Crowe

INSIGHTS

Five Steps to Building Organization's Big Data Analytics Capabilities to Improve Business Performance

May 2018

In this era of rapid-changing business environment, information is engine, and with big data, businesses can stand to become more powerful than ever before. However, being 'big' does not make data useful. What makes it beneficial is when it can be translated into insights which provide benefit for business. Therefore, companies must be able to process vast amount of data to uncover hidden patterns or correlations, and generate valuable insights for their business. This ability is widely known as Big Data Analytics Capability. The big data and decision-making survey by The Economist in 2012 of companies' executives from across the globe found that the major issue on making big data effective for business decision-making is not about volume, but the ability to analyze and take steps on the data in real time.

Big data is not a totally-new concept. In fact, it has been around for years. However, there is a significant difference in how large amount of data that streams into businesses are treated at present and how it was processed decades ago. In the 1950s, companies were applying "basic analytics", i.e. manually examines numbers in spreadsheet to uncover insights and trends. Nowadays, most businesses understand that they need to use a more sophisticated data analytics technique which offers speed and efficiency in identifying insights from vast amount of data, not only for future decisions but also for immediate decisions.

If we know that the effective use of big data affects business performance in several ways, the question is what can organizations do to scale up their big data analytical capabilities so that they can take maximum advantage from big data? Here, we will uncover five steps in developing big data analytical capabilities to improve organization's performance.

1. Understand your current state and your end goal

The initial and critical step is to know and understand where you are and what your end goal is. Organizations need to devote sufficient step in this stage to understand current capabilities and the gaps need to be closed, clearly define what they want to accomplish from big data analytics capability, determine clear scope, and build realistic roadmap. This first step is crucial for the capability building project to become manageable and provide insights to the business.

2. Pick the right data – Small data is a good starting point

The volume of data and information is growing extremely fast, and organizations need to be able to comprehensively understand what data are already available in the business, the quality of that data, and which data they need to select. Starting with 'small data' often becomes the most effective way in selecting the right data as it allows the process to be more realistic to manage and able to provide an early insight into the quality of the bigger data. Starting with small data can help organizations to avoid handling the complexity of the data.

3. Build strong foundations on technology and people

Nowadays, it is almost impossible to manage sets of data within the business without a robust technological solution. Organizations need to select the right system and tools by considering two primary criteria. Firstly, scalability, in which organizations should ensure that the system can both cope with the data currently produced. Secondly, fit for purpose, in which the chosen

system is able to develop with the ever increasing amount of data the organization will produce or generate in the future. When an organization decides to use more than one system or tool, finding the right combination of tools is also critical. Not less important is to develop knowledge and skillsets among people within the organization. People in the organization need to have balanced capabilities on their data skill, analytical skill and business skill.
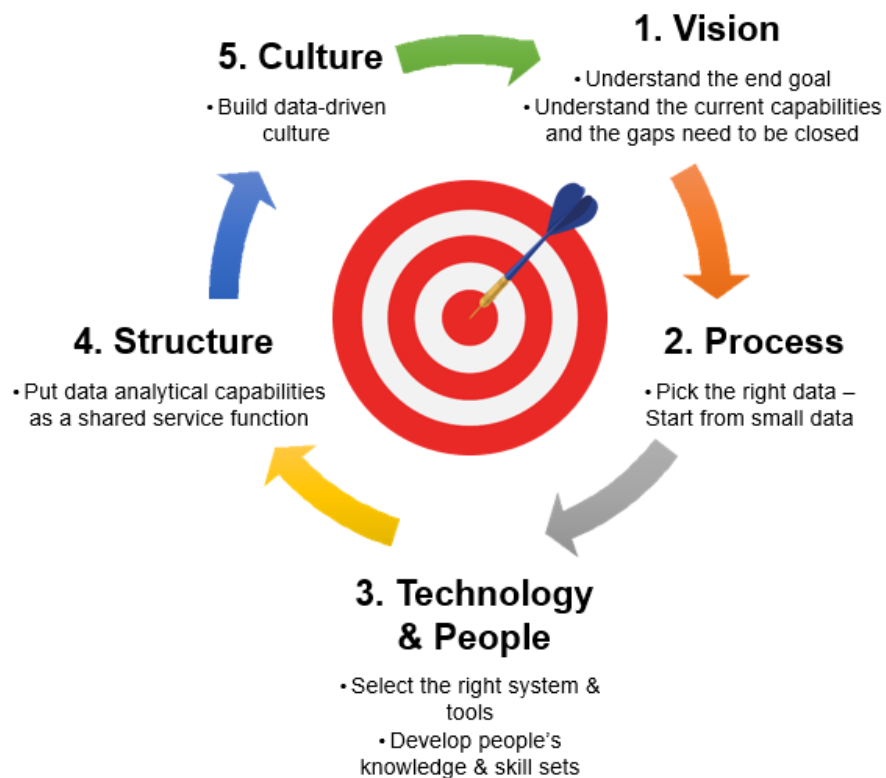
4. Build data-driven organization structure

A solid big data analytics tools and capability should become the engine of business growth, not merely supplying routine aggregated data. It should provide real and valuable commercial insight in order to drive effective data-driven decision making. This can be achieve by carefully considering where to put analytics capability in the organization structure. Although there are several options of it, we believe that it should be put as a shared service function, so that it can collect data from variety of sources inside and outside the business, and provide insight to support decision making process.

5. Build data-driven culture

Like almost everything in the digital age, all starts with culture. Developing data-driven culture can bring a multitude of benefits for businesses, from better employee understanding of the value of data, how to use it for better decision-making, to an extensive commitment to always support ideas with data. An organization which successfully build data-driven culture is likely to have teams that are inclined to seek out and use data in every facet of their works, and teams that are eager to take a more active role in measurement and analysis.

Figure 1: Five Steps for Building Big Data Analytical Capabilities: The Combination of Vision, Process, Technology, People, Structure, and Culture

Any organizations must build superior capabilities to derive meaningful insights from big data in order to make good, immediate strategic and operational decisions. The five steps of developing big data analytical capabilities we have uncovered are the combination of vision, process, technology, people, structure, and culture that will help organizations make information more transparent and improve the data-driven decision-making process, understand their market and customers better, enhance the effectiveness and efficiency of business process, and ultimately boost organization overall performance.

Learn More

Mochamad Rinaldi Aryasa
Performance Advisory – Crowe Indonesia
+62 2125535600
rinaldi.aryasa@crowe.id

Munir M. Ali
Performance Advisory – Crowe Indonesia
+62 2125535600
munir.ali@crowe.id