EDITORIAL

Greetings!!!

Big Data Analytics refers to the strategy of analyzing large volumes of data or big data. This big data is gathered from a wide variety of sources including social networks, videos, digital images, sensors and sales transaction records. The aim in analyzing this data is to uncover patterns and connections that might otherwise be invisible and that might provide valuable insights about the users who created it. Through this insight, businesses may be able to gain an edge over their rivals and make superior business decisions.

Big Data Analytics is the process of inspecting, cleaning, transforming, and modeling Big Data to discover and communicate useful information and patterns, suggest conclusions, and support decision making. Big data is high-volume, high-velocity and high-variety information that gets processed and analyzed. It refers to an immense volume of both structured and unstructured data that is aggregated and processed with automated tools or technologies.

This is a combination of Data Management Technologies that have evolved over time. When organisations talk about Big Data they mean, to store, to manage and to manipulate, humungous amounts of structured and unstructured data at the right speed and the right time to get the right insights. It is business analytics that makes it possible for the organisations to connect to their data and use it effectively to identify new opportunities that further leads to a better business environment and create an efficient operations environment, gain higher profits and acquire happy customers.

Companies using Big Data Analytics gain value by Cost Reduction where Cloud-Based Analytics and similar technologies cannot only bring down the cost of storing large amount of data but at the same time can bring about more ways of doing business. Quicker decision making is another key advantage where with the availability of in-memory analytics and ability to analyse the new sources of data, businesses can analyse real-time data and make immediate decisions based on what they have learnt.

Data Analytics can be applied across three key areas. In terms of planning, it can be used for effective risk profiling, the testing of data via simulation and statistical sampling. Data Analytics can also enhance the execution of audits, providing quick and effective monitoring of continuous controls, keeping watch for indications of fraud, recognising patterns to anticipate future risks and control simulation. It can enhance reporting of risk quantification, real-time exception management and root cause investigations to provide better understanding of how to avoid future breaches.

To keep pace in today's increasingly complicated governance and risk management landscape, progressive external audit firms and internal audit functions have started using technology to revolutionize the way audits are conducted. Both internal and external auditors are combining big data and analytics and greater access to detailed industry information to help them better understand the business, identify risks and issues and deliver enhanced quality and coverage while providing more business value.

There are opportunities for Cost and Management Accountants to work with data and data analytic outputs to assess business performance within the framework of accounting principles and methods. They can also use it to identify trends and unusual items requiring further investigation.

The integration of Big Data and Analytics into the audit helps to mitigate compliance and reputational risks and leads to better financial reporting and insights to ultimately drive better decisions and actions within an organization as well as to create strategic value.

This issue presents a good number of articles on the cover story theme *'Big Data Analytics in Accounting and Auditing'* by distinguished experts and authors. We look forward to constructive feedback from our readers on the articles and overall development of the journal. Please send your mails at *editor@ icmai.in*. We thank all the contributors to this important issue and hope our readers enjoy the articles.