



Banking, building societies and credit card sector overview



Attracted by a vast array of use cases, banking is an industry that has become fixated on Artificial Intelligence. From fraud detection to onboarding to account management, AI is bringing significant improvements to both customer service and operating expenses. It is potentially the next big growth engine.

Banking leads the way in adopting AI technology

Our AI adoption index shows that banking is the most advanced sector when it comes to implementing AI and ML technologies. The key use cases are fraud detection and cyber security, areas where AI can quickly detect patterns and prevent fraudulent activity.

Unfortunately, it is also a tool available to fraudsters – an AI arms race is underway as banking organisations seek to stay one step ahead. As a result, it is critical that banks consider the risk and control environment within which they will deploy AI solutions, to ensure adequate protections are in place to mitigate these risks.

As a virtual co-worker AI is rapidly removing mundane tasks from banking colleagues, ensuring that they have more engaging and satisfying jobs.

Colleagues are moving from managing physical workers to being responsible for virtual workers – a whole new skill set is required and banks are having to rethink how they train their people when it comes to managing virtual colleagues.

Improving banking operations

According to a survey from The Economist Intelligence Unit, 77% of bankers believe that the ability to unlock the value of AI will be the difference between the success or failure of banks¹.

Global banking organisations have identified over 100 potential areas where Generative AI can bring significant benefits. Early implementations show it is enabling relationship managers to concentrate on clients rather than paperwork. It is enabling relationship managers to radically improve their understanding of the customer and suggest potential ways of improving the clients' financial circumstances.

¹ <https://www.forbes.com/sites/forbesbusinesscouncil/2023/03/20/the-future-of-ai-in-banking/?sh=41d3bd485ed5>

AI is automating many routine tasks, such as account balance inquiries and password resets, freeing customer service representatives up to focus on complex issues. It will increase efficiency and reduce costs for banks while providing faster and more accurate customer support. And all of this would be available 24/7, making it easy for customers to get help by answering questions, resolving issues, and providing financial education outside of regular business hours.

The more efficient the bank becomes the more opportunities for creating value for the customer.

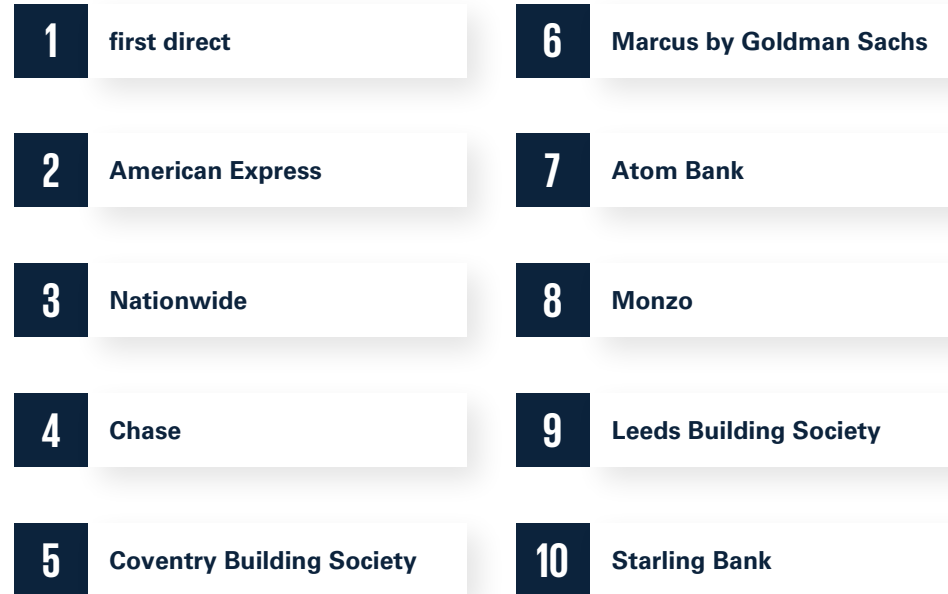
Delivering a personalised experience

AI can accelerate benefits from data science, analysing customer data to understand preferences and needs and use this information to provide personalised service and support to users, addressing their queries and concerns in real-time. Banks could also use AI models to provide customised financial advice, targeted product recommendations, proactive fraud detection and short support wait times.

AI can guide customers through onboarding, verifying their identity, setting up accounts and providing guidance on available products. It is moving the complicated process of onboarding to the next level, ensuring compliance with a multitude of policies and procedures to ensure that it is auditable and consistent with the risk appetite of the organisation.

Top 10 banking organisations

With five organisations in the UK top 10 and twenty organisations in the top 100, UK banking is achieving high levels of customer experience delivery.



As they recover from the impact of the pandemic on their customer service model, first direct return to number 1. They have been in the top 3 organisations in our index 12 times in the past 13 years.

first direct have introduced AI enabled banking through Autopilot. This is an AI-powered function that works in the background of the app to enable and

support customers at a level they want, for example, by making personalised recommendations and automating activities such as topping up savings accounts. It is designed to anticipate and respond to their customers' needs in real-time and has enabled first direct to make significant progress along its 5-stage process.

Amex have been very careful and highly selective in their approach to AI, identifying use cases that sit naturally with their day-to-day business operations. Amex is evaluating ways LLMs can analyse feedback and customer service inquiries - as well as comments on social media - to develop appropriate and helpful responses to customer questions and concerns.

Perhaps their largest implementation is in fraud detection. Years in the making, Amex's newest ML model for fraud detection, "Gen X", was developed using billions of observations and executes a sequence of more than 1,000 decision trees. As it automates over 8 billion decisions, ingests data from over \$1T in transactions, and generates decisions in mere milliseconds, it is believed that this was one of the largest AI implementations in a commercial business at the time of launch².

² <https://www.aidataanalytics.network/data-science-ai/articles/3-ways-american-express-is-using-ai-to-stay-ahead-of-disruption>



Nationwide is carefully and methodically applying new technology to improve existing processes and deliver higher customer satisfaction. One area under focus is resolving a major issue for banks, namely ID verification. This is a major pain point for customers where historically it has been necessary for customers to present themselves physically to a branch to verify identity.

Nationwide needed the flexibility to open and manage accounts online without the use of a physical bank branch. Nationwide's usage of AI allows exactly this, offering a "fast, convenient" online application process for customers. Working with a specialist partner, Nationwide utilises a proprietary mix of AI, machine learning, and other advanced technologies to determine if an identity document is authentic and belongs to the user³.

The application seamlessly integrates with Nationwide's existing workflows to determine if applicants are who they say they are, and allows Nationwide to make an informed decision about the applicant based on a variety of powerful fraud signals.

³ <https://bdaily.co.uk/articles/2022/02/02/nationwide-integrates-ai-technology-into-banking-platform-to-streamline-security>

"Nobody needs convincing about the benefit of AI, or indeed the number of use cases. The hesitation is to what extent AI requires a significant business model change rather than trying to speed up existing processes".

Paul Greenan, Partner, Customer and Operations - Banking

kpmg.com/uk

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organisation.

CRT149410 - December 2023