digital Business

We help clients build digital businesses and innovate products that create new value – by using sensing, insights, software and experience to deliver on what customers demand in the digital age. Through IoT we connect the digital and physical worlds to make smart, efficient and safe products, operations and enterprises. Leveraging data, analytics and AI we drive intelligent decisions and anticipate where markets and customers are going next. Then we use those insights, combining design and software to deliver the experiences that consumers expect of their brands. Learn more about how we're engineering the modern enterprise at [cognizant.com/digitalbusiness](https://www.cognizant.com/digitalbusiness).

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## About Cognizant

Cognizant (Nasdaq-100: CTSI) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 194 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at [www.cognizant.com](https://www.cognizant.com) or follow us [@Cognizant](https://twitter.com/Cognizant).



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