Man, money and machines: How consumers can benefit from the Cyber Society

How can behavioural science, data science and technology best serve our financial lives? Questions for a distinguished panel of economists, professors and opinion formers at a major ING-sponsored conference in Amsterdam. **By journalist, Jeremy Gaunt**

A life-long relationship with customers

It has come at a breath-taking rate, but we are now firmly in a world in which huge amounts of data are being vacuumed up by artificial intelligence (AI) programs to persuade us what to buy, wear, eat and invest. The question is, how can people benefit from this Cyber Society and what role, if any, do banks and others have in making sure it all works properly?

Such was the issue before a panel of experts who met on July 9 under the auspices of ING's Think Forward Initiative and the Amsterdam Innovation District. The locale – the Amsterdam Science Park – was more than apt; it is a container village of high-tech start-up businesses.

"We need to think how we can mobilise social cohesion to help people," said Mark Cliffe, ING's Chief Economist, noting that studies suggest banks are still fairly well trusted by consumers when it comes to money management. "We should focus on building a life-long relationship with customers", he told the conference.

Mark Cliffe

Too much data?

Banks are increasingly looking to their data sets to see how they can inform themselves and their clients about what financial steps to take, be it through so-called robo-advising, payment apps or simply designing new products. ING's Chief Analytics Officer Görkem Köseoğlu said that more efforts should go to better understanding the drivers of financial decisions. But it is far from straightforward.

The meshing of AI with so-called Big Data has raised a number of problems, mostly not to do with the technology itself but with use. Paul Ormerod, an economist and visiting professor at UCL, for example, showed a) how there was sometimes too much data to be useful and b) how consumers could easily be influenced.

> *The meshing of AI with so-called Big Data has raised a number of problems*

In the first case, Ormerod noted that simply typing "mobile phone" into a Google search threw out about 155 million results or data points. In the second, he cited earlier studies that showed how knowing what others had chosen had led to "a phenomenal difference" in the music downloaded by a test group of students. But he also showed how useful huge swathes of data could be, tracking the mood of Londoners based on an analysis of positive and negative tweets on Twitter. AI, Ormerod concluded, was good at picking up patterns, but pretty much useless at everything else. Essentially AI can not interpret, even though in the popular mind it may be seen that way.

Gerd Gigerenzer, German psychologist

Machine-human collaboration

In a similar vein, Professor Gerd Gigerenzer, Director of the Harding Risk Literacy Centre at Berlin's Max Planck Institute for Human Development, noted a difference between risk and uncertainty – the former essentially knowing what could come, the latter not knowing. AI performs best in the first case, but humans have evolved to understand the second and machines haven't. "We need to have a good machine-human collaboration," he said.

Gigerenzer believes behavioural scientists and others make things too complicated. He prefers a heuristic – basically a rule-of-thumb – approach to finance and other sectors, eschewing vast amounts of data analysis. "It pays to try to find a simple solution – and it saves you lots of money," Gigerenzer said, swimming against the tide of Big Data. He cited cases where making an informed heuristic forecast had proven more accurate than a complex analysis – something he dubbed the "Less-Is-More Effect".

Professor Gina Neff, a sociologist with of the Oxford Internet Institute at the University of Oxford, focused on some of the misuses of Big Data by AI programs, or at least misuses by the people seeking to interpret what they were given by AI. In one infamous case, New York City police tried to find a suspect who looked like Woody Harrelson by running the actor's picture through a face-recognition program, unaware that such programs use highly specific measurement -- not looks-like – variables.

Noting that "humans tell stories", Neff said that data had to be put in context or else it could lead to dangerous mistakes. There were "bad expectations, "bad perceptions" and "bad applications" when it came to AI, while biased data leads to biased outputs. "We (need) to build better, appropriate uses of AI," she said. "Let people feel they have some power."

Professor Gina Neff

What banks can learn

The people, however, are somewhat confused about it all to judge from findings presented by Tony Smith, global head of financial services at UK polling firm Ipsos. For example, 75% of people in an Ipsos survey said they would like to have access data on how they spend their money. But only 40% said they were comfortable providing information that could lead to that.

> *There is a huge disparity between countries when it comes to a willingness to share data*

Similarly, there is a huge disparity between countries when it comes to a willingness to share data with companies and actually sign up to do so. Developing countries such as India are far more open to it than mature economies such as The Netherlands. Smith said Ipsos had found that people became more positive about such things as open banking – sharing data with others to get more opportunities – if they could be persuaded that they would benefit. “Utility overcomes concern,” he said, meaning that natural caution is put to one side if something can be shown to be useful.

So, what does all this mean to banks? Well, the good news, according to Ipsos research, is that banks are top of this list when it comes to trust, so they are in the best position to exploit new financial technology with their clients. The downside is that new, powerful players – notably the likes of Google, Amazon and Facebook, are getting into the financial act. The opportunity that banks hold won’t be there long.