



Do what matters



Flag suspicious activity

Detect and prevent fraud



**Banks: are you AI ready?**

## Imagine what you will do with AI

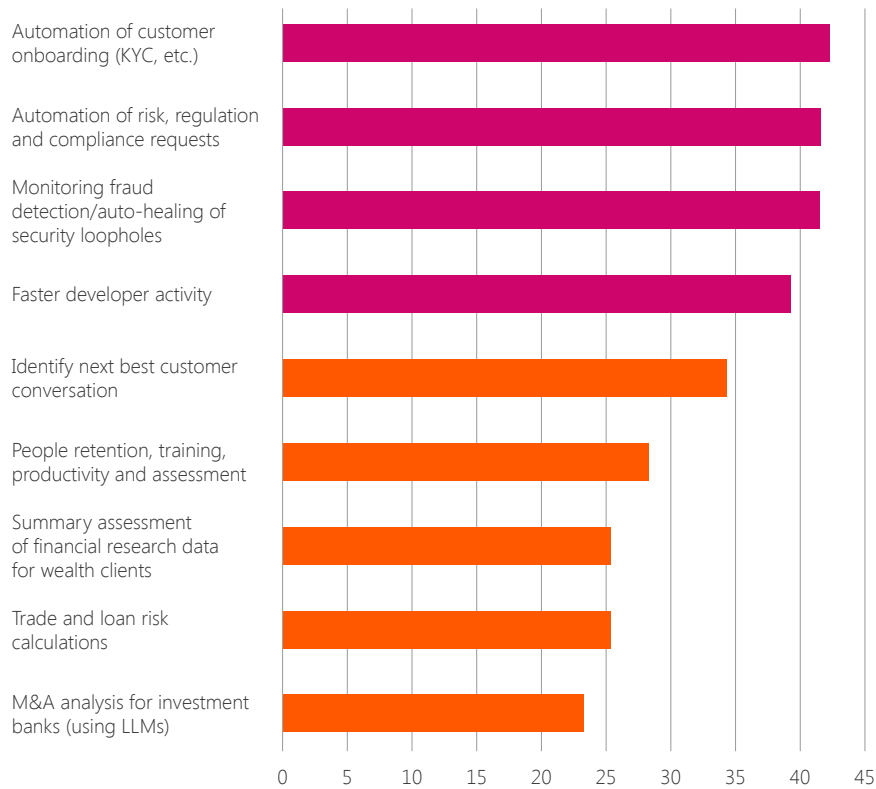
Banks have quickly grasped the benefits of AI for their business. They recognize that faster process automation is vital, especially around responses to the regulator. Improved fraud detection is critical for a business that is constantly assaulted by security threats. Making better credit underwriting decisions will drive profitability. Personalization at scale means greater customer retention and loyalty. And who doesn't want to create key financial documents in record time?

Banks: are you AI-ready?

Avanade's latest [global research](#) found that bankers see automation and efficiency as the key game-changers that AI can deliver. The top three use cases among bank board members are automation of customer onboarding, monitoring fraud detection and automation of risk, regulation and compliance requests. Generative AI could have a significant impact on the banking industry, generating value from increased productivity of 2.8 to 4.7% of the industry's annual revenues – an additional \$200-340 billion<sup>1</sup>.

<sup>1</sup> McKinsey: the economic potential of generative AI, June 2023

### Which use cases are most exciting for you right now? (%)



Source: Avanade Global AI Research, 2023



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However, banks are also familiar with the drawbacks: incorrect information presented authoritatively ('hallucinations'), lack of audit trail ('black box' syndrome), AI's tendency to mirror algorithmic bias and legal and copyright challenges around training data. Demonstrating transparency around responsible AI is an emerging challenge.

An Asia-Pacific retail bank partnered with Avanade to automate its loan approval process. It had 160+ manual steps, 85% of applications contained missing information and it took 7 days for approval. Using intelligent automation the bank reduced turnaround times, increased conversion rates (and revenue) and freed staff to focus on higher value activities.

Because of its lack of predictability and the newness of generative AI, banks are now exposed to greater risk. As part of our research, one US banker remarked: "If you were to insert genAI anywhere along your pipeline, we have to get regulators comfortable. On traditional tasks like Excel analysis, it's straightforward. But if you're doing something which is more customer-facing ... that one time you took the wrong advice and you didn't check the backend data for it ... you can lose your job."

One of the top challenges when it comes to risk is how to manage data and prepare it for AI usage. Banks are large, heavily regulated organizations with complex data structures, often due to a history of multiple acquisitions. Data is kept in a variety of formats and repositories across the business, often in silos and disconnected clouds. You can't build value if your data is inaccessible, poorly organized, low-quality, siloed, or unsecure. To achieve digital transformation at scale, you need to unlock the value of all your data, finding every insight, efficiency and opportunity to put your data to work.

Building and maintaining a strong digital core starts with infrastructure: having the flexibility and scalability of a cloud-based foundation that is secure by design. It means making data accessible and integrating tools like AI and machine learning to inform and improve decision-making across business functions. Lastly, it requires having applications and platforms that are flexible, scalable and are fine-tuned to manage the demands of AI. Datasets should be high-quality and reflect diversity to train AI models and make accurate predictions. Applications are better able to harness AI if they are modernized.

"The operating committee and the board level are not folks who traditionally understand technology. Leadership has excitement about the potential of AI, but don't necessarily understand what it means to be AI-ready.

Many are still struggling with their journey to cloud. Many haven't even completely transitioned to cloud yet, let alone using tech that is cloud-native. (We're) using applications which still need to be modernized to be cloud-ready, let alone have them feed off of generative AI capability." **US banker**

Banks: are you AI-ready?

To make the most of AI, and all its potential, banks need to focus on four key areas:

**01**  
**Getting data ready for an AI-first world**

**02**  
**Make the most of your cloud investment**

**03**  
**Use AI to develop robust security**

**04**  
**Move beyond the mainframe to AI-ready platforms**



Banks: are you AI-ready?



## 01 Getting data ready for an AI-first world

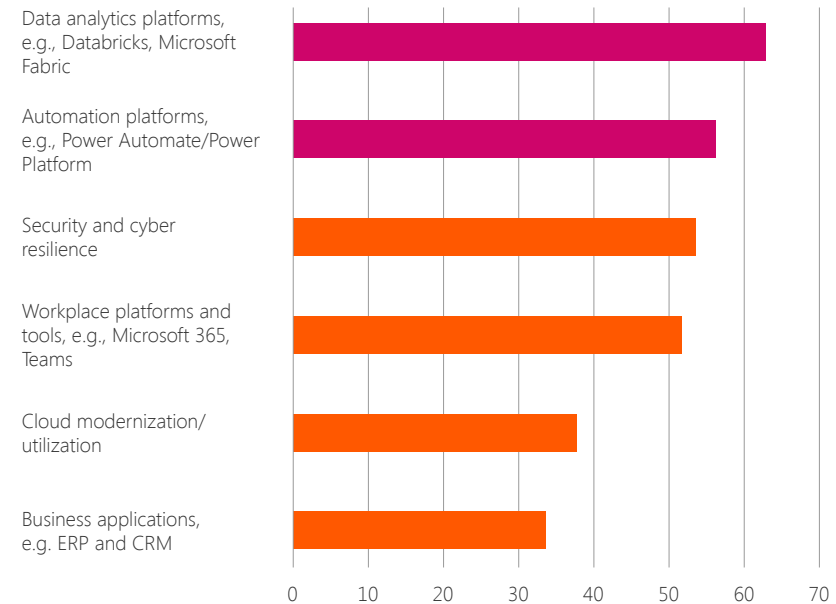
AI needs clean, governed data that is accessible regardless of its cloud location. **Almost two-thirds (63%) do not completely trust the data** their company uses today. **Only 27% completely trust their ecosystem partners** to fully protect their customer data with no concerns. "The data most companies have gathered wasn't for machine learning or AI," commented one European banker in our research. "That data may not be useful." Today many banks have data scattered across disparate systems and formats. Data is often duplicated across a bank. Loading in new data is complex and time consuming.

### Our offer to you:

Let us help you scale your business analytics and AI vision by building on your existing investments. Register for a **Data Platform in 30 days workshop**, where we'll help you create a data migration plan for your bank.

To prepare for AI, our latest global research found banks are making priority investments in data and analytics, followed by automation and security. Our clients are making more use of [data analytics platforms](#), such as Microsoft Power BI and the [Microsoft Intelligent Data platform](#), but still have a fragmented and costly architecture as data needs to be moved through layers and systems. They tell us they want a simplified and unified architecture across data engineering, data science and business intelligence workloads.

### Which digital platforms will be a priority for investment during 2024 to support scaling AI?



Source: Avande Global AI Research, 2023

Banks: are you AI-ready?

A European bank wanted to reduce churn in its mortgage business, increase fraud detection and improve customer lifetime value. We built a customer data and analytics platform. 100+ variables were fed into machine learning models that predicted the risk of mortgage churn and fraudulent credit card transactions. Mortgage churn was reduced by almost 50% over a 6-month period. The client saw a 2% reduction in underwriting fees and a 7% increase in the early detection of credit card fraud.

Microsoft Fabric is a key enabler of AI. It offers a simplified SaaS-based platform that unifies data from different sources via a single, intuitive user interface for the whole organization (no silos). Data security and governance is streamlined while remaining easily available to all who need access. It brings Power BI and the intelligent data platform together into a single environment with generative AI and Copilot infused throughout. This reduces data silos, streamlines costs and minimizes latency and data movement between systems. This allows banks to get value from their data much quicker and improves interoperability and efficiency across different roles and tools.

At every bank, data platforms are the core of better decision-making. Data modernization means that banks can optimize and accelerate the value of the data that surrounds every transaction, process and system that flows through it. With modernized data on a unified platform, banks can scale data science and applied intelligence across the business.



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## 02 Make the most of your cloud investment

For banks that wish to leverage the incredible power and opportunity of AI, machine learning and intelligent automation, the move to cloud has never been more urgent.

Given that **30% of cloud spending is wasted** we analyzed data from over 100 customers across 18 sectors and found that they could save, on average, 22% from Microsoft Azure. When combined with standards, governance and automation recommendations, savings can stretch up to 50%.

### Our offer to you:

**A free, two-hour workshop**, where we share lessons learned from Azure consumption analysis of more than 100 customers and explore ideas for bringing this value to you.

Avanade [Cloud Impact](#) is a dynamic platform that helps banks get the best value from their cloud investment. It uses Azure AI and analytics services to understand your cloud usage, benchmark against external sources, avoid technical debt and unlock funds for innovation. It compares application architecture and consumption patterns with service criticality and change management metrics to proactively identify resilience issues and modernization options. It can assess the impact of your decisions for carbon emission and a more sustainable estate. We've recently helped a major North American bank strengthen their cloud capability, which will help them free up funds through cost savings to invest in generative AI.

A South American bank had a paper-based, labor-intensive loan approval process. Avanade completely digitized the bank's loan approval process by moving the bank to Microsoft Azure. Customers now use computers or mobile devices to upload documents and link credit scores for assessment and approval. New risk-based pricing resulted in 25% savings for underwriting and processing. Pre-check and document handling time reduced from 6–7 days to a few minutes. The bank jumped to first place (from fourth) in market share in five months. Revenue increased by 40%, with \$400 million in new loans generated.

### Typical examples include:



The model your application team selected for storing performance data in Azure is costing you nearly \$50,000 a year more than it should.



20% of your backups are for systems that no longer exist and don't need to be retained.



Half of the apps in your newly acquired technology estate are using Azure services that are now end-of-life.



## 03 Use AI to develop robust security

To harness generative AI securely and respond to emerging threats faster, banks need to transform their security operations. Cybercrime has doubled from \$3 trillion in 2015 to \$6 trillion in 2021. The IMF reckons that cyberattacks are leading to \$100 billion in losses for financial institutions. The threat surface is expanding. Whether it's supply chain attacks or third-party risk, the rise of ransomware, increasing cyberfraud, insider threats due to remote working or the impact of emerging technologies on encryption, banks need to protect themselves and their customers.

### Our offer to you:

Find out more in our [banking and cybersecurity guide](#), learn about the work we have done for [AIB](#) and [register](#) for a security workshop.

AI is fundamentally reshaping the cybersecurity landscape. This has led to a comprehensive re-evaluation of risk profiles and investment strategies. The key issues are how to secure generative AI and using generative AI to improve security.

To provide secure generative AI, banks can explore and test new capabilities, such as Microsoft Security Copilot, to improve the ability to detect and respond to cyber risks and how it may help to address cyber skills shortages.

Banks can identify risk areas that drive AI security use cases of the highest value, such as advanced fraud detection or Large Language Model-powered security assistants for employees. Banks can adopt a secure by design approach from the start to ensure resilience against compromise or unintended data leakage.

This could include embedding Security Copilot into your detection and response capabilities. Or increase capability in your Security Operations Center across multiple areas, such as vulnerability management, threat hunting, reporting and security guidance. Banks should leverage OpenAI to power new security capabilities, such as enhanced fraud detection.

Microsoft has 90 of the Fortune 100 using four or more of their security, compliance, identity and management solutions. In 2020 Microsoft blocked almost 6 billion threats on endpoints and over 30 billion email threats.

## 04 Move beyond the mainframe to AI-ready platforms

Almost **90% of the top 100 banks** still use mainframes to run complex and monolithic workloads related to core business processes. But these systems are highly customized, difficult and costly to maintain, challenging to adapt to business changes, and often approaching end-of-life support. As long as your data is locked away in legacy, the AI opportunity cannot be realized. Legacy platforms are not suited to transformation.

### Our offer to you:

Find out more about our approach to **mainframe modernization** and learn how to structure and shape your modernization program.

Many banks are moving away from legacy data systems to modern data, analytics and AI platforms. [Accenture](#) research found that 82% of banks have the goal to migrate more than 50% of mainframe workloads to the cloud. Most of the banks that intend to operate almost entirely in the cloud (workloads higher than 75%) are planning to achieve their goal within the next five years.

Assessing the benefits and capabilities to select a new modern platform architecture is no easy task. Historically, banks have combined a myriad of technologies to support specific data and analytics roles. This came with the consequence of high integration costs and the complexity of managing teams of experts across different technologies. These challenges are turning legacy mainframes into bottlenecks that are slowing down innovation and limiting banks' ability to move some applications to the cloud.

A European bank wanted to boost its digital customer service, route customers to the right employee (agent/bot) and support the future conversational needs of its customers. We built a platform creating hundreds of conversational flows for text and voice scenarios. The bank is now enabled with a natural language and voice-driven capability to process customer inquiries in real-time, conversational flows using a low-code conversation AI platform and an increase in its self-service rate, freeing up its call center agents for more complex calls.

Banks: are you AI-ready?

With AI-driven code improvement, specific areas within the [modernization](#) path can be greatly enhanced when used alongside specialist mainframe modernization software. Generative AI can help developers to quickly assess, update, validate and priority test sections of code. Combining the use of mainframe modernization software and AI-driven code improvements allows banks to efficiently improve large applications and focus on higher impact tasks. Well-designed experiments are demonstrating that the use of Large Language Models during legacy refactoring is quickly becoming a useful additional tool in the developer toolkit. Generative AI's natural-language translation capabilities can be used to optimize the integration and migration of legacy frameworks. Generative AI tools with COBOL- and Java-capable foundation models enable banks to further improve developer productivity.

"AI will lead to task – not job – displacement. The challenge is for each knowledge worker to be told enough about AI so they can themselves displace the tasks that they don't want to do." **European banker**



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The advent of AI will provide new opportunities for banks. However, it will also increase risk, which needs to be mitigated, and put pressure on data management within the business. As ever, to realize the benefits of AI banks cannot simply focus on data platform modernization. They will have to assess other elements of the business: the move to cloud, the state of the applications portfolio and the appetite to retire legacy systems.

Banks will have to integrate tools like AI and machine learning to improve decision-making. They will need applications and platforms that are flexible, scalable and ready to manage the demands of AI. Data must be high-quality, well-governed and secure in order to train AI models and make accurate predictions. Applications can deliver much more to your business with AI, but they need to be modernized. The goal is to unlock value from all your data to harness the power of AI.

**Imagine what  
you will do with AI.  
Are you ready?**

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# Let us help

The Avanade AI Organizational Readiness Framework provides a comprehensive assessment of your bank's business and IT functions. It offers detailed insights into AI readiness across people, processes, and technology, enabling leaders to prioritize responsible actions for leveraging AI's benefits. Find out more about Avanade's [generative AI strategy workshops](#).

## Specifically for AI, we have the following options:



### **A two-hour workshop:**

this includes introduction to generative AI and the Microsoft portfolio plus a use case overview based on OpenAI. Identify questions and brainstorm use cases for your industry.



### **A two-day workshop:**

this is a deeper dive, using design thinking, to prioritize use cases, explore customer journeys and build trust.



### **Two weeks proof of concept (PoC) or a two-month minimum viable product (MVP):**

directly build a PoC or MVP to prove the technology and value for one use case.



### **Six weeks strategy assessment:**

this will help define data readiness and multiple complex use cases. We will review use cases through responsible AI frameworks, including roadmap definition and return on investment.



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# Avanade was made for this

Avanade is a recognized leader in delivering Microsoft solutions to banks. We are uniquely placed to help you safely navigate uncertainty and thrive in an AI-first world.

Avanade has partnered with Microsoft on AI for almost a decade and hundreds of clients rely on us to help them responsibly innovate and work with AI to achieve things never possible before.

Our privileged access to the development of Microsoft's new copilot solutions, combined with our long-standing experience of how to make the most of your existing Microsoft investments, enables us to bring unique capabilities to help you more quickly ready your people, processes and platforms for AI and to responsibly scale AI to unlock more value and growth and transform your business.

[Contact us today.](#)

## Industry expertise

**13 of the 20**

top global banks are clients

**Trusted by 85%**

Microsoft Azure is trusted by 80% of the world's largest banks and 85% of GSIFIs.

**Over 60%**

of the top 100 banks are clients

**600+**

Financial Services clients

## Data and AI capability

**40,000+**

Data & AI professionals

**20,000+**

Years of data management experience

**4K**

Data scientists

**6**

4 Data Innovation Centers  
+ 2 Data Studios

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#### About Avanade

Avanade is the leading provider of innovative digital, cloud and advisory services, industry solutions and design-led experiences across the Microsoft ecosystem. Every day, our 60,000 professionals in 26 countries make a genuine human impact for our clients, their employees and their customers. Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation. Learn more at [www.avanade.com](http://www.avanade.com).

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