Best Practices for Maximising the Value of Big Data

In today's data-centric world, big data has become an indispensable asset for organisations of all sizes. However, despite the buzz surrounding big data, many companies find it challenging to extract the full value from their data. According to a recent survey, the majority of respondents had no current plans to invest in Hadoop, the leading tool for big data, due to challenges around business value and skills. This points to a larger problem in overall big data adoption.

To maximise big data's value, organisations must focus on doing six things well:

Start with a Business Problem in Mind

Before diving into data analysis, it's essential to identify a specific business problem to solve. Focusing on a specific business problem makes it easier to identify useful data sources and choose appropriate tools and techniques. It also sets you up for the next step, which is to plan how to put your insights into practice.

Look Ahead to How You Will Put Your Insights into Practice

To achieve real business value, it's crucial to be able to operationalise the results of your analysis. Although this sounds obvious, far too many projects are left gathering dust on the shelf because it is too hard to incorporate their findings into the business activities that would benefit from them. Data that looks wonderful in the lab may not be available, or may be too expensive to get at the time you need it for use in day-

to-day business operations. Therefore, it's important to consider all the practicalities of implementing your insights and adjust your analysis accordingly.

Take Advantage of the Latest Analytic Innovations

Innovations in Business Intelligence and Business Analytics are transforming how businesses get value from their customer data. This is causing a shift from traditional approaches that provide periodic snapshots in the form of descriptive reports and historical dashboards, to systems that continuously analyse incoming data to provide prescriptive insights that are actionable in real-time. Big data tools and infrastructure are making it faster and easier to apply machine learning techniques to explore huge datasets that include a wide variety of structured and unstructured data.

Embrace Analytic Diversity

The exploding world of analytic innovation requires taking advantage of the latest techniques that often require learning a new set of tools. Waiting for your favourite analytic tool vendor to catch up and provide an integrated solution isn’t usually an option. Leading analytic teams will inevitably need to use multiple tools to support their business needs, so the best approach is to embrace diversity and create a flexible infrastructure that can operationalise models authored by a wide range of tools.

Leverage the Cloud and Productivity Platforms

Creating big data analytics no longer requires making a huge investment in expensive infrastructure and specialised skills. By running your analytic projects in the cloud, you can let a dedicated third party handle the underlying systems and services while you focus on the business problem at hand. You can rent out just the capacity and services you need, at a fraction of the cost of implementing your own.

Give Control to the Business Experts

The greatest value comes from giving business experts new insights that they can quickly turn into differentiating strategies and actions that will delight customers and shareholders alike. Interactive and highly visual dashboards and reports can provide information that helps business experts to refine and evolve high-performance strategies. Standard decision management components such as business rules authoring services can make it faster and easier for experts to incorporate new models and insights into their business rules and policies. Simulation and data visualisations can also speed the approval time for implementing new models and strategies by making it easier to understand and explore their potential impact.

Develop a Data Strategy

To maximise the value of big data, it's essential to develop a data strategy that aligns with your business objectives. The strategy should outline the data sources that are critical to your business and how they will be integrated to provide meaningful insights. It should also define the metrics that will be used to measure success and the tools and techniques that will be used to achieve the desired outcomes.

Invest in Data Governance

Data governance is critical to ensure the quality, accuracy, and security of your data. It involves managing the availability, usability, integrity, and security of the data used in an organisation. A governance framework should be established to define the policies, standards, and procedures for managing data across the organisation. This framework should also identify the roles and responsibilities of key stakeholders and define the processes for monitoring and enforcing compliance.

Build a Strong Data Culture

To extract maximum value from your data, it's crucial to build a strong data culture within your organisation. This culture should emphasise the importance of data-driven decision-making and encourage employees to use data to inform their decisions. It should also promote collaboration between different departments and encourage the sharing of insights and best practices.

Implement Continuous Improvement

Maximising the value of big data is an ongoing process that requires continuous improvement. It's crucial to regularly review your data strategy and adjust it based on changing business needs and emerging technologies. It's also important to continually monitor and evaluate the effectiveness of your data analytics programmes and adjust them as needed to ensure that you are getting the maximum value from your data.

In conclusion, maximising the value of big data requires a comprehensive approach that involves focusing on business problems, leveraging the latest analytic innovations, embracing analytic diversity, and leveraging the cloud and productivity platforms. It also requires giving control to business experts, developing a data strategy, investing in data governance, building a strong data culture, and implementing continuous improvement. By following these best practices, organisations can unlock the full potential of their big data and gain a competitive advantage in today's data-driven world.