

The Effects Of Big Data Analytics On The Accounting Profession

Posted on July 31, 2022

Introduction

In contemporary society, the establishment of [Big Data](#) analytics is growing to evaluate and scrutinize the large volume of financial data from separate commercial units and their environment. This large amount of data is accumulated in the form of huge sets of information downloaded from various websites. The application of analytics on big data opens new doors for organizations to acquire a more prominent understanding, foresee future results and mechanize non-routine errands. The implications of big data analytics bear immense importance in the modern era of business industries. Furthermore, Big Data analytics provides immense opportunities for the accounting profession to help different businesses change their dynamics in various areas. This paper will unveil the significant effect of big data analytics on the field of accounting.

Big Data: Overview

The term “Big Data” can be defined as a very large amount of datasets, which are normally greater than one petabyte (1015 terabytes), and that carries certain storage and analyzing challenges (Mashey 1999). These extremely large data sets are unstructured/ raw data that are gathered from different discrete sources at a massive speed that is beyond the processing power of a customary server. The data is in large volume that is measured in terabytes and zettabytes. Big Data can be clarified by its three characteristics. These three characteristics are volume, velocity, and variety. The application of analytics to big data provides immense positive attributes for [accounting courses](#) and the finance industry.

The application of big data analytics has had successful effects in the accounting field. Big Data analytics perform error-free and accurate calculations, which cannot be performed by outdated accounting methods. The operations conducted by Big Data analytics are rapid and save abundant time. Big Data analytics cannot run on a traditional server because of its speed and consistency. The processing of the data occurs on a real-time basis. The technological innovations and the analytical functions of large voluminous data have reduced staff costs. The implication of Big Data analytics is that it will deliver numerous opportunities for accounting organizations to gain noteworthy perceptions, foretell future consequences, and mechanize their regular financial tasks. The technological system of big data analytics has minimized the staff cost that was required to analyze and organize large amounts of unstructured data in the accounting profession. Big Data analytics also

provides expert decisions and calculations for the future, which have massive prospects in the field of accounting.

Real-Time Access

In the past few years, the accounting profession has required the strategic tasks of data analytics within a short time. However, traditional accounting methods cannot cope with time and the large volume of data. This makes it difficult for accounting staff to fulfil their tasks on their given deadline every month. Big Data analytics provides real-time access to accounting data, which helps accounting firms meet deadlines. Furthermore, it can instantly correct the errors in reports and increase the efficiency/ accuracy level of the data analytics.

Risk Identification

The provision of risk-free and accurate financial services is an essential component for accounting firms. The implications of big data analytics are that it will identify potential risks and provide data analysis reports of financial data that will be error-free and accurate. The large volume of data comes with many errors and security issues. The accountants can have real-time access to their data and provide risk-free evaluations. Big Data analytics ensures the provision of risk-free data analysis reports and financial services for accounting firms.

Data Visualization

Big Data analytics provides visualization software to accounting firms. This visualization software will provide patterns, flows, irregularities, and exceptional patterns in a large amount of data. This will help the accountants visualize these patterns of data easily. It also helps them with better insights, more variables, and comparisons with previous analytical reports. The traditional accounting methods cannot provide such visualizing insights for the accountants.

Audit Analytics

In the modern era, external and internal auditors use Big Data analytics for their auditing processes. The traditional methods of auditing on ledger-based sampling are now considered redundant and time-consuming. The auditors use Big Data analytics to visualize large sets of financial data with greater comprehension. With the help of visualization software in data analytics, auditors can identify irregular/ exceptional patterns, errors, and pressure points. This will improve future predictions and enhance decisions for the auditors. Furthermore, the exploitation of analytical reports generated by Big Data analytics will help the auditors to make improved business choices and exhibit significant performance standards.

Conclusion

In conclusion, the implication of big data analytics is that it has the prospective of changing the old accounting standards to new improvised accounting standards. Big Data analytics accelerates the improvisation of decision-making and insight within the accounting paradigm of the business industry. It challenges the traditional accounting standards and provides new accounting principles to cater to the evolving culture of Big Data. Big Data analytics offers modest advantages of lucrative decision-making, data insights, and fraud exposure/avoidance to accounting and financial firms.

References

- Alles, M. G. (2015). Drivers of the use and facilitators and obstacles of the evolution of big data by the audit profession. *Accounting Horizons*, 29(2), 439-449.
- Brands, K. (2014). Big Data and Business Intelligence for Management Accountants, *Strategic Finance*, vol. 96, no. 6, pp. 64-5.
- Cadambi, B. V., Mayer-Schonberger, V., & Cukier, K. (2013). Big Data: a Revolution that will Transform How We Live, Work and Think. *SAMVAD*, 6(2), 94-98.
- Fanning, K., & Grant, R. (2013). Big data: implications for financial managers. *Journal of Corporate Accounting & Finance*, 24(5), 23-30.
- Mashey, J. R. (1999, June). Big data and the next wave of InfraStress problems, solutions, opportunities. In 1999, *USENIX Annual Technical Conference*.
- Sönmez, F., Perdahçı, Z. N., & Aydın, M. N. (2020). Big Data Analytics and Models. In *Handbook of Research on Big Data Clustering and Machine Learning* (pp. 10-33). IGI Global.