"Where do you start with Big Data?"
- by Jackie Down, BigData4Analytics

BigData 4Analytics

When Gartner published its latest "Hype Cycle for Emerging Technologies" recently there was a notable absence of one broad class of technology in particular - big data.

Big data is no longer an emerging technology, it seems! However Big Data is a megatrend that touches so many aspects of our interactions with computers – from the Internet of Things and content analytics to cloud computing and virtual reality - all highly hyped categories in Gartner's eyes!

Big Data has been around for a long time but is still just data! However, it does differ from traditional data in one or more ways:

- High volume
- Moving at high velocity
- Variety of types, often unstructured i.e. video, social, email, etc.
- Varying degrees of "veracity"

So when all is debated, it's all about what you do with the data and what action you take to transform your business.

There have been many reports published that show that companies using Big Data can gain competitive advantage by implementing a big data solution:

- 26% greater profitability than their industry peers
- … and 6%-9% performance improvement over industry average
- 15%-20% improvement in Marketing ROI

…in companies that "*put data at the centre of their marketing and sales decisions*"
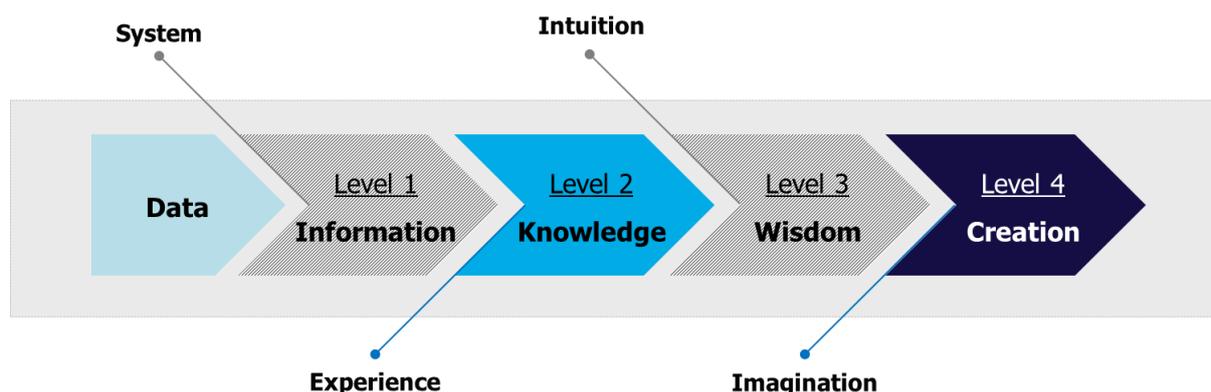
So why hasn't every organisation used Big Data in their day to day business? It seems that Big Data has a paralysing effect on many companies. Why is this so? As much as organisations may want to exploit it to improve decision-making or uncover ways to monetise their data, it seems many organisations' initial big data efforts flounder and fail to realise desired value.

One of the issues that organisations have trouble with is zeroing in on an appropriate business problem or use case, or getting bogged down in tactical questions like:

- Where do we get the data?

- How do we store it?
- What technologies should we use?
- Who should have access to the data?
- Do we have the skills to take on such an initiative?

So for a project to be successful where should you start?

It is essential that you start with the identification of the Business issues/problems your organisation have identified. It is also important to have an executive to champion the initiatives.

Also consider Culture — for many organisations, better decision-making requires a cultural shift to data-driven, fact-based decisions, rather than unsupported or "gut-feel" conclusions. So the days of "HIPPO" (the "Highest Paid Person's Opinion") should be long gone.

Big data is not a technology transformation, it a Business transformation. It not an IT responsibility, but a joint ownership with the business.

So let's start by asking the questions …

What are the business problems you are trying to solve?

- Customer
  o Increase Customer Retention
  o Improve Customer Loyalty

  Product, pricing and delivery

  o Dynamic Pricing
  o Optimisation of Supply Chain
  o Product Profitability
- Security
  o Real-Time Detection of fraud
- Impact and fit with company strategy
  o Do the problems under consideration directly relate to the company's business strategy?
  o If these issues are solved, do they have the potential to increase top-line growth or reduce costs
  o What are the top priority business issues to be solved?
- Executive sponsorship
  o Which executives have expressed interest in using data and why?
  o Which functions/business units may benefit the most from applying external data to operational decisions?
- Added value and ROI
  o Are these long-standing problems the company hasn't previously been able to address due to the limitations of available technology and data?
  o Can you measure the financial impact of applying big data to these business problems?
  o How are you currently measuring your business?
  o Can you get the data you need to react WITHIN THE QUARTER to impact behaviours to meet your numbers - or is it always looking backwards?
- Current use of data
  o Are you getting the data you need the way you want it and in a timely manner?
  o Are you able to analyse the data you need?
  o How easily can you get at the data that you need to run your business/department/project?
  o What challenges are you facing in getting more information out of your data?

Try to identify which companies in your sector seem to be capturing the most value from big data. How and when are they using big data to drive decisions?

Don't ignore looking at other sectors, you can learn a lot how they use data in their business and how that may benefit your own organisation.

Finally, keep in mind that "Big Data" is really all about a) asking Questions (in new ways), b) Accelerating the use of data by shorter time to business impact via insight and automation, and c) Transforming with the use of analytical insight to change culture by amplifying business intuition, not replacing it!

Remember, Big Data is a journey not a DESTINATION!

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