Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results
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ROYAL BANK OF SCOTLAND

Using Big Data To Make Customer Service More Personal

Background

Prior to the 2008 financial crisis, Royal Bank of Scotland (RBS) were at one point the largest bank in the world. When their exposure to the subprime mortgage market threatened to collapse the business, the UK Government stepped in, at one time holding 84% of the company's shares.

Currently undergoing a process of re-privatization, the bank have chosen improving customer service as their strategy to fight for their share of the retail banking market.

Big Data analysis has a key part to play in this plan. The bank have recently announced a £100 million investment in data analytics technology, and has named one of their first initiatives "personology" – emphasizing a focus on customers rather than financial products.

What Problem Is Big Data Helping To Solve?

During the 1970s and 1980s, says RBS head of analytics Christian Nelissen, banks became detached from their customers. The focus was on pushing products and hitting sales targets, without regard as

to whether they were providing their customers with the services they needed.

"In the Seventies," says Nelissen, "banks, through the agency of their branch staff and managers, knew their customers individually. They knew who they were and how they fitted in – who their family were and what they were trying to do."

At some point in the Eighties, he says, this personal relationship was lost as retail banking transitioned from helping customers look after their finances to pushing all manner of financial and insurance services in the search for new streams of revenue.

Whereas before they would have concentrated on meeting customer expectations, focus shifted to "getting products out of the door" – in Nelissen's words. Banks would have a target of selling a particular number of balance transfers or credit cards, and that's what they would try to sell to the customers who came through the door, whether or not that's what they wanted or needed.

How Is Big Data Used In Practice?

RBS are attempting to use analytics and machines to restore a level of personal service – which at first may seem counterintuitive. But their analytics team have developed a philosophy they call "personology" in order to better understand their customers and meet their needs.

Our banks have enormous amounts of information on us available to them. Records of how we spend our money and manage our finances can give an incredibly detailed picture of how we live our lives – when and where we take vacations, get married, feel unwell and, if we are lucky enough to have any, what sort of things we spend our excess income on.

Nelissen says: "If you look at someone like Amazon, they know relatively little about their customer compared to us, but they make very good use of the data they do have.

"We've traditionally been in the opposite position – we have a huge amount of data about our customers but we're only just starting to make use of it. There's a huge richness in what we have and we're only just starting to get to the potential of it."

A very simple and straightforward example, which makes a nice starting point, is congratulating customers personally when they contact a branch on their birthday. That's not exactly Big Data analytics but it's in line with the concept of personology.

Systems have also been developed to let customers know individually how they would benefit from deals and promotions being offered. While in the past, logging into an online account, or telephoning customer services, would have been an opportunity for the bank to offer whichever services it could most profitably offload, now customers will receive personalized recommendations showing exactly how much they would save by taking up a particular offer.

Additionally, transactional data is analysed to pinpoint occurrences of customers paying twice for financial products, for example paying for insurance or breakdown assistance that is already provided as part of a packaged bank account.

What Were The Results?

Even though it is early days, Nelissen is able to report some initial results. For example, every single customer contacted regarding duplicate financial products they were paying for opted to cancel the third-party product rather than the RBS product.

Nelissen says: "We're very excited about the stuff we are doing. We are seeing significantly improved response rates and more engagement."

Computer Weekly reported that one octogenarian customer was reduced to tears (as were members of the bank staff) when he was wished a happy birthday: no one else had remembered.[1] While looking at isolated examples may seem counter to the philosophy of Big Data, it's immensely important to remember that ultimately it is the way in which strategies such as this affect people on an individual basis.

What Data Was Used?

RBS use data on their customers, including their account transactional history and personal information, to determine what products or services would be most useful.

What Are The Technical Details?

The bank use analytics-based CRM software developed by Pegasystems to make real-time recommendations to staff in branches and call centres about how to help specific customers. They have also built their own dashboards using SAS and use open-source technology, including Hadoop (supplied by Cloudera) and Cassandra.

Any Challenges That Had To Be Overcome?

According to Nelissen, getting staff on board was one of the major challenges faced at the start. "We're at the point where the staff feel like they are having valuable conversations with their customers.

"They're at the point where they understand what the data is trying to do and feel it helps them have good conversations – and that's a big shift from where we were before.

"Staff engagement is critical – the ideas that work best, and that have the best resonance with customers, are the ones that we either got from the frontline or we worked really closely with the frontline to develop."

What Are The Key Learning Points And Takeaways?

In sales and marketing terms, data is useless if it doesn't tell us something we don't already know about our customers.

By understanding customers better, organizations can position themselves to better meet their needs.

Engaging with staff and other stakeholders is essential. They must fully understand the reason that data analytics is being used in customer-facing situations if they are going to make the most effective use of the insights being uncovered.

REFERENCES AND FURTHER READING

1. Goodwin, B. (2015) Royal Bank of Scotland goes back to 1970s values with big data, http://www.computerweekly.com/news/4500248239/Royal-Bank-of-Scotland-goes-back-to-1970s-values-with-big-data, accessed 5 January 2016.