

## **Disadvantages of Big Data Management to the Organization**

Siti Nabila Isnkandar

Faculty of Information Management  
Universiti Teknologi MARA (UiTM)  
Selangor, Malaysia

Received Date: 11 December 2019

Published Date: 1 January 2020

**Abstract.** Large volumes of data, whether it is structured or not that provides the daily business, will define the big data. What organisation do with the data is the most crucial thing. By understanding that leads to better strategic business decisions is the analysis and description of the big data. In the era of globalisation, technology played an essential role in the progress and innovation of an organisation. Technology makes the management and administration of an organisation run more systematically and regularly. The growing use of social media has changed the landscape of communication between an organisation and users in the system of government electronically in enhancing the information delivery system.

*Keyword: Big Data, Hadoop, Technology, Information Analysis, Data Storage*

### **Introduction**

Tools, techniques and technologies are inclusive in big data where it operates productively on any scale which generates data on social networks until running the web application to the clients. Storage, computation and database services are among the tools in the big data that a person needs to make information data for the business where IT Research provides a systematic and manageable, analytics platform from the framework of the power system. Decreasing queries and take advantage of the vast ecosystem of tools, at the same time using high-scale to secure the infrastructure platforms is the focus of the big data (Baig, Shuib & Yadegaridehkordi, 2019).

Big Data will get access from the age of the information through the growth in variety, volume, complexity & velocity where there is an open-source solution for big Data Services that will distribute the technology in processing that has made it easier and able to make calculations on large data sources such as web server log files, call record data, sensor logs, Photography archives and social media content. Significant challenges will be faced by many businesses in big operationalising data, especially in recycling the big data that can be contacted as needed by the systems in the Company (L'Heureux, Grolinger & Carpetz, 2017). The development of the use of ICT has been

driven by the emergence and use of high internet among the people in the world. The rapid development of the use of ICT is to increase the effectiveness of information delivery systems and services. Among the government's strategies in this effort is to introduce the consumption of social media to diversify communication channels and expand access services to consumers (Prasad & Agarwal, 2016).

## **Disadvantages of Big Data Management to the Organisation**

### *Data Hadoop*

Previously, keeping the information would be a problem. However, it will give cheaper storage on platforms such as data Hadoop and lakes that has lightened the load. Besides, on what organisation do with the date is much more important as have the data from any source may analyse it to find the answers in regards to minimising their costs and time (Baig, Shuib & Yadegaridehkordi, 2019). The organisation can complete the organisation tasks when they use high power of analytics such as in examining the cause of the problems and failures by studying on customer's purchasing behaviour that will give impact to the company (Baig, Shuib & Yadegaridehkordi, 2019). According to Baig, Shuib and Yadegaridehkordi (2019), Hadoop Distributed File System (HDFS), Hbase, MapReduce Tool, YARN, Pig, Hive, Casandra, Mahout, Jaql, Zookeeper and Oozie are among the most used tools with big data. Also, HDFS and Hbase are among the most flexible data storage. Besides, it will be resulting from creating new chances for data analytics in healthcare, finance and other industries (Baig, Shuib & Yadegaridehkordi, 2019).

In the era of the industrial revolution, information and communication technology played an essential role as a catalyst for the progress and innovation of an organisation within aspects of national development (Prasad & Agarwal, 2016). Among them is the collection process, dissemination of information and document management will be faster, efficient and effective. This development can save not only time but also save energy and expenses of an organisation (Prasad & Agarwal, 2016). According to Prasad and Agarwal (2016), Hadoop is an economical choice, but some organisation may have no issues spending big money which caused an increase in the NoSQL databases. It is found that when researchers combine data from many sources, it will become essential to data fusion. (Prasad & Agarwal, 2016).

### *Internet of Things (IoT)*

On the other hand, the growth of the Internet of Things regards the velocity when the data is flowing at an uncertain rate. This phase should be handled promptly (Baig, Shuib & Yadegaridehkordi, 2019). However, it may be a big problem for the industry in terms of the big data which can impact on IoT and other connected devices. This is because it may produce an increase in the number of information that the organisations have collected, managed and analysed. Together with the big data will be followed by the potential to unlock the large view for the industry whether the industry is big or small. Apart from that, the massive amounts of information in

within the organisation that flow from unknown sources will seek new and innovative ways to gain big data from the competitors can make them more success (Olshannikova, Ometov, Koucheryavy, & Olsson, 2015).

At the same time, Olshannikova, Ometov, Koucheryavy and Olsson (2015) stated that the interaction and human involvement are crucial to working with big data system to increase customer's satisfaction which may reduce the risk and fraud. This is happening to maintain the compliance of the regulations which the big data gives significant insights. Still, it will also need organisations to move further with advanced analytics. In the education industry, educators are prepared with data-driven insights that can give a significant impact on the school systems, students and curricular by analysing the big data. This is happening when they can identify and determine the students at risk, ensure students are on track with their progress and can implement better systems for teachers in terms of evaluation record.

#### *Deep Learning*

Deep learning is needed because big data isolate hidden patterns. After all, without deep learning, it will cause problem and disadvantages towards the quality data the organisation have. How the flows between multiple locations, sources, systems, owners and users must be considered before any organisation locate their big data because there are steps to take over this massive data structure which are traditional and structured data together with the unstructured and structured data (Villars, Eastwood, & Olofson, 2011).

According to Villars, Eastwood and Olofson (2011), an explosion in devices placed at the periphery of the network will define data explosion which will give results to produce new chances for data analytics in healthcare, finance and other industries. By monitoring and improving on how organisation acquire, store, manage, share and use data inside and outside of the organisation is a strategy is to help the organisation with a big data system. Considering existing and future business and technology goals when developing strategy is important which big data is considering as precious asset to the organisation which will give right product and effective management (Villars, Eastwood, & Olofson, 2011).

#### *Working at Different Latencies*

Furthermore, the big data and how organisations manage and get information from it will change the world regarding the information technology because data integration requires to operate with various data types and sources. In the meantime, from real-time to streaming by working at different latencies are the biggest problem in big data because it has to expand to meet current needs (L'Heureux, Grolinger & Carpetz, 2017). Building the data and analytics strategy will ensure the information is dependable and empowering decisions to get data across the business will help the organisations to have a good strategy by surveying the adoption of technology and enhancing better methods for the organisation to successfully grow the analytics ecosystem (L'Heureux, Grolinger & Carpetz, 2017).

According to L'Heureux, Grolinger and Carpetz (2017), the data fusion is also crucial for the researchers to combine data from many sources as a process and algorithm manipulations are assumed to attract research interest because there is a possibility to use traditional way associated with the big data system. This is where paradigms help to update the existing model and enable bigger datasets than batch learning. It will help the team to meet the challenges of big data services with open source solutions that make the development of big data services easy and economical. Human interaction and involvement are essential to work with big data system (L'Heureux, Grolinger & Carpetz, 2017).

## Conclusion

In conclusion, the number of people who use the internet is a lot and keep growing day-by-day. The disadvantages of the Big data analysis are regarding the management of the data quantity to produce something useful which may give presumption about the future according to the records and find the colouration. This is very beneficial to run simulations to view the consequences of specific actions because the power of predictive analytics is rising. Smarter and faster algorithms are used to produce useful analytics and to conduct good learning about the quantity of data obtained from many sources which including the accessible social media because it already helped many businesses and to have informative decisions and significant result with a variety of applications.

## REFERENCES

- Villars, R., Eastwood, M., & Olofson, C. (2011, June). *Big Data: What It Is and Why You Should Care*. Retrieved on October 28, 2020, from the world wide web: [http://www.tracemyflows.com/uploads/big\\_data/idc\\_and\\_big\\_data\\_whitepaper.pdf](http://www.tracemyflows.com/uploads/big_data/idc_and_big_data_whitepaper.pdf)
- Maria Ijaz Baig, Liyana Shuib, Elaheh Yadegaridehkordi (2019, November). *Big Data Tools: Advantages and Disadvantages*. Journal of soft computing and decision support systems. (n.d.). Journal of Soft Computing and Decision Support Systems. Retrieved on October 28, 2020 from the world wide web: <https://jcsdss.com/index.php/files/article/view/215>
- Prasad, B. R., & Agarwal, S. (2016). Comparative study of big data computing and storage tools: A Review. *International Journal of Database Theory and Application*, 9(1), 45- 66. <https://doi.org/10.14257/ijdta.2016.9.1.05>
- L'Heureux, A., Grolinger, K., & A. M. Capretz, M. (2017, March 23). *Machine Learning with Big Data: Challenges and Approaches*. IEEE Xplore. Retrieved on October 28, 2020, from the world wide web: <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7906512>
- Olshannikova, E., Ometov, A., Koucheryavy, Y., & Olsson, T. (2015). *Visualising big data with augmented and virtual reality: Challenges and research agenda*. *Journal of Big Data*, 2(1). <https://doi.org/10.1186/s40537-015-0031-2>