

FACT SHEET

BIG DATA ANALYTICS



MAKING SENSE OF LARGE DATA SETS

The Essence: The systematic collection, extraction and analysis of large and/or complex data sets, requiring far more than everyday ordinary processing power and tools.

Characteristics: Big Data analytics is most often described by the “4 V’s of Big Data”: 1. **Volume** - how much data is being collected and analyzed? 2. **Variety** - what kind of data is it, structured, unstructured, other? 3. **Veracity** - how accurate and applicable is the data, what is the trustworthiness? 4. **Velocity** - how frequent or real-time is the data? Oftentimes also **Value** is added to the “4 V’s” - will insights from the analysis of the data create new opportunities, perhaps a product line, a cross-sell opportunity or a cost-cutting measure? Or will it lead to the discovery of a critical causal effect which may solve a problem? Another characteristic is that a Big Data initiative encompasses *the enterprise at large*. I.e. if it does not point to a wider organizational effort to generate insights for strategic purposes, it is commonly not regarded as Big Data analytics, but rather as a departmental effort or for targeted tactical purposes. It is often combined with other emerging technologies like Machine Learning – harvesting benefits from smarter algorithms with the potential to reveal complex relations and patterns from the data sets.

Business value: Big Data analytics may bring insights which directly can improve business decisions, whether it is about new opportunities or solving problems. Particularly important is it for organizations to use this technology to gain insights into market trends, industry alterations, and customers’ preferences and behavior.

Concerns: With the rapid evolvement of the “information society” and the vast amount of data potentially interesting to organizations for business purposes, there is a legitimate risk related to overflow, the actual quality of the data, as well as privacy concerns. Legislation has commonly lagged the technical advancements but are increasingly being addressed. Data integrity will remain a concern, while methods and tools are improved.

Successful implementations: Where there is a need for better insights from large data sets, and where Data Governance (DG) is properly implemented, Big Data analytics adds value. Marketing, risk management, strategic decision-making, customer trends, predictive maintenance, financial assessments – and many more.

Hot tip: Ensure the quality of the data going into the process! This includes classification, modelling, taxonomy, source verification, etc. And ensure you are legally compliant!