Big Data Analytics: New Opportunities in Scientific Research

Kamran Ali Sani¹, Nadeem Uz Zaman², Bilal Sarwar², Noor Muhammad², Mumraiz Khan³ ¹Faculty of Science and Technology, Middlesex University London, United Kingdom ²Department of Management Sciences, BUITEMS, Quetta, Pakistan ³Department of Computer Science, BUITEMS, Quetta, Pakistan Corresponding Email: k.ali@mdx.ac.uk

Abstract—This research entry is a literature-based viewpoint that extends an appreciation of how big data analytics can mold the way scientific research is carried out. We, nevertheless, have focused our discussion on the usefulness of big data analytics rather than the nature and description of bog data collection, storage, and retrieval. We argue that big data analytics has several advantages over conventional data analysis. Big data analytics can give scientific researchers greater insights into the problem of study with improved reliability and validity of the results. Big data analytics can play a vital role in greater and more useful creation of knowledge, the setting of future research direction, and reduction of the wastage of research efforts and resources.

Keywords-Big Data, Big Data Analytics, Scientific Research, Data Analysis