

Research Article

A Study on Impact of big Data Analytics on Accounting Professionals

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How to cite this article:

Reddy G. A Study on Impact of big Data Analytics on Accounting Professionals. *J Adv Res Acct Fin Mgmt* 2022; 4(1): 1-4.

Date of Submission: 2022-02-10

Date of Acceptance: 2022-03-03

A B S T R A C T

The future will be determined by continual technological advancements, which will result in an ever-increasing need for real-time data analytics across all fields of time. The profession of accounting is not an exception to this rule. Now, accountants are required to employ computerised tools, such as big data analytics, rather of the manual procedures that were previously used. Big data analytics have an effect on almost every facet of accounting, including tax, audit and managerial accounting. It assists in locating numerous opportunities for advancing and analysing worldwide chances for accounting professionals, which is a huge benefit. Professionals in accounting should work to improve their talents in terms of both their technical and their analytical/statistical skills and knowledge. Accounting professionals may advance their careers by educating themselves on the advantages of big data as well as the risks and difficulties that arise from using big data. The purpose of this theoretical paper is to explore the impact that Big Data has had across the board in accounting. It places an emphasis on the necessity for transformation inside accounting companies in order for them to keep up with new technological approaches, as well as the opportunities and risks associated with analytics made possible by Big Data in accounting. The implications of big data for the accounting profession are another primary subject of the present paper. In addition to that, the opportunities that are open to professionals in the accounting field in the age of big data analytics are discussed in this paper as well. In a word, Big Data is expected to provide a great deal of potential in the field of accounting, which will need the accounting profession acquiring new skills in order to turn it into their primary area of expertise.

Keywords: Big Data Analytics, Accounting Professionals, Data Analytics, Data Visualisation

Introduction

Big data refers to very high quantities of data in any form that have been collected from a variety of sources at a speed that is faster than that of a conventional server. According to Gartner, one definition of it is as follows: "Big Data is high-volume, high-velocity and/or high-variety

information assets that require cost-effective, innovative forms of information processing that enable enhanced insight, decision making and process automation."

Significance of Big Data for Accounting Profession

The field of accounting is becoming more dependent on

rapidly developing technologies such as machine learning, artificial intelligence, data analytics, blockchain applications and cloud computing. These technologies play an important part in the world's current state of affairs. Big data is seen as having a very substantial impact on the future of business by 62 percent of companies all over the globe, according to a research by the IMA. According to the World Economic Forum, in the year 2020, the entire amount of data created each day would be almost 44 zettabytes. Companies have to manage, enhance and make quick choices on their operations in order to compete in the market and obtain a competitive edge. This is necessary so that they can keep up with the changing environment. In order to do this, they need to comprehend the current and future market trends in order to fulfil the expectations of their clients. It is necessary for companies to be aware of the many prospects for the development of income. In addition, they call for the investigation of a company's performance using both financial and non-financial criteria in order to complete the analysis. This organisation has to be able to store a lot of material and utilise correct information that is structured, semi-structured and unstructured within a certain amount of time and space.

Big data may be of use to companies since it provides them with a big volume of necessary data that is obtainable from a variety of sources including records, metaphors, videos and social networks. Big data is the technical analysis and mining of large amounts of data that is allied with big-velocity, big-volume and big-variety. Big data also deals with multifaceted big data sets, which traditional software processes are unable to deal with and it helps in updating data set to have space for acquiring data. Analytics for big data are what are utilised to integrate big amounts of data. The use of big data analytics will result in cost savings, which will lead to an increase in earnings. Because they are provided with a large amount of data that assists them in accurately analysing actual facts, businesses may reap the benefits of quicker and more accurate decision making.

The methods of financial and managerial accounting, as well as the reporting elements of these areas, may be improved with the use of big data analytics. Big data will give information that is both relevant and accurate in the field of financial accounting. This will enable stakeholders to make more informed choices, while also improving the transparency and quality of accounting data. In managerial accounting, putting up big data may help establish effective and efficient management control systems with systematic budgeting procedures. These systems can provide managers with the potential to acquire unexpected income streams. Big data may also help create and improve accounting standards by assisting with cash flow forecasting, the recovery of payments and the management of working capital in a way that is both efficient and effective.

Accounting businesses are able to better prepare for and organise the management of the risks associated with long-term investments in fresh markets with the assistance of predictive analysis in big data. Big data enables statistical precision in the detection of fraudulent activity and in the reporting of the underlying reason, which contributes to improved comprehension. An integrated report is produced as a result of the combination of the financial and non-financial data. By providing structured, semi-structured and unstructured information, it assists auditors in analysing not just financial but also non-financial behaviours and trends. Additionally, it assists auditors in assessing mistakes.

Benefits of Big Data to Accounting Industry

- Data Visualisation
- Data Analytics
- Audit Analytics
- Real time Access
- Risk Identification and Management

Opportunities and Risks of analytics facilitated by Big Data in Accounting

Big Data is used to get a knowledge of a variety of topics, including the preferences of consumers, the current state of the market, the positioning of rivals, the evolution of trends, as well as the inbound operations and services that companies provide to clients. A meaningful performance benchmark can only be obtained by compiling the data from all relevant industries and big data does just that. Big data analytics makes it possible for businesses to conduct their operations based on real-time data rather than the assumptions that were previously made. This is true in terms of analysing the people working for the company, analysing the strategies that are going to be implemented, studying the current and future market, consumer preferences and tastes, vendor ratings and risk assessments. Accountants have the opportunity to learn required tools and techniques and use various sources of data that are available. This allows them to gain technical knowledge, technical skills and abilities that assist them in accurately predicting outcomes while maintaining an economical cost structure by utilising real-time information. Integrating both financial and non-financial data allows accountants to do more accurate analyses of the factors that affect costs. The data that is available will assist accountants in operational processes and control mechanisms by identifying the areas of improvement where they are currently suffering problems. Accountants may also play a strategic and advising role in the stages of planning and executing operations for the purpose of making business choices thanks to the technical tools at their disposal. This prompts accountants to reimagine their strategic position in companies as new professional hybrids.

On addition to analysing risk, regulatory bodies may utilise big data analytics to get a profound insight of how operations function, which helps them concentrate their limited resources in a more productive and efficient business by determining which areas need further investigation.

The Management Information System is often weighed down by unpredictably large amounts of data, some of which may be erroneous and may even include errors, duplicates, or information that is no longer current. Big data may exacerbate these issues since it pulls data from disparate sources, such as social networks, where the information may not be trustworthy or may go out of date very quickly. The third obstacle that decision makers will need to overcome is the possibility of some inaccuracy in the data. In order to overcome this obstacle, decision makers will need to focus on quality standards and make certain that the data meets these standards. At the time of the analysis, there may be a risk associated in picking the data and its parameters; however, since big data will not rely on sample data but rather it analyses the full data sets client may dot original sample, this risk will not be a factor.

The analytics of big data provide an advantage when projecting potentially occurring events and assist to structure business operations using models. By drawing on newly gathered sources of data, machine learning makes it straightforward to replicate unique predictions.

Big data predictive models rely on the link between fundamentals and high-level outlines to make predictions about the future. Even the correlations are correct; however, it can be risky to accept correlations without referring to the underlying causes. This is because if the conditions change while the assumptions remain the same, there is a chance of receiving highly inaccurate predictions, which can lead to undesirable results. When managers make judgments based on this unexpected result, the actions may result in the removal of ethical problems.

Automation presents yet another opportunity for the use of big data in fields like law and medicine, where it can be used for diagnosis. Systems can sign and process a lot more information than humans and by displaying indicators, they can accurately go through the required scenario and gather a large amount of evidence pertaining to previous cases and other necessary information very quickly. For bookkeeping and account compilation, automation may also be employed in accounting. They allow tasks that are both high-standard and low-complexity.

Risk in automated systems is closely related to the risk of being hacked. Not only that, but particularly at the time of mergers and acquisitions, risks of fraudulent activities, risks of supply chain might be increased and in order to control this risk, they need to place a greater emphasis

on cyber safety. Big data aid in fraud detection credit and liquid risk management.

Traditionally, auditors and book keepers would personally collect accounting data, maintain massive files and conduct data analysis on the available local data set in order to calculate return on investments, risk, profit or loss, etc. However, with the advent of big data technology, accounting is now performed concurrently with audit sampling in order to identify issues and conduct risk analysis based on trends and exceptions.

Impact of Big Data analytics on Accounting Professionals

Accounting professionals who have received training in software tools have the potential to serve as a bridge in the process of blending analytical capabilities with models provided by statisticians. It is required of those working in accounting to acquire expertise in the professionals of changing data and storing data. In order to do this, they are designing to need to work closely with professionals that specialise in information technology in order to create the technically driven technical systems. They need to increase their understanding of both the theory and practise of statistics since this will aid them in locating useful data, which will in turn assist them in designing an acceptable strategy. The techniques of predictive analytics are used to the consumer data in order to make predictions. People who work in accounting will be able to apply predictive analysis to achieve reporting and audits that makes sense in the actual world. It is important for those working in accounting to be informed with the cyber laws that may protect them from becoming professionals of cybercrime. The smaller accounting companies will join together in order to maximise their potential to profit from specialised knowledge. Automation helps to reduce the need for low-level accountants while simultaneously increasing the need for highly experienced accounting professionals at the highest levels. When evaluating the effectiveness of an organisation, accounting personnel should make use of big data sets. When the impact of big data becomes more widespread, it's possible that accounting statements may have less weight with those who utilise accounting information outside. Big data makes it possible to conduct audits based on data, which results in a more positive experience for auditors. Auditing of conventional accounting statements will become significantly different as a result of the use of analytics. The essential use of block chain techniques is required since they enable the flow of data, which in turn alters reporting. When it comes to the taxation process, big data can monitor tax expenditures and budgets, evaluate tax rules and provide more accurate reports on firm performance.

With their combination of technical and statistical expertise,

accountants have the potential to become new skills of professional hybrids earning high salaries. Big data has consequences for the process of defining and revising accounting standards and these standards need to concentrate on the process of data collection to result in improved efficiency in capital markets. Implementing data analytics is a must for management accountants in order to keep their skills current with technological advancements, as well as to enhance corporate performance, which ultimately leads to management accountants being strategic partners of their respective organisations.

Conclusion

In shadow of big data Folks with the skills and talents to comprehend and analyse as strategic business partners are needed in the accounting profession rather than people who only handle the books. It is necessary to automate accounting procedures while maintaining full transparency. Accounting professionals, accounting users and academic learners will all benefit from gaining more insight to actual data, accurately predicting data and automating operations that are not regular thanks to this technology. When big data is employed, there are extra risks related with the selection of data sets, the quality of information and the construction of models that need to be tacit.

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