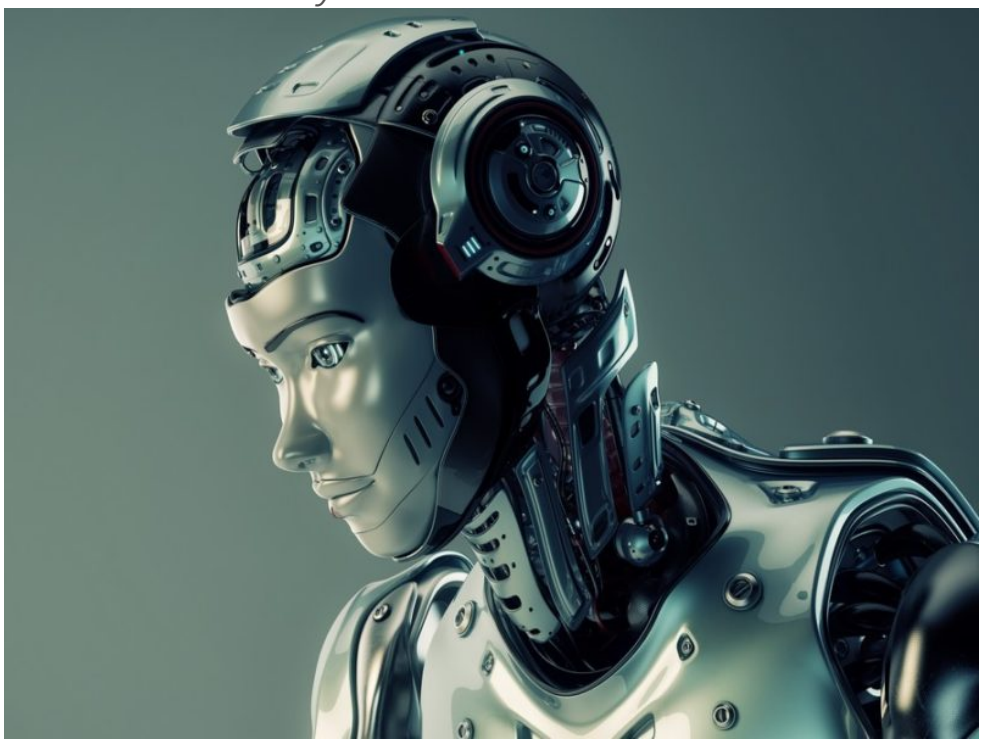
How AI-powered platforms can disrupt the banking system

24TH AUGUST 2016 *by* **SPEAR'S**



From personalised recommendations to fraud protection, the data-crunching powers of artificial intelligence are changing the face of financial services, writes Alexey Utkin.

The past few years have seen a number of exciting advances in artificial intelligence (AI) which could change the way customers interact with financial services. Examples are the evolution of predictive analytics, recommender systems, anomaly detection, decision trees, computer vision and voice recognition. These have enabled delivery of an industrial-scale personalisation and automation of various processes in the financial services industry.

The majority of financial services are still aimed at specific financial products, meaning it falls to customers to analyse their own situation and then research which products they should be using. Alternatively, they have no choice but to use expensive professional advisers to guide them through the thicket of choice.

AI can help deliver a relevant, personalised financial service or dispense advice to a consumer. This advice or product offer can be customer-centric — delivered within the context of a particular customer situation or behaviour, or even a current location.

An AI-powered system can help users with initial personal financial planning, but once it has done this it can also them help choose the best financial products available to put the plan in motion. AI can take into account a range of factors, from the companies you favour to those which are in line with your risk/reward appetite. Automation, including that delivered with AI, will bring personalised experience, with a wider coverage at lower staff costs.

Many believe that customer age is a major factor in whether AI is useful. A significant portion of millennials actually prefer a digital or mobile experience to face-to-face. However, a recent study by Catalyst Pro Group indicates that human connection is still valued by millennials. I believe it depends on context. For routine matters such as payments, statements, loan approvals, most people, especially the younger demographic, prefer not to have to make a trip to a bank or even having to have a telephone conversation. However, when it comes to larger, potentially life-altering decisions and where trust is involved — say, for mortgages or financial advice — face-to-face will work better, even if it is just a proxy to some AI-powered system, which can take more data into account than a human being and come up with better and more relevant advice.

A major benefit of AI-powered processes is that the lower cost will improve access to financial services and advice for a wider population, and extend accessibility to those who were previously shut out because of cost.

Two areas that will massively benefit from AI are fraud detection and credit scoring. Currently, in the case of fraud checking, anti-money-laundering (AML) and 'know your customer' (KYC) are not always well delivered. Fraud is often left undetected. Credit scoring is frequently not in line with a default probability due to lack of data and can cause unnecessary friction — for example when your credit card is blocked after a first coffee in an airport on your holiday trip. These areas can certainly benefit from the increased ability of AI to detect patterns or find anomalies, taking more data into account.

Biometrics/voice and face recognition is another area of huge innovation, which will be integrated to the digital channels of financial institutions and deliver better security and customer experience.

Robo-advisory, such as Schwab Intelligent Portfolio, is certainly making wealth management more accessible to less wealthy customers. It is still the case that the personal experience is beyond the budgets of most less wealthy customers. For this group of people, it's robo-advisory or nothing. Robo-advisory today is not necessarily powered by AI, but in the long term AI will evolve to make engines that deliver a quality comparable with the expertise dispensed by many of today's financial advisers.

AI can take more data into account and can, ironically, offer more personalised insights. However, what it cannot deliver is intuition. The 'gut-feel' of a highly experienced adviser will be absent. It is quite possible that top-tier clients will be provided with the best of both worlds and will have access both to

experienced advisers who themselves will use AI-powered systems to increase the quality of their advice.

Recommender systems — the type of information-filtering AI that stands behind things like Amazon or Netflix suggestions — revolutionised the retail marketplace. Customers have a footprint of data — about them, their situation, their behaviour. All that data, when aggregated, allows you to come up with the most relevant suggestions for the benefit of the customer, filtering out irrelevant noise.

AI can deliver stronger business performance via smart, predictable analytics and cost efficiencies by speeding up and automating thousands of manual, paper and human processes that every financial institution currently has to staff and fund today. An example is Rainbird, an AI system that supports business operations, including customer service and decision-making. Another system is Nuance, a virtual customer services assistant. Fingenius uses AI for data analytics and natural language processing for banking and insurance use, including intelligent customer question and answer systems.

Challenger banks are likely to move ahead with AI that will be a factor in disrupting the banking system. However, those established banks that are progressing with their digitalisation programmes are also looking into AI-powered business process automation and predictive analytics. It is quite likely that some incumbent big-name banks will partner with innovative fintech companies, bringing new AI-powered capabilities into their offerings.

A few years ago it was a common belief that, since mobile operators often have more customer data (gathered from calls, location capture, site visits and so on), they could build better analytical systems powered by machine learning and deliver more relevant services, including financial services and products. Then, it was believed the mobile operators would mount a serious challenge to incumbent banks. However,

evolution did not go this way and most banks now have mobile apps and are able, with their customers' permission, to collect and use just as much data as the mobile operators, integrating with other apps that customers use on their phones. A real challenge for an incumbent bank is to bring all this valuable data into a single platform to be able to analyse it. Challenger banks, with newer systems built from the ground up, may have the edge.

Original article — http://www.spearswms.com/ai-powered-platforms-can-disrupt-banking-system/