How Can You Leverage Big Data?

Research and ideas shared at recent INSEAD alumni panel discussions shed light on the elements required to capture and effectively use big data.

As access to massive sources of data becomes easier, for example from user generated content on social media platforms, to purchase behaviour on e-commerce websites, or location data via smartphones, new opportunities arise to create more complete images of markets, consumer preferences, actions and lifestyles. Complementing existing (traditional) data, such new sources of data create unprecedented opportunities for enterprises, if they are able to connect the dots and systematically implement data-driven strategic and tactical decisions. Indeed, the majority of respondents in a recent survey conducted with INSEAD alumni in February 2014 said that the ability to make better strategic decisions is the main benefit of “big data”.

The speakers at two recent INSEAD Big Data Analytics panel discussions, one in Paris and one in Singapore run by the INSEAD Technology, Media & Telecommunications (TMT) Alumni group, demonstrate the possibilities big data can offer, but also the cost of not going big. Neil Soderlund, Partner and Managing Director at the Boston Consulting Group said, “For me Google is one big algorithm, a classic case of big data. What I find surprising is the enormous gap between Google and the legacy companies. As much as they might be doing big data, they are abysmally bad at using it for value generation. The culture of organisations and perception of leaders is that a black box cannot yield a better answer than they can draw out from their years of experience. This is going to be a big differentiator, one of the things that separate companies to a far greater degree in years to come.”

It’s not just marketing

Companies in big data are not just disrupting the incumbents, they’re creating new industries. Bambos Kaisharis, Sector Lead of Performance Advertising at Google likened big data to putting different layers of information together for people to make better decisions. He pointed to 23andMe, the genetic testing company as one of the huge potential benefits of big data, in this case, to find out a person’s likelihood of certain genetic diseases. This, he says, has the potential to add value to people’s lives.

LinkedIn’s Asia Pacific Managing Director, Hari Krishnan, explained how companies are leveraging its data around the world to determine where talent pools are aggregated to help market expansion decisions. Uber, a technology company that helps connect commuters and taxi drivers uses its data to find the best solution for all its customers.

Talent challenges
Big data is a big priority and it’s set to create many jobs. By 2018, the United States alone will need 1.5 million managers with the know-how to analyse big data to make effective decisions, according to McKinsey. But with such huge demand, inevitably comes tight supply. The biggest reason why some organisations are not considering or further exploring the use of big data is the lack of capabilities and skills, according to our survey. A study by Teradata backs this up. The firm recently found that 43 percent of C-level executives favour software development skills over business intelligence skills when hiring employees to handle big data, even though only half of companies have a big data strategy in place. As with any position, individuals hired to handle big data can’t just be scientists. Jean-Louis Constanza, Chief Innovation Officer at Criteo, said that it is particularly difficult to find people that understand both worlds – the technical and the business world – and that can also connect the dots between these two worlds. Too many companies still think in silos.

As Michael Brown, Regional General Manager from Uber Singapore mentioned on the panel, “What matters is asking the right sets of questions to move your business forward. It’s safe to assume that the data infrastructure will be there for you to run large queries so you also have to think about how you can best expose your data to empower decision-making at all levels of your organisation.”

Share the data wealth

Beyond skills, enabling the best use of the data haystack mostly comes down to processes and systems. The competitive edge is held by those able to efficiently share and reuse data analytics internally, as we found in our survey. Those who do not share or optimise the use of data find themselves laggards in innovation performance, client intimacy, and operational performance.

This is reflected in a study we recently conducted with AT&T showing that companies without standardised digital platforms and processes could find themselves with a much lower chance of getting value out of their investments in ICT and at the same competitive level as companies that don’t make any IT investments at all.

Not only does this enhance the competitive position of effective users of big data, but investing in processes and infrastructure to make data analytics usable and valuable also creates momentum for leveraging new technologies more often in the future. Such new technologies include cloud-based and open source data analytic technologies. Those currently efficient in using big data are much more determined to expand into these new technologies than those who are not, according to the alumni survey.

It’s going to get bigger

When we put the complexities of big data aside and strip it down to its fundamentals, the true definition of this historical shift in business analytics is about connecting many pieces of data to identify patterns which help us make better decisions. James Walker, Senior Partner at Prophet said companies could get to much better insights if they can manage the diversity of the data available. Data is not big – today data is diverse.

It’s clear that this trend is here to stay. The leaders in this field will be the ones who analyse more sources of data more frequently, who understand the technology and know the questions to ask. Although from our survey most companies are still in the early stages of using big data, many already focus on monetising and leveraging it. As Mike Brown of Uber hinted during one of the panel discussions, “You need to think about what ‘data exhaust’ you’re producing and how you can leverage it”.

Take OKCupid, which has compiled a data blog from observations and statistics from its hundreds of millions of dating interactions by its users. Using data to drive content marketing has proved popular and elevated the brand, especially with “The Best Questions For a First Date” and the “10 Charts About Sex.”

Who said Big Data couldn't be sexy?

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