

# KYC gets a boost from the bots

Michael Leung Kin-man is a banking industry veteran. CEO of the BOA International Financial Group, Leung has been in the business for over 30 years and held senior executive positions at many of the world's leading banks.

Despite a wealth of experience in banking operations, Leung has always had a passion for technology, having come from an IT background. He's looking to design processes and solutions for the world's top digital and virtual banks, a mode he believes to represent the future of banking.

Leung decided to pursue a DBA from CityU because he wanted to learn how to digitise and enhance the KYC (know your customer) process, the first thing to do when bringing customers on board, using AI and machine learning technology. He was able to do that under the guidance of his supervisor, Professor Ma Jian,

one of the world's top information systems research scholars. Leung studied and tested 10 machine learning models, and used the findings to devise an innovative approach to meeting the requirements of industry regulators.

"The essence of KYC is knowing about your customer in terms of value and risk," Leung explained. "In a typical onboarding process, customers have to submit a lot of things: identity and address proof, income statements, and then the assessment is done largely manually by KYC specialists. It's a long and cumbersome process," he elaborated. "It's so important in our case because we hardly ever meet the customer per se."

Leung said that there are machine learning models that can produce KYC results with over 90 per cent accuracy – plus, the process is instantaneous, free and available 24 x 7. The downside is

**Michael Leung Kin-man's research focused on "know your customer" processes**



that the more accurate algorithms are often lacking in transparency and explainability.

"Regulators and customers won't just accept 'yes' or 'no' as an answer: you ought to be able to explain, for instance, why you are not able to open bank accounts for any particular customer, or process any particular transaction, due to this or that reason," he continued.

According to Leung, there

are machine learning models such as Random Forest and Neural Network that are high in prediction accuracy, whereas some others such as Decision Tree and K-Nearest Neighbours have higher transparency and explainability. By devising a new approach that balances accuracy and explainability, human KYC experts can instead focus their time and energy on borderline cases, where they're most needed.