

How AI is changing banking

Robert Hazboun, Managing Director of ICS Financial Systems explains what AI offers and what banks need to consider

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ICS Financial Systems (ICSFS), is a leading provider of modular, core banking systems. Robin Amlôt discusses how banks should come to grips with artificial intelligence (AI) with the company's Managing Director, Robert Hazboun.

What are the key factors that need to be considered by a bank looking to implement AI?

With no room of doubt, AI is a game-changer and it will revamp the way we used to do banking, especially in the midst of mandated lockdowns due to the Coronavirus pandemic.

Three key elements banks need to consider when implementing AI in front, middle and back office:

- First of all, high performance and secure digital backend. AI needs access to large amounts of quality data that it can collect, analyse, and make decisions upon. The data needs a highly secure and low latency connection to provide the results on time.
- Another key element is the workforce skills. As AI will replace many human repetitive tasks – many jobs in banking will be lost to AI; bank employees should be re-skilled and embrace AI to focus on adding value to clients by helping AI to provide targeted and personalised results.
- And the underline major factor for all of this to work is privacy and security: AI should respect data privacy and security and comply with standards like GDPR, PCI DSS & PSD2.

AI offers powerful functionality but will only be successful if the data it is working on is accurate – what do banks need to do to ensure the quality of their data?



Robert Hazboun, Managing Director, ICS Financial Systems

High data quality is a keystone of AI. It ensures more accurate algorithms, helps mitigate the potential bias and discrimination in many AI-enabled financial products, and delivers greater value to customers. To avoid bias at the product level, banks should actively build diversity into the data teams defining goals, roadmaps, metrics, and algorithms. Before launching any AI product, it is vital to develop data quality assurance practices to realise the best return on investment (ROI).

How does AI enhance user experience and customer engagement in banking/financial services?

AI is enriching customer and user experience (CX & UX) through

personalised data insights and providing the right recommendations based on customer behaviour. Recently, conversational AI played a major role in boosting CX like its common form of chatbots with underlying technologies that include natural language understanding, generation, and processing (NLU, NLG, and NLP).

Most customers' first experience of the use of AI by a bank is engaging with a chatbot but are there limits on what this experience can deliver?

Chatbots are extremely efficient and can substitute humans in various interactions between customers and their banks, but at the end, chatbots understand human context to a certain extent with near-zero decision-making and research skills, and most importantly with no emotions. Data availability and data explainability remain top-rated challenges.

How can AI be leveraged to present customers with personalised solutions and product offerings?

Providing customer personalisation is a key aspect of adopting AI in banking that goes beyond just enhancing customer experience, but moreover, to develop effective customer engagement that provides the right recommendation at the right time, based on customer behaviour. Personalisation is meant to create a memorable and value-driven customer experience for the bank's customers and to generate new revenue streams for financial institutions whilst reducing operational costs.

Turning to the way bank employees engage with AI, what is the employees' experience of AI and how does it benefit the middle and back office activities?

For middle office activities, AI technology helps process more work at a lower cost. Identifying exceptions is one example of AI helping employees become both better and faster at their jobs such as know-your-customer (KYC) regulatory checks, hence AI should make bank employees' jobs easier and more efficient. Enhanced cognitive technologies specifically for fraud detection and credit approvals have been used for back office functions. Back office functions can use AI to detect anomalies and exceptions, they can serve as a second eye to make sure that processes are proceeding as they should be, hence AI is providing faster solutions

What can AI do to monitor and protect both customers and the bank in fraud management and anti-money laundering?

AI combined with cognitive computing such as machine learning can be used to implement effective anti-money laundering (AML), know-your-customer (KYC) regulatory checks and fraud protection procedures, where it can compare customer transactions and provide a quicker and more detailed assessment of the legitimacy of the transaction. Additionally, AI should be properly deployed by humans,

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and always be up-to-date with the latest regulations to receive effective results and progress.

What other technologies should be in place alongside AI to ensure successful implementation?

With AI hype everywhere today, many technologies are being utilised to ensure successful implementation of AI products such as Machine Learning, (ML), Deep Learning (DL), Natural Language Processing (NLP) and Computer Vision to interpret and understand the visual world like detecting emotions and measuring temperatures.

In general, banks should embrace the enormous capabilities of the available cognitive technologies, where top management should have a roadmap ready for renovating their customers' engagement and reducing time to market of new products and services.

How does a bank make sure that AI is carrying out tasks correctly?

Having Explainable AI (XAI) in the stack of financial processes is key for banks to make sure that AI is carrying out tasks correctly, and on the other hand in explaining AI decisions to customers and regulators to avoid bias and discrimination. Bank employees should serve as a second eye to make sure that processes are proceeding as they should be, and to build a collaboration model between AI and bank employees.

What should we expect in the evolution of AI in banking – what new developments may we see over the next few years?

As it is obvious and stated in many reports, AI is becoming the primary channel through which financial institutions and their customers are interacting. The reality is that AI is already transforming financial products and services such as chatbots, already leveraging customer service –as it will always be an integral aspect of financial services. Whereas money laundering and fraud detection will always be a priority concern for the banking sector, AI and ML are helping in designing algorithms to monitor suspicious activities. Process Automation and RPA are now key drivers for human tasks' automation. Finally, we will see banks increasingly incorporating AI with RPA to create more complex automation products.