Actionable INSIGHT from DATA

In a business environment where prices and products are so alike, a company's data and how it is used is one of the last remaining differentiators between mediocrity and excellence.

In days gone by, business owners were able to determine and anticipate the behaviour and actions of their customers without the requirement for specialised technology. Not only was the data limited in terms of variety of content but the speed in which decisions were expected was days or even weeks and hence "gut feel" based decisions were acceptable and generally reliable.

In today's market, there are massive volumes and variety of data being generated at an alarming speed. It is physiologically impossible for the human brain to process all the available information to find patterns and relationships. Coupled with the diverse nature of the available data, the speed in which business is expected to react and make decisions and the increasingly limited resources, "gut feel" based decisions are no longer acceptable.

Today, the most competitive organisations globally use a combination of mathematical techniques and computing power to uncover vital intelligence that exists in the data. This unique combination of technologies empowers business to tap into the wealth of available data to make decisions based on "what they know to be true" rather than "what they believe to be true".

In essence, these advanced analytics technologies apply statistical, mathematical and machine learning algorithms to historical data to identify relationships and patterns that can then be used to anticipate and predict what is likely to happen next.

The process is enriched through the use of substantial volumes of data that are collected, in real time from a variety of sources. Data relating to transactions, demographics, behaviour and attitudes are now incorporated in the decision process. It is the combination of advanced analytics and this "Big Data" that facilitate this ideal partnership.

Predictive Analytics and "Big Data" are most frequently applied to the area of customer insight and understanding. They offer the capability to understand each customer and to anticipate what they are likely to want and do next, thus enabling a highly personalized interaction between the organisation and customer at each touch point. It is these tailored interactions that are proving invaluable in gaining the competitive advantage.

Predictive analytics has a compelling role to play in risk management and health care. A major healthcare insurer in South Africa uses big data and predictive analytics extensively to manage and optimise their management of clinical risk. Santam uses a combination of predictive models and business rules to target, in real time, how a claim should best be processed and its likelihood of being fraudulent.

Predictive analytics can also be applied to operational processes. This includes making consistent and automated decisions in real time to process claims, optimise inventory of stock and detect when a part is likely to fail on a vital piece of equipment within a production line.

Such insight eliminates costly downtime and unnecessary servicing, and ensures that the required spares are in stock.

Data is the only representation of the truth; it is not open to corruption, political leanings or opinion, unlike gut feel. Can you afford not to use your data intelligently? What is the consequence to your organisation of making decisions the old way while others base their decisions on the facts? ∎

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