Yachts make way for bots

***David Birch** believes artificial intelligence will become the most important technology over the next 15 years and says we need to get ready for the rise of the bots*

The Centre for the Study of Financial Innovation (CSFI) was asked by the multinational law firm Dentons to put together a series of "horizon-scanning" events, each looking at the major factors that will determine the shape of the financial services sector over the next 10-15 years. I was among those taking part and my main observation was that artificial intelligence (AI) is the most important technology in that timescale.

Forrester, a market research company that provides advice on the impact of technology, has predicted that a quarter of financial sector jobs will be "impacted" by AI before 2020 and John Cryan, chief executive of Deutsche Bank, was quoted in the *Financial Times* in September 2017 saying that the bank is going to shift from employing people to act like robots to employing robots to act like people. Wow. The impact on employment is obvious, but we cannot hold back the tide so we must take advantage of the changes and begin to explore new opportunities that can be built around a more productive financial services sector.

But what opportunities? Just as physicists cannot see inside the event horizon that disrupts space-time around a black hole, so AI is a similarly disruptive event horizon that prevents us from seeing the future of financial services. Something that is hidden from us by that event horizon is the impending and under-investigated AI-on-AI action that will form the nexus between financial institutions, regulators and customers.

When you talk about AI in banking, people tend to think in terms of robo-advisers and chatbots, focusing on the use of AI by financial institutions to either cut costs or deliver new services. But, to paraphrase Fred Schwed's 1940s' classic financial services book, *Where Are the Customers' Yachts?*, where are the customers' bots?

This is a key question about the future of financial services. If you think about it, customers will have access to AI just as powerful as the banks'. The banks do not have the exclusive use of this technology – it will be available on demand to everyone else as well. The customers' smartphones will connect them, permanently, to an intelligence far greater than their own or their bank manager's.

Therefore, if a bank is trying to sell me a mortgage or a credit card or whatever, it is wasting its time showing me gibberish advertisements involving astronauts riding horses, or whatever the last one I saw was. Brand, as a substitute for incomplete information, becomes meaningless.

My bot is going to negotiate with the bots of the regulated financial institutions to obtain the best product for me. It is not going to be swayed by the logo or the branch design or a double-page spread in the *Financial Times*. It is going to be swayed by price and performance. But I do want some sort of confidence that there is a regulator involved to ensure that the bot is doing its best on my behalf.

Perhaps the regulators will have a list of "authorised" bots, much as they have lists of authorised financial advisers now. Should I choose the Saga bot or the Virgin Money bot or the

> "*My bot is going to negotiate with other financial bots to get the best product for me*

best-performing bot over the past 12 months or the Google self-taught super intelligent bot that is also the world Go champion? But what if the super-intelligent learning bot outflanks the regulator's super-intelligent learning bot so that the regulator thinks that the bot is acting in my best interest but actually it is acting in the best interests of Kim Jong-un or Facebook? As the economist Diane Coyle pointed out in the *Financial Times* last year, it may be that transparency is the key to making this work. ('Luckily, Bots' Conquest of Knowledge is Not Yet Complete', *Financial Times,* 26 January, 2017).

My head hurts. How the banks' bots will interact with the customers' authorised robo-representatives is both fascinating and frightening – not for customers, but for the banks that are unable to deliver the cost-effective products and services that their robotic representatives will demand. ■

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