

INSIGHTS

How the Effective Use of Big Data Affects Organization's Performance – Learning from Some Global Companies' Successful Stories

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Businesses are drowning in data. Today, organizations generate and access more data than ever. Big data – dynamic and large volumes of data created by people, tools and machines should not be merely seen as a continuation of past information trends. It is now an asset to every business, regardless of the size as it will change how companies do business, internally and externally.

There have been many research which highlighted the critical roles of big data in improving organizational performance. A big data survey of more than 500 companies' C-suites and executives across the globe held by The Economist in 2012 showed that majority of companies' executives implied that big data and the effective use of it have positive impact on their organizational performance. However, another finding from the survey suggested that big data management is still not viewed strategically at senior levels of most organizations.

A question is raised, what benefits are offered by big data and big data analytics for organizations to improve their performance? This article will discuss how big data and the effective use of it affect organizational performance, along with real-life case studies from some global companies who have successfully uncovered the power of big data to generate opportunities for business performance improvement – to provide clear evidence of the benefits big data can deliver to the business performance.

1. Faster and more intelligent decision-making

The capability to produce good and intelligent decisions as quickly as possible is vital for any organization to enhance business performance and outperform competitors. In this era of fierce competition, companies cannot simply rely on intuition and experience for decision-making. The effective use of big data allows organizations to derive insights from information in order to make better, more intelligent, real-time and fact-based decision so that they will remain proactive instead of being reactive in their strategy. Big data eliminates intuition-based and promotes data-driven decision making that is important in managing and improving organizational performance. How a company can work faster and stay agile will determine its competitive advantage over its peers.

Netflix, the world's leading internet entertainment service has been collecting huge amount of data about the viewing habits of its millions of users in more than 50 countries to make a business decision on what programs it should create and buy that will attract large audiences. Relying on big data and analytics, the firm decided to create products which appeal to the local tastes in each of countries it operates in, and it worked. On average, the success rate for Netflix's original shows is 80% as compared to 30%-40% success rates of traditional TV shows.

2. Creates information transparency

Valuable insights often remain hidden behind vast amount, unstructured data. They are also sometimes not captured in digital form or not easily accessible through existing networks. The effective use of big data can unlock significant value by making information transparent to the decision makers. An organization can collect more accurate and detailed performance information, significantly reduce inefficiency in data search and transfer, expose variability, and boost performance.

UPS, the world's leading package delivery and logistic services shipped over 4 billion items through nearly 100,000 vehicles every year. To handle this huge volume, the company empowers big data to one of its programs called fleet optimization. With advanced algorithms, UPS is able to collect accurate and detailed information about routes, engine idle time and predictive maintenance to achieve operational efficiency to their delivery trucks. The company successfully saved over 39 million gallons of fuel and avoided driving 364 million miles by applying such program.

3. Better knowledge of market situations and better customer targeting

From the marketing perspective, the effective use of big data helps businesses understanding their market situation and how it has evolved. The information can be for example, in the form of change in customers' purchasing preferences. This is a valuable information to be translated into a new opportunity and strategy on which product should be produced to meet market's needs, the market segments to be targeted, and how to reach the targeted markets. By making and executing a right marketing strategy, a company can maximize its marketing dollars and further, improve its business performance and get ahead of its competitors.

American Express, an American multinational financial services corporation has over 100 million credit cards spread all over the world and more than US\$ 1 trillion in charge volume every day. By leveraging the power of its big data, the company can predict customer loyalty more accurately and develop innovative products in the payments and commerce space which provide value to customers. The results: Dramatic reduction in time to market of the company's products and significant improvement of the company's performance.

4. Make business process more efficient

Big data, and the effective use of it is not only helping organizations to know their market and customers better, but also enhancing efficiencies and business process. From the operations perspective, the effective use of big data can provide surprising insights of the effectiveness and efficiency of business process, for example by identifying poor-performing measurements, bottlenecks or inefficient areas throughout the business process, the trends of process and performance over time, etc. The results are basis for creating business process improvements, eliminating waste, increasing efficiency, and ultimately, improving bottom line and organization's performance.

Xerox, the world's leading provider of digital document solutions was facing a problem with its large workforce in which the company needed to cut employee training cost and reduce the premature attrition of its employee pool. The company leveraged the power of big data and ran predictive recruiting program in order to identify better applicants. Big data and big data analytics helped Xerox to hire people who are more technically inclined and more likely to stay longer with the company, thus diminish cost of training. The reduced attrition successfully led to the improvement in Xerox's bottom line.

Figure 1: Several Ways of How Big Data Affects Organizations' Performance



Nowadays, the amount of data generated by businesses is growing from day to day, changing the way they do business. Many research and real life case studies have shown the importance of big data and big data analytics to make business performs. Big data is a new source of competitive advantage for any organization in any industry as it allows organization to produce faster and more intelligent decisions, makes information more transparent, provides unprecedented insights into market situations and customer behavior, and optimizes business process.



Learn More

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