Good Data:
The Fast Track to Good Decision Making

Big Data is the next frontier for innovation, competition, and productivity according to a prophetic May 2011 report from leading consultancy firm McKinsey. Defining Big has become problematical as today’s big and fast is tomorrow’s small and slow, however Good Data will always be readily defined and designed for good decision making.

A major international MPS company presented data for a large consultancy with an error rate of 30% failing at the first hurdle by not producing verified, high quality Good and Clean Data”, James Duckenfield, Managing Director of NewField IT says “competitors don’t do it and so undermine their position.” NewField IT used their discovery and design toolset to visually demonstrate where the errors lay. Without clean data at the first step of consultancy, Discovery, the successive steps, Analysis, Strategy, Development and Design will be quantifiably meaningless, and subsequent decisions will be exponentially inefficient and potentially wrong.

The quality and veracity of big or even small data is vitally important to distinguish it as Good Data, presented in an easy to analyse form then useable for good and efficient business decision making. Good decisions manifest from verified and clean data, efficient decisions manifest from the capability of Business Intelligence software tools to condense and graphically present a mass of collated data in a user friendly and adaptable form.

The McKinsey report spelt out the benefits of using Big Data clearly stating the potential financial gain in five sectors researched by MGI and McKinsey’s Business Technology Office: Healthcare in the United States, the Public Sector in Europe, Retail in the United States, and Personal-Location globally. A 60% gain in Operating Margin could be achieved by a retailer using Big Data to the full. United States Health Care could generate value of $300 billion per year if they were to use Big Data creatively and efficiently to drive quality and efficiency, a particularly prescient conclusion in the light of current worries over the downgrading of quality under Obamacare. One of the major conclusions of the study was that sophisticated analytics could substantially improve decision making therefore driving value, and sophisticated analytics requires sophisticated Business Intelligence tools.

4V-Big-Data

Good Data is closely related to the up to date definition of Big Data. Gartner in 2011 produced a definition of Big Data as the 3 V’s: Volume, Variety, and Velocity actually predating the term Big Data. Now widely in use as a definition a fourth term was added to complete the description: Veracity, covering the question of trust and uncertainty in the data that would distinguish it as good or bad thus determining if such data could be used for decision making. During this time Microsoft, Oracle, and Intel threw their hats in to the ring with definitions of Big Data, Oracle saying “Big data is the derivation of value from traditional relational database-driven business decision making, augmented with new sources of unstructured data,” encompassing both the need for Good Data and Business Intelligence software.
The drive for Good and Clean Data in an MPS consultancy is both an automated and a manual process requiring analysts behind desks, on the ground kicking boxes, and looking behind closed doors. A forensic analysis is performed on devices and details on the devices in an MPS environment. An analyst needs to visually confirm the data they are presented with and verify every detail to gain the insights on work flow, processes, devices, and document lifecycles. The costs of not taking the detailed approach to having clean data as the earlier example showed is producing bad data, producing bad decisions, and not producing value for the customer.

A major customer in the United Kingdom underreported the total of their peripheral devices by 50% to NewField IT’s analysts who whilst performing their assessment quickly discovered a room full of unused devices on contract representing direct and ancillary costs with zero productivity. Reported data is not Clean Data until analysts using their specialised skills, insight, and knowledge have verified it, looking at devices in person checking product consistency, benchmarking the reported usage, pricing, and utilisation against manufacturers figures.

The collection of data during 10 years of consultancies has produced some startling conclusions:

- Up to 30% of devices are not networked, therefore not on contracts they become sunk costs, with no upgrading, and no cost savings achieved when servicing and supplying when under contract.
- Up to 48% of prints are generated on non-networked devices, again not having the benefit of lower costs of servicing and supplies when under contract, their costs being harder to trace and monitor and not being part of an efficient work flow process.
- Print and imaging cost savings can be up to 52% and on average 30% after a consultancy process collecting Good Data and using Business Intelligence tools proving the conclusions of the MGI and McKinsey study that sophisticated analytics will drive value.

“A good sketch is better than a long speech” a quote often attributed to Napoleon Bonaparte, visualisation is not a new concept, as old as primitive cave paintings, and its utility is proved by even the most basic pie chart run on Microsoft Excel. The second step in the process towards good decision making once the standard of Good Data is achieved is the analysis using Business Intelligence tools that graphically present the set of data in a visual easy to grasp form and changeable parameters for analysis.

The Harvard Business Review published an article in December 2009 revealing figures from EMC that in 2008 the digital universe was adding 487 exabytes (487 billion gigabytes) of data and that by 2013 we would be adding five times that amount, data is unlimited as a live process is continually adding new data, visualisation is accepted as a major factor in the analysis and efficient decision making process for the growing volcano of data being generated.

The decision making responsibility and position of the CIO and their pressure to make timely decisions in the fast moving technical environment has been brought to the fore by the flow of Big Data and its importance in strategy and investment to effect cost savings, a November 2013 Forbes article stated “The CIO is one of the important hubs of decision making across today’s organisations.” Decision making in the current business world (as well as the scientific world) is also a collaborative process relying on several key decision makers with differing skill sets and knowledge. The demise of
Royal Bank of Scotland was blamed on the autocratic style of their CEO burying a few last nails in the coffin of the classic view of the never wrong Chairman behind the big desk. Software that condenses and visualises the data will be easier to grasp by a larger set of people than trawling through reams of tables and numbers which takes more time and concentration to form the patterns and trends. Graphs, dials, charts etc. can also be imbued with an aesthetic appeal making the data functional and good looking resulting in faster and more involving decision making.

In the current data explosion and the adoption and recognition of the new constantly chanted mantra “Big Data” being the key to business success, Good Data is complementary to good Business Intelligence software that can take a live workflow using the verified and Clean Data and based on that current state run an analysis and make changes to present a virtual future state by using a fully interactive user friendly interface. The quality of the data and the graphic visualisation of the data and the analysis speeds up the decision making process and leads to a positive outcome. James Duckenfield puts it succinctly “companies who embrace this technology now will be the winners in five years’ time.”

Sources:
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