

**AVANADE'S TECHVISION**

Why banking must embrace  
the AI-first world, today

2017



## Avanade's TechVision 2017: Why banking must embrace the AI-first world, today

The old assumption that heritage banks can sit back and retain customers without innovating has evaporated. Fintechs have made their presence known, and financial services organizations of the future will look very different from those we see today. The biggest change: Artificial intelligence will redefine both the customer and employee experience in the financial services business.

Which is why, to complement our [Technology Vision 2017](#), we bring you this look at how the banking industry can prepare for a changing future, dominated by an AI-first mandate. We focus on five key themes:

- **New User Experiences:** Create simple, more human-like interactions
- **Augmented Workforce:** Empower your operations to do more
- **Platform Economy:** Tap into open, fluid solutions
- **DesignOps:** Focus on the customer and value
- **Digital Ethics:** Keep consumer trust front and center

*Artificial intelligence will redefine both the customer and employee experience in the financial services business.*

## New User Experiences: Create simple, more human-like interactions

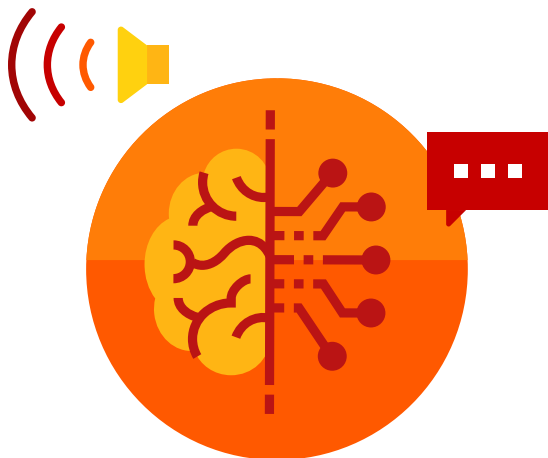
Consumer loyalty to banks is on the decline, as customers look for new conveniences and a more modern, enjoyable experience. So, as the technologies of AI and frictionless interfaces (such as voice and chatbots that provide faster responses to queries) break into popular use, banks need to pay attention. Soon, we expect the banking channel of preference to move from mobile-first to AI-first, with conversation-based interactions becoming the norm.

Many banks are already taking note. In the UK, [Santander's SmartBank](#) app offers a voice-powered digital interface; and [Atom](#) is a new kind of mobile-only, app-based bank, which relies on machine learning to customize services. Expect this trend to continue, with more banks adopting chatbots, virtual assistants and AI-powered financial advisers.

Smart machines and smart things also provide banks with the opportunity to become hubs of engagement between customers and various partners offering a range of financial services. This can help meet customer demands for different capabilities while also enabling banks to gather valuable customer intelligence through advanced analytics to improve experiences.

Want to get started? Get out into the wild and begin co-creating new user experiences with the help of real customers and business units. Voice and text UIs are key.

>> **Related reading:** [How 10 Big Banks Are Using Chatbots to Boost Their Business](#)



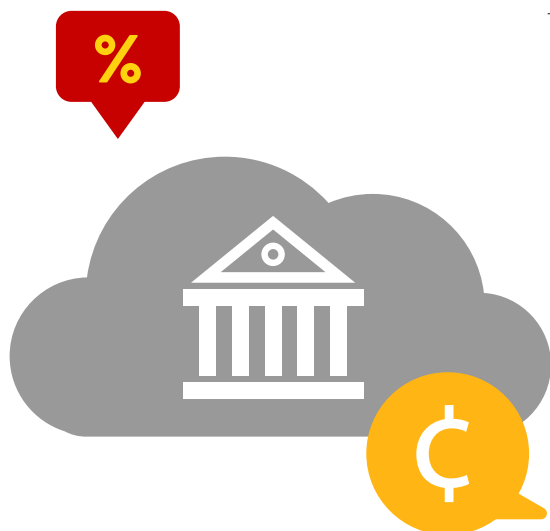
## Augmented Workforce: Empower your operations to do more

As with customer experiences, what is happening in the back office will have a significant impact on banking as financial services organizations turn to AI to augment their workforce. Today we are already seeing a major shift to automation and crowd-sourced talent with a growing number of millennials and contractors. Both trends are making banks more productive while also being compliant and auditable.

In particular, Robotic Process Automation (RPA) is here to stay and banks have been one of the biggest beneficiaries. We've seen [financial institutions using automation](#) to tackle high-volume, low-complexity tasks. There is an immediate impact on the cost-to-income ratio and significant efficiency improvements for in-country, middle-office and back-office processes.

To start, assess the current level of automation of your processes and select a few on which to focus. Then create a pilot to understand the actual benefits of automation. You may also want to invest in a center of excellence to onboard future processes.

Keep in mind that the true value of robotics and automation includes predictability of action, auditability, compliance with regulations and, especially, allowing human beings to do more important things.



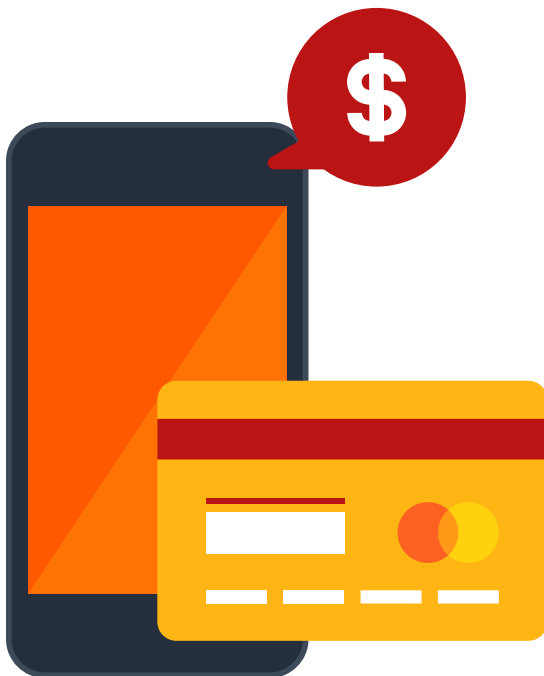
## Platform Economy: Tap into open, fluid solutions

Banks are rapidly adopting open ecosystems, not just because they want to, but because that's where customers are heading. Acquisitions of fintechs with lucrative business models, as well as experimentation with APIs, off-the-shelf software and even blockchain are ubiquitous.

With this type of open banking model, the bank serves as a platform, on top of which third-party companies can build their own applications using the bank's data. Consider, for example, [Citi's developer hub](#), which is an API platform that allows partners to interact with Citi on certain transactions. This kind of open approach is having a significant impact on bank business models, enterprise architecture, data currency, distribution approach and partnerships with other industries.

Banks will be able to leverage the Platform Economy to create new products and services with ecosystem partners, exploring not only open APIs but also IoT and smart machines that could be deployed in open spaces like malls, airports and train stations to capture the moments of truth. Quick wins can be gained by betting on advanced analytics and digital experience platforms, which are rapidly becoming commoditized.

>> **Related reading:** [26 Japanese banks register for Exchange-run blockchain proof-of-concept](#)



## DesignOps: Focus on the customer and value

Two core shifts to modern engineering methods and design thinking have rewired our approach to development and the speed at which businesses go to market. But keeping DevOps and design concepts separate is no longer acceptable given both the scale and pace of change in the AI-first era. It's time for businesses to start to combine design thinking principles with their modern engineering teams and projects. We call it DesignOps – and adopting it might be one of the most significant challenges banks face today.

With the rise of fintech, new user experiences and open banking models, the pressure is high to change the modus operandi of how banks work. But heritage banks will struggle with this imperative, as they are held back by two dusty old Goliaths: culture and technology. For example, one aspect of design thinking is a willingness to fail and fail often. In highly regulated financial sectors, that's a scary idea, and a costly one too.

But it's an approach that can bring real benefits. For example, at Avanade we are working with several banking clients to apply design thinking and distributed agile-based delivery to take the banks digital with a low-cost baseline and fast time to market. The banks have improved productivity by 40% and reduced cost of delivery by as much as 50%.

Going forward, banks will need to straddle the regulatory demands and higher bar of responsibility with the fact that they need to evolve or perish. You can do this by upskilling your teams to adopt design thinking strategies, as well as pushing forward with agile methods and DevOps. It's time you bring the customer's voice into your planning room.



## Digital Ethics: Keep consumer trust front and center

Banking's ethics have a significant impact on the entire world. Few have forgotten the effects of the global financial crisis in 2008, for instance. So, as banking's role in the lives of consumers becomes more personal, more data-driven and more integrated than ever before, we must ask the question: Are we doing this right?

In all the themes above, each advancement comes with a myriad of related effects, most of which will be impossible to foresee. In an AI-first world, where consumers put the trust of their hard-earned dollars in the hands of automation, one bad algorithm could have significant consequences.

The key is to be prepared. The more inclined you are to protect digital ethics, the more likely your products and services are to succeed. Your brand and your customers will benefit as a result. Banks must immediately begin to develop a [digital ethics framework](#), seeking to identify the potential impact of your digital plans, and putting in place buffers to slow or prevent errors and damage. Consider integrating a change program and naming some digital ethics champions.

The importance of digital ethics was highlighted in a [survey by The Economist Intelligence Unit](#), which addressed the concerns financial services institutions have around the ethical implications of enhanced data analytics, including the compromising of customer privacy (for example, information that should not be used in loan decisions). The report found that 80% of the companies surveyed believe that by delivering higher ethical standards they have achieved a competitive advantage.

The bottom line: Incorporate digital ethics today into your strategic objectives and revise your digital roadmap accordingly.





## Conclusion: Actions to get ready for the AI-first world

Banking is an old industry, which has always kept pace with available technology. But it will need to reinvent itself for the AI-first era. To get ready, we suggest five strategic approaches to take full advantage of this new opportunity:

- 1. Leverage AI to deliver zero-effort, invisible experiences** to wow and please your customers.
- 2. Allow AI into the workforce**, harnessing it to automate high-volume, low-complexity tasks, while training your employees to focus on delivering a unique, differentiated experience.
- 3. Tap into new opportunities in the Platform Economy**, transforming the bank into a platform vendor, leveraging APIs and integrations to go where your customers go.
- 4. Keep consumer needs in focus and use a DesignOps approach** to help you build the engaging experiences made possible by AI.
- 5. Step forward quickly, but do so with caution.** We can't possibly anticipate all the effects from AI, so be sure to put in place a digital ethics framework.

For more insights from Avanade's Technology Vision 2017, please visit:

[www.avanade.com/techvision](http://www.avanade.com/techvision).

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Avanade is the leading provider of innovative digital and cloud services, business solutions and design-led experiences delivered through the power of people and the Microsoft ecosystem. Our professionals bring bold, fresh thinking combined with technology, business and industry expertise to help fuel transformation and growth for our clients and their customers. Avanade has 30,000 digitally connected people across 24 countries, bringing clients the best thinking through a collaborative culture that honors diversity and reflects the communities in which we operate. Majority owned by Accenture, Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation. Learn more at [www.avanade.com](http://www.avanade.com).