

# Elevating experiences with the power of artificial intelligence

Learn how the future of artificial intelligence and machine learning will completely transform consumer interactions with financial institutions.

## Everyone's talking about artificial intelligence and machine learning

In a world of always-on digital services at your fingertips, customers have much higher expectations of the organizations they do business with. Artificial Intelligence (AI) and (Machine Learning (ML) have rapidly progressed over the past few years. According to Forbes, the last few years have marked a dramatic rise in the development of this technology.<sup>1</sup>

While tech giants tend to steal the limelight with cutting-edge technology, AI in financial sectors is picking up – even by the most traditional of banking institutions.

Customer use of UK banking apps has soared by 356% between 2012 and 2017. And the number of transactions is rising as customers start doing more than simply checking their balance.

Last year there was a 30% rise in the number of Brits using apps to manage their savings, a 46% increase in those looking after their credit cards, and an 86% jump in those handling mortgage and investment accounts.<sup>2</sup>

As consumers increasingly turn to mobile channels for their day-to-day banking needs, for transactions such as deposits, withdrawals and bill payments, there's an inevitable decline in branch visits – suggesting fewer branches are needed to deliver the same services. Consumers choose who they bank with based more on the quality of their app than the physical location of their bank.

US banks collectively shut down 869 branches during the first half of 2017. In the UK, the number is slightly lower, but still sits at a record-breaking 762.<sup>3</sup>

## Key Advantages of 5G / Wi-Fi 6

### Higher data rates and lower latency

Support new applications and achieve better business outcomes

### Significant increases in network capacity

Seamless connectivity for more users, more applications, and more devices

### Support IoT... at scale

The explosion of IoT devices makes supporting a growing network mission critical for continued success

## Artificial intelligence is good for banks, but even better for customers

While branch closures come with positives and negatives, automation comes with one undeniable benefit for banks: the potential to cut costs. Complex processes can be transferred from human to machine with little effort. And when work is automated, it's not only completed faster, but can be performed around-the-clock. As a result, banks achieve greater results with less effort.

What's more, AI and ML can perform work error-free. People naturally make mistakes. The chances of human-error increase as more people perform the same routine tasks, which could add up to a pretty costly problem. Better quality means improved profitability, and higher customer satisfaction rates. At the same time, these technical solutions can shave minutes off a task. Take that task, multiply it by dozens of tasks and people, and the savings quickly add up.

And it's not just about saving dollars. AI and ML, used in the right ways, will create better customer service overall.

## How to make the most of AI in banking

### 1. Cut out the pain points

People expect a sign-up process to be quick, painless and frictionless.

But balancing consumer demand for a frictionless experience with the need to prevent fraud and protect customers' sensitive information is an ongoing challenge.

A 2016 study on British attitudes to 'know your customer' (KYC), found 40% of people who applied for a financial product abandoned the sign-up process simply because it took too long. And 55% expressed their displeasure at having to send paper copies of documents, saying they'd be more likely to finish their application – and apply for other products – if the process was 100% online.<sup>4</sup>

Clearly, the ability to complete a sign-up as quickly as possible, without forcing customers offline, will drive competitive advantage.

The opportunities to improve how a consumer opens a new account are endless. Imagine being able to open an account using a smartphone and facial recognition to confirm customers identity. It can arguably create high-level security at the account sign-up process. Better yet, it will speed things up – a bonus for customer experience.

*Banking will no longer stop at wallets, ATMs, or even mobile apps. 5G and Wi-Fi 6 will give banks the ability to create truly immersive experiences.*

## 2. Automate chat

Studies have already shown people find phone calls tedious and slow compared to instant chat. They want speed and personalization without the impersonal feel of email and online forms. Customer support chatbots offer a mix of both live conversation and speed.

Chatbots are good news for banks because of:

- **cost savings** – chatbots are relatively inexpensive to develop and maintain compared to people. And they're easier to use than a traditional banking app.
- **ease of use** – chatbots are more intuitive. You don't need a download, and the experience can be personalized over time through machine learning.
- **tangible insights** – they can track spending habits, give credit scores, set and manage budgets and tell the customer where they're spending their money. It gives banks the opportunity to give AI-based recommendations and advice.
- **24/7 digital support** – people now expect an 'always-on' service. Banks with chatbots built into their websites have a competitive advantage, and are more likely to attract and keep customers.

**But AI is some way from being able to understand human emotions.** A customer might be frustrated before the call is even connected. Throwing in an untimely automated message along the lines of 'how's your day?' into the mix, and it'll make the situation worse. This drawback of chatbots is something banks need to consider when mapping out their customer journeys.

## 3. Prioritize personalization

According to Accenture, 33% of customers who abandon business relationships do so because of the lack of personalization. While 91% of consumers are more likely to shop with brands who recognize, remember, and give relevant offers and recommendations.

With the rise of AI, the natural assumption is there'll be less personalization. But this doesn't need to be the case. Personalization through AI can in fact improve the customer experience, using complex data to give people a unique and tailored service. AI and ML can predict things for customers, and take designated actions – for example, they might anticipate the customer's account being overdrawn, and automatically reschedule a bill payment for when there's more money in the account.

*“Hackers use artificial intelligence and machine learning to methodically work their way into financial services networks... **At a click of a button, banks can’t distinguish the hacker from the customer, and traditional security measures are next to useless.**”*

#### **4. Be aware: the more connected we are, the more vulnerable we become.**

AI can give banks better fraud protection. But it comes with dangers too. After years of tackling credit card fraud, retail banks face a new challenge – fraudulent account takeover. Hackers use artificial intelligence and machine learning to methodically work their way into financial services networks. They gain access to customer account details, and use this access to apply for products like mortgages and loans. At a click of a button, banks can’t distinguish the hacker from the customer, and traditional security measures are next to useless.

Banks can start protecting customer accounts by using strong multi-factor authentication – security that goes beyond a single user ID and password.

And, hackers tend to have tell-tale patterns. For example, fraudsters often tie scams to seasonal events. Tax-related scams are common in the tax season. The strength of AI here is that it can sift through massive amounts of data and spot patterns people might miss.

## The AI hurdles for big banks

### **Working with decades-old systems**

Unlike many modern tech giants, traditional banks often have thousands of employees carrying out mundane paperwork and ‘legacy’ processes. Decades-old systems make managing an ever-increasing mountain of data challenging. Many years of complex management decisions make it near impossible to uncouple the business processes that are dependent on legacy systems. That makes it particularly difficult to integrate new software, and creates a gap between meeting customer demand and business goals.

### **Old-fashioned ways of working**

Cultural business silos and bureaucracy mean people now have to make strong business cases to invest in technology changes. This often involves layers of sign-offs and internal approvals.

### **Robotic feeling chatbots**

As it stands, chatbots have a limited dialogue, and are limited to a fixed number of formal questions set by a development team. Bots struggle with accents and different languages creating a barrier for national and international banks. And chatbots can’t hold a conversation where there are multiple questions asked in one go.

### **Keeping up with fraudsters**

Changing fraud patterns over time is one of the toughest challenges to keep ahead of. Fraudsters are always on the lookout for new and innovative ways to get around the systems banks put in place. It’s an ever-moving goalpost.

### **Out-dated regulations**

It’s not easy to strike a balance between compliance and immediacy. And a lot will depend on future regulation. Laws are constantly changing and it will take time for them to more closely match modern market trends.

## A bright future for AI/ML in banking

Technology can lead banking to a place where people ask Alexa or Cortana to make a transfer from the couch. Banks might offer an interactive service, helping people budget on the go – giving guidance on whether to buy those shoes, that takeout, or that concert ticket based on their spending limit.

One thing's for sure: banks that can overcome the challenges of AI and ML will have a leg up over those who don't. And when they do? They'll deliver the convenience, security, and overall experience customers are looking for, and see growth, increased customer loyalty, and cost-savings to boot.

For more information on how you can  
prepare your bank for the future of AI/ML  
technology, visit:

[Cisco.com/go/FSI](https://www.cisco.com/go/FSI)

#### Footnotes

1. <https://www.forbes.com/sites/janakirammsv/2017/12/28/3-key-machine-learning-trends-to-watch-out-for-in2018/#376f52971280>
2. [https://www.finextra.com/newsarticle/30753/uk-banking-app-transaction-numbers-soar?utm\\_source=Triggermail&utm\\_m](https://www.finextra.com/newsarticle/30753/uk-banking-app-transaction-numbers-soar?utm_source=Triggermail&utm_m)
3. <https://www.paysafe.com/blog/is-the-bank-branch-facing-extinction/>
4. <https://www.icarvision.com/en/why-is-a-process-of-financial-onboarding-abandoned>

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