

Published: 03 Aug 2015 by Anna Milne

Big Data, Bold Future

*Big Data could be the very future of retail banking and the one thing to rebuild consumer trust, said the chief executive of the British Bankers Association at a roundtable in London where the future of retail banking was put in the spotlight in a very big way. **Anna Milne** reports*

Anthony Browne, chief executive of the BBA, boldly proclaimed: "Big data could be the future of retail banking.

"If banks do get this right it could help rebuild trust in banks. No longer will they make the mistakes of the past, sending the wrong products to the wrong customers.

"There will be a world where your bank will be your financial ally. It will help you make your money go further, guide you to the right financial products and help you achieve your ambitions."

The difference between trust in banking as an industry and trust on the part of individuals towards their bank is quite significant and there is a gulf between them. This was highlighted when Charles Blake-Thomas, product management and strategy lead, Lloyds, made the point that banks are still fighting against consumer trust. Most studies and surveys show us the individual still has strong faith in their bank to keep their financial affairs in order. And less trust in emerging challenger banks or start-ups.

Potential for banks and the first step

Vidur Varma, product director, Citibank said the first key thing for a bank is to define what they are going to use it for: "Is it for loyalty or otherwise? Banks are good at structured data, but not unstructured."

Francesco Burelli, partner, Innovalue Management Advisors, said: "Banks need an element of clarity and prioritisation- they need to figure out what to use big data for before they move forward. It's a no-brainer, for example, to use analytics for risk but in terms of bringing further service to the customer, if they are not clear what their line of intent is they won't get off the starting blocks- product, optimising channels, improving customer experience, optimising channel management in terms of cost effectiveness.

"This is a perfect example of how you can simplify the back end data and manage it properly. The payback is there- with the current technology banks can add layers on top of siloes to help them extract the information. The payback is there for the taking."

Reiterating Burelli's point, Venkatesh Vaidyanathan, vice president of product management at Infosys, said: "Some data in legacy systems is buried so deep within the bank that it is nigh

on impossible to even extract. When you imagine some banks having up to fifty or sixty different systems- and bigger banks may have more- you can begin to understand why."

The time it takes to realise value is a very strong proposition, Vaidyanathan continued, often taking only a matter of months before the bank is able to realise the value from analytics using open source 'and at a much lower cost than we've ever seen before'.

It can consolidate information about a customer such as the number of times they called the bank, what they have posted on Facebook, Twitter, and their interest in a particular service. This, married with a bank's information on customers becomes very powerful.

So why don't banks get into it faster? Browne said they all are but it takes time and Vaidyanathan said the fear in banks of disrupting a service is huge, making them risk averse and slow to embrace change. When there is a glitch, it is immediately broadcasted all over the internet and the bank gets lambasted.

"Upgrades are what banks really fear. It would be easier if banks collaborated on big data as they do on fraud," Vaidyanathan said, adding that collaboration is a big problem: "The credit card department often has no clue as to whether that customer also has a current account with the bank or not. Tackling collaboration will tackle attrition. And you can use data to predict likelihood of attrition. You collect the data of customers who have left and recognise a pattern. Today all banks talk to credit agencies- could they also talk to telecom providers? Or retailers?"

And staff: the crucial link. It's true that the data scientist is a relatively new professional to banking, but this is no reason banks cannot move forward in this space. Vaidyanathan: "There was nobody with a PhD in Data Science ten years ago. There are people who are passionate about data. You could probably have one data scientist for an organisation of 1,000 or 500. It is far more scalable to have enough people in the organisation who are passionate about data. And incorporate it from the teller up. Educate the staff."

Vaidyanathan continued: "Structured data is dead. We've beaten the death out of BI. Sending out something, waiting for a response, every morning receiving a report- from the CEO down, then some actions are taken. Forget it. People are banking online and on mobile. From a bank's perspective, a customer with a high Twitter following is a very important customer.

"Social media equals unstructured data. Banks need to harness the power of unstructured data."

Regulation

While there was little disagreement about the potential for banks in harnessing big data by the bankers in the room, it was acknowledged how banks are hindered and therefore things take a while. They are confined to tight rails by both regulators and inherent culture- two aspects which are by no means mutually exclusive.

For some it solves problems; for others it poses as many questions as solutions.

The National Crime Agency in particular is starting to look at big data and how it impacts regulation. The issue is again protecting confidentiality without strangling innovation or preventing innovation.

He said: "We all have different thresholds from what kind of alerts we want from our bank: some of us happily flaunt ourselves on Twitter while others loathe the idea. Our types of services will be just as diverse. Our industry will need to listen acutely to what the British public wants, powered by their information. Big data could power the next revolution in retail banking but only if the customer wants it."

Advent of big data

In two years so much has changed. Two years ago, data was very confidential. Roll forward to this year's BBA annual conference and big data was the recurring theme for all banks, Browne said. "The term big data was only born in the late 90s; it was supposed to refer to data so large that it presented a major logistical problem that computers just couldn't handle. With today's much higher processing speeds everything has changed. There is huge opportunity to use vast amounts of data."

"Mobile banking is changing consumer behaviour, for example text alerts, stopping customers from going into the red. We are now in a position where banks are sending more texts than any other industry in the country," said Browne.

Vaidyanathan: "The broader adoption of open source- a few years ago there was no discussion at all about this. There is a good conversation now. Banks are in a very competitive environment and they are trying to figure out how to get value out of big data without investing millions and millions of dollars."

How it can help the customer

Digital bank innovation teams need to utilise big data to better serve the customer. This is the next step: it can transform the way customers interact with shops, with energy companies and so on. It can change the way we interact in our lives.

- Energy companies- comparing spend to other consumers in same locality- banks have all this information
- It empowers customers, giving them far greater insight into how they spend their money. Personal finance management tools have taken off in the US. These offer a categorised break down into how a customer spends their money and what on. They are great budgeting tools and can be personalised so the consumer can set alerts to prevent them spending over a certain amount on a certain category. Iceland and Turkey are hailed as advanced markets in PFM
- Major lifetime events such as buying a house, getting married, planning a family

Browne: "Ask yourself this: if your bank has spotted that you are spending 25% more on your broadband than your neighbours, wouldn't you want to know? If you are spending 15% more on electricity than the other houses in your street, wouldn't you want to know? All that data is there. Banks hold that data. They don't use it at the moment."

Banks also know about major events in people's lives, and how those have been budgeted for by hundreds of thousands of different people. One major UK bank is developing an app to help prepare for such events. For the individual, it may occur only once or twice in their lifetime but banks can consolidate the financial experience attached to these events of thousands of people.

House hunting

If the bank knows a customer is house hunting and has already discussed mortgage options, using locations services, that bank can set up an alert to draw attention to any suitable houses the customer walks past, giving details of the relevant estate agent and contact details.

Another example is a customer being able to upload the last year's history of their current account data to a price comparison website in order to see a league table of the best current accounts for them. This kind of data is anonymised and cannot be stored by the price comparison website.

Big Data, Big Brother? Not for the SME

Some may hold this view but the reality is most people find it extremely useful to be handed the tools with which they can better manage their finances. Then there is the SME.

Banks hold enormous amounts of payments data from customers of small businesses. This could be shared with business owners in a secure, regulated way. They could find out where their customers tend to live, where a second shop could be opened. Or find out overheads of similar businesses in order to try and make savings. Consumer 'opt-in' is essential for certain of these services of course.

"At the moment the government is working with the industry of standardised APIs for banks. These effectively act as DNA for your banking IT platform. There are huge opportunities there. But it is vital for the customer's data to be safeguarded. An opportunity cannot be presented to fraudsters," said Browne.

Understanding customers

Vaidyanathan explained that, after all, "two generations ago, banks understood customers really well. Looking back just one generation, the bank would always know when my father needed money; when it was time to invest in agriculture. When you were having a child, they would come round to your house to advise on setting up an investment programme for that child's education or wedding. We are now relying on machines to do all this. We really could use a branch manager who knew every customer but that's not possible."