# **Article Summary - “Better Data Brings a Renewal at the Bank of England”**

In June of 2014 the Bank of England (the Bank) made its first policy recommendation based on data which included information from the Financial Conduct Authority (FCA) (Fitzgerald, 2016). The FCA was created in 2012 as part of Britain’s response to the banking crisis caused by the 2008 global recession. Prior to the FCA, the Bank of England did not use microeconomic data in their forecasting and policy recommendations. The creation of the new FCA and related data sources, as well as other measures arising from the recession, necessitated changes at the Bank.

The Bank of England is responsible for regulating all UK banks. One of the changes resulting from the recession was new responsibility for regulating insurers as well banks. This responsibility required the Bank to conduct regular stress tests on the institutions it oversees. Mark Carney was brought in as Governor to lead this transition. Carney instituted a number of changes, bringing in key new people, creating a compelling strategic mission, and implementing processes and systems to take advantage of the new data sources.

## **Environment**

The Bank had a history of being data driven, but changes in structure, process and culture would be needed. In order to take advantage of the new FCA microeconomic data, multiple groups across the Bank had to begin working together, a change from the previously isolated group structure. The Bank of England’s “mission statement”, set out in the charter which created the bank in 1694, is “To promote the public good through financial and monetary stability”. This historical mission statement formed the basis for some portion of the culture at the time of Carney’s arrival. Bank employees are described as being analytic by nature, and having a sense of public service. They are generally seen as willing to support new initiatives as long as they are in line with the historic mission of the institution.

## **Leadership Team**

As Governor, Mark Carney set the new strategic mission for the Bank. He branded the vision “One Bank, One Mission”. His strategic plan focused on four aspects or pillars: diverse and talented people, analytic excellence, outstanding execution, and being more transparent. He encouraged staff to build on each other’s expertise. The “One Bank” mission required collaboration from groups across the bank, in order to pull together the required data. This was a culture shift. Carney wanted to make the Bank more transparent in how policy decisions were reached. He felt that analytics would be an important part of that goal by helping to change the culture. As a result of the new analytics efforts, his long-term focus is expanding to include warning insurance companies to plan on increasing claims from global climate change related events, and a potential future collapse of fossil fuel industry.

Carney was a champion of diversity, hiring Charlotte Hogg as the first Chief Operating Officer (COO) the Bank had ever had. In addition to Hogg, Carney brought in several other new leaders including: Hany Choueiri the Bank’s first Chief Data Officer (CDO), Andrew Haldane the Chief Economist (who swapped jobs with a colleague as part of Carney’s re-organization), and Paul Robinson the head of Analytics.

## **Implementing the Strategy**

In order to realize his vision, Carney instituted a number of changes. He created the COO position and hired Hogg (who’s first job in the 1990’s was at the Bank), he created high-level data council to guide decisions on data strategy, he created an Analytics unit and he hired a Chief Data Officer (CDO) which the Bank had never had before. Choueiri, in his role as CDO, pushed for changing IT from a service to a driver of change. Inventories of data sets were taken; the Bank had nearly a thousand. As part of the inventory, each data set’s purpose was noted allowing for insight into data handling compliance with regulations. The Bank also implemented new data strategies to manage the information required to conduct stress tests on the institutions they oversee. The longer-term strategy for analysis involves more generalized tools, an architecture overhaul, and getting people off Excel as a primary analysis tool.

The Bank’s research team, which sits under Andrew Haldane, undertook advanced projects which span the range of the Bank’s areas. They also rotate in members from other departments for varying lengths of time to cross-pollinate knowledge. The newly formed Analytics Excellence group is largely made up of non-finance people. This was done intentionally to bring in expertise from new areas of data modelling, like physics and computer science. In addition to the structural and technological changes inside the Bank, the institution began consuming new data. High-frequency data sets, like the Google data on housing market and employment conditions were something the Bank had not used previously in creating policy.

To evaluate their progress, the Bank leadership did a number of interesting things. They conducted an experiment to see how well they were acting as “One Bank”. Using the Bank’s Outlook data, a model was created and visualized which showed how people in the various departments were connecting. Hogg (Fitzgerald, 2016) described the result as “You could see who was really talking to whom, and whether that made sense.” They also ran an experiment, using Twitter data, to look for potential runs on Scottish banks during the Scottish cession vote. Consuming this type of unstructured data was new for the Bank.

# **Assessment**

In relating this article (Fitzgerald, 2016) back to our class material, specifically the text (Eckerson, 2012) I’d like to start by focusing on the chapter *“What are the keys to analytical success?”*. In the text, Eckerson makes the argument that change management is a critical aspect of being successful in any analytics endeavor. One of the main points in the article is that Mark Carney had an established track record in the banking industry, and was able to successfully initiate and manage a range of changes at the Bank of England. The textbook chapter goes on to talk about six components necessary for analytic success: right culture, right people, right organization, right process, right architecture and right data. I suggest that Carney employed each of these components in his work at the Bank of England.

Right culture can be seen in the “One Bank, One Mission” vision Carney created, and in his encouragement for people to leverage each other’s expert knowledge. Right culture is also demonstrated by the other leaders he brought in, for example Charlotte Hogg. Hogg had worked at the Bank before, she had deep knowledge of the culture and the icons of the institution. For example, she knew the Pegasus image over the door of the Bank was meant to symbolize making fast decisions. She had a copy of the original Bank charter hung where she can see it from her desk, honoring the founding mission and helping tie it to the new culture. She could be thought of as one of the keepers of institutional memory, and by bringing her in at a high level, Carney showed sensitivity to the institution’s historic culture while forming the new one.

Carney and his team achieved right people through thoughtful hiring, for example, bringing in Hogg and other high-level women, and by moving Andrew Haldane from Executive Director of Finance to Chief Economist. Right organization was achieved through steps like creating and staffing a CDO position, and hiring Paul Robinson to build an advanced analytics unit. Robinson in turn staffed the new unit with less traditional hires, people from physics and computer science to bring in new viewpoints on analysis. At every level, the Carney organization was making sure they had the right people in the right positions, and the right positions in the organization.

Right process was achieved through experiments the Bank conducted on itself to understand their own status and culture; the experiment in using Outlook to visualize communications illustrates this point. Right data comes from the highly pragmatic view of taken of the data, choosing to focus on collecting just they data they need to answer the relevant questions, and not trying to collect much more. Data collection and handling is expensive, and the Bank made a conscious choice to be lean in what they acquired. At the time of the article, architectural changes are being done on a 3-year plan, but were not yet completed, so right architecture is a work in progress.

In chapter 7, *“How do you gain momentum?”* (Eckerson, 2012) the author again focuses on managing change. The article illustrates how Carney and his leadership team seems to empathize with the Bank employees, and how they set and managed expectations around the new environment. Carney leading from the top by encouraging collaboration, and Haldane rotating people thru his research group are examples of this. On a meta-level, Eckerson’s points about finding, managing and motivating analysts are implied in the Bank hiring non-traditional people in the center of analytic excellence and raising the importance of analytics to the C-suite by hiring a CDO.

Unlike many companies, the product of the Bank of England is not a tangible product per se, it is fiscal policy which might be thought of as a form of service. The Bank already had a data driven culture, it faced the challenge of pulling in new data sources to improve its recommendations. The Bank does not currently deal in big data as such, but they are running experiments in their data lab with Hadoop, and plan to roll out a big-data platform in 2016, which speaks to the textbook’s points on big data warehousing and speeding time to delivery.

I think one of the key points from the article is that Paul Robinson, head of the analytics excellence team, is explicitly thinking about how to avoid over-fitting models. Given the complexity of the data, and the rare events they deal with, this is a significant concern. If you get it wrong, the policy decisions could have a real-world monetary impact. This ties back to Eckerson’s chapter on developing analytical models.

In terms of Leadership theory as presented in our text (Northouse, 2016) the different leaders at the Bank appear to potentially have different styles. It is difficult to tell since specifics are not given; I am inferring from the examples of leaders’ actions that they may have different approaches. I suggest that Carney’s style could well be Adaptive. His creation of the mission statement, his focus on the high-level picture at the Bank, and his forward focus on the vision of the institution seem to map well to the idea of “getting on the balcony”. The creation of a data lab for experimentation and the center for excellence in analytics could be seen as part of a holding environment. Disciplined attention comes in the form of decisions like only collecting the needed data for the tasks at hand, rather than hording whatever comes their way. Creating the position of Chief Data Officer, I think indicates a form of providing direction, along with the new mission of One Bank – One Mission. Giving work back to the people is implied by the article’s mention that new forms of analysis has popped up in the Bank, and experiments like the Twitter analysis. While not explicitly discussion in the MIT Sloan piece, I feel confident in suggesting that Carney may in fact utilize an Adaptive leadership approach.

From my reading of the article, I don’t see any major gaps in the approach Carney took to revitalizing the Bank. He appears to have been successful and the organization remains healthy. Employee turnover is well within a desired range (Reuters). He brought in new people, but he also leveraged the people in place, as evidenced by moving Andrew Haldane. His approach to analytics demonstrates an understanding of their importance to the long-term success of the Bank’s mission and a fundamental understanding that you need key managers in analytics roles to make things work. Gaining executive support was a moot point since these changes were coming from the top.

The article doesn’t discuss leadership styles explicitly, nor does it say if Carney championed a single style within the Bank. One possible gap in the reporting is that the leadership style of Carney and his key personnel was not explicitly covered. I had to infer based on my personal reading of the article and the leadership text (Northouse, 2016) what style was most likely in use. Regardless of the style, it appears effective and appropriate for the analytics task and the overall Bank mission. The Bank has reduced the time it takes to do stress testing on banks. Originally, they could do 2 stress tests a year - in sequence, now they can conduct seven in parallel. Given the new modeling capabilities, the Bank is able to make predictions in their new area of responsibility, insurance, as well. For example, Carney has turned his attention to warning insurance companies that global-climate change may result in more claims, or potential collapsing fossil fuel markets could have impact to insurance claims. Warning the insurance companies to account for these new risks in their own models. The actions taken by Carney and his team are an example of an effective analytics project, done well. By accounting for the human needs as well as the institutional ones, the Bank has delivered on its “One Bnak, One Mission” directive.

# Works Cited

Eckerson, W. (2012). *Secrets of Analytical Leaders Insights from information insiders.* Westfield, NJ, USA: Technics Publications, LLC.

Fitzgerald, M. (2016, May). Better Data Brings a Renewal at the Bank of England. *MIT Sloan Management Review*.

Goleman, D. (2011). What Makes a Leader? In H. B. Review, *HBR's 10 Must Reads On Leadership* (pp. 1-21). Boston, MA: Harvard Business School Publishing.

Heifetz, R. A., & Laurie, D. L. (2011). The Work of Leadership. In H. B. Review, *HBR's 10 Must Reads On Leadership* (pp. 57-78). Boston, MA: Harvard Business School Publishing.

Northouse, P. G. (2016). *Leadership Theory and Practice, 7th Ed.* Thousand Oaks, CA, USA: SAGE Publications.

Reuters, S. (n.d.). *Bank of England staff turnover could be "a little bit higher" - deputy governor.* Retrieved from Reuters.com: https://www.reuters.com/article/britain-eu-boe-staffing/bank-of-england-staff-turnover-could-be-a-little-bit-higher-deputy-governor-idUSL9N1KV029