Six AI technologies set to define the future of banking

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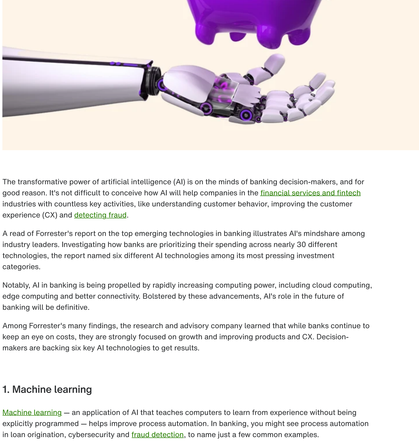

The transformative power of artificial intelligence (AI) is on the minds of banking decision-makers, and for good reason. It's not difficult to conceive how AI will help companies in the financial services and fintech industries with countless key activities, like understanding customer behavior, improving the customer experience (CX) and detecting fraud.

A read of Forrester's report on the top emerging technologies in banking illustrates AI's mindshare among industry leaders. Investigating how banks are prioritizing their spending across nearly 30 different technologies, the report named six different AI technologies among its most pressing investment categories.

Notably, AI in banking is being propelled by rapidly increasing computing power, including cloud computing, edge computing and better connectivity. Bolstered by these advancements, AI's role in the future of banking will be definitive.

Among Forrester's many findings, the research and advisory company learned that while banks continue to keep an eye on costs, they are strongly focused on growth and improving products and CX. Decision-makers are backing six key AI technologies to get results.

1. Machine learning

Machine learning — an application of AI that teaches computers to learn from experience without being explicitly programmed — helps improve process automation. In banking, you might see process automation in loan origination, cybersecurity and fraud detection, to name just a few common examples.

In 2021, according to Fintech News, financial institutions spent more than $217 billion on AI applications to help prevent fraud and assess risk. Financial services brands are also deploying these technologies to deliver a more personalized customer experience, serving up relevant suggestions and content related to a customer's questions and behavior.

The Forrester report found that 37% of respondents using AI in financial services said improved operational efficiency was a benefit, and 33% said improved CX was a positive result.

2. Computer vision

Computer vision, also known as machine vision, is significantly impacting the financial services industry and could be a $17 billion market by 2027, per Research and Markets. This AI technology trains machines to capture and interpret information from images and videos, understand the context and take appropriate actions.

Using computer vision, financial institutions can automate data extraction from documents and reduce the need for human review. Computer vision can also confirm a customer's identity through Know Your Customer (KYC), reducing the time it takes to complete the KYC process from hours to minutes; support cashless transactions via mobile wallets on smartphones; and improve security procedures through intelligent surveillance cameras and biometric security.

3. Natural language processing and natural language understanding

Natural language processing (NLP) is a branch of AI that helps computers understand how humans write and speak. Its subset, natural language understanding (NLU), helps machines understand text through its grammar and context.

These technologies can help banks identify transaction anomalies, extract information, gain insights, streamline manual tasks, prevent financial loss, reduce risk and improve customer experiences. The automation that comes from NLP and NLU also helps banks to save time and reduce human error.

Forrester found that 23% of financial services respondents using AI in banking use NLP and 19% use NLU. That may be the case today, but given the tech's inherent potential, its use can be expected to rise. For example, one financial services company created an AI-enhanced virtual assistant that uses NLP to answer more than 100 potential customer questions, ranging from account details, to how to buy a home.

4. Deep learning

Deep learning is a subset of machine learning that attempts to simulate how the human brain learns from large amounts of data.

Deep learning in finance and banking enables virtual assistants to answer questions, automate common actions and suggest products for specific customers. It can reduce costs by quickly identifying suspicious transactions and can use unstructured data, such as Google Street View images, to check that a business exists or to perform other compliance checks. There is an impressive amount of power and potential to deep learning algorithms; the technology is even helping banks to assess credit risks and loan requests.

Financial firms can use deep learning to convert unstructured data from companies' annual reports into machine-readable data. What's more, the technology can be used to make predictions and classifications on structured data such as stock market data — meaning that automation could have a growing influence on the future of trading.

5. Natural language generation

Natural language generation, another subset of NLP, enables a computer to transform data into a written, natural language text response. Through natural language generation, an algorithm can generate regulatory reports and summaries of long documents and huge datasets.

You may have heard of natural language generation tools like ChatGPT, which garnered a lot of attention toward the end of 2022. For firms, these tools are generally not yet used without human oversight, but hybrid approaches are already ushering in increased efficiency.

6. AI-powered robotic process automation

Robotic process automation (RPA) uses applications to do repetitive, rules-driven work in banking, such as sending emails and online applications, and copying and pasting information from one system to another. Using RPA in banking helps financial institutions automate repetitive manual processes so employees can focus on those that are more involved.

In one example, a global company achieved impressive results after implementing an RPA solution with the help of TELUS International. Within the company's contact center, the RPA solution decreased average handle time by 22% and increased call capacity by 35% — and the initial development took only two weeks.

The right tech increases efficiency and scalability

With AI technologies, the foundations of a brighter future for banking can be built today. For success, it's critical to align your vision with the needs of your customers, and to partner with capable companies that can help bring that vision to life.

TELUS International's AI Data Solutions help financial services and fintech companies test and improve machine learning models with an AI community of more than a million members, as well as a proprietary training platform that handles all data types across 500+ languages and dialects. If you're setting up to redefine the future of banking, we have a habit of working with the world's most innovative brands. Contact our team of industry experts today.

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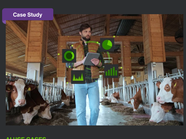

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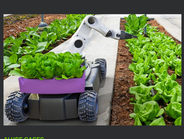

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