Exploring the Path to Big Data Analytics Success in Health Care

Preshita Mahendra Panshikar[1] and Prof. Divakar Jha[2]

Student, Department of Computer Application[1]

Mentor, Department of Computer Application[2]

Late Bhausaheb Hiray S S Trust's Hiray Institute of Computer Application, Mumbai, India

Abstract: *Like Oxygen, the world is surrounded by data today. The quantity of data that we harvest and eat up is thriving aggressively in the digitized world. Increasing use of new innovations and social media generate vast amount of data that can earn splendid information if properly analyzed. This large dataset generally known as big data, do not fit in traditional databases because of its rich size. Big Data is a collection of data that is huge in volume, yet growing exponentially with time. It is a data with so large size and complexity that none of traditional data management tools can store it or process it efficiently. Organizations need to manage and analyze big data for better decision making and outcomes. So, big data analytics is receiving a great deal of attention today. In healthcare, big data analytics has the possibility of advanced patient care and clinical decision support. In this paper, we review the background and the various methods of big data analytics in healthcare. This paper also elaborates various platforms and algorithms for big data analytics and discussion on its advantages and challenges. This survey winds up with a discussion of challenges and future directions.*

Keywords: Big Data, Cloud Computing, Hadoop, Big Data Mining, Predictive Analytics.

REFERENCES

[1]. Alexandros Labrinidis and H. V. Jagadish, "Challenges and opportunities with big data," Proc.pp. 2032-2033, August 2012.

[2]. Amir Gandomi, Murtaza Haider, "Beyond the hype: Big data concepts, methods, and analytics," International Journal of Information Management 35, pp. 137-144, 2015.

[3]. Chaitrali, S., D. Sulabha and S. Apte, "Improved study of heart disease prediction system using data mining classification techniques," 2012.

[4]. Wullianallur Ragupathi and Viju Raghupathi, "Big data analytics in healthcare promise and potential",2016

[5]. Xindong Wu, Xingquan Zhu, Gong-Qing Wu, Wei Ding, "Data mining with big data," IEEE Transactions on Knowledge and Data Engineering, vol. 26, no. 1, 2014.

[6]. Wu, J., H. Li, S. Cheng, and Z. Lin. 2016. "The promising future of healthcare services: when big data analytics meets wearable technology." Information & Management 53 (8): 1020–1033. doi:10.1016/j.im.2016.07.003.

[7]. Yasin, S. A., and P. P. Rao. 2018. "A framework for decision making and quality improvement by data aggregation techniques on private hospitals data."

[8]. ARPN Journal of Engineering and Applied Sciences 13 (14): 4337–4345. Zaragoza, M. G., H. K. Kim, and Y. Chung. 2017. "U-healthcare Big data analytics process control." International Journal of Control and Automation 10 doi:10.14257/ijca.2017.10.11.15.

[9]. Zhang, F., J. Cao, S. U. Khan, K. Li, and K. Hwang. 2015. "A task-level adaptive mapreduce framework for real-time streaming data in healthcare applications." Future Generation Computer Systems 43: 149–160.