

Big Data and Its Impact on Educational Sector

Bob Orkian*

Department of Computer Science, Aragatsotn Technical College, J6QF+WXV, Tsaghkahovit 0401, Armenia

Description

The world is changing quickly because of the rise of technological advancements. As of now, countless specialized gadgets are used by people. In each and every second, a huge measure of data is created through these gadgets. In order to counter with this enormous data, recent technologies and applications are being developed. These innovations and applications are valuable for information investigation and storing. Presently, big data has turned into an issue of interest for researchers. Scientists are attempting to characterize and describe big data in various ways.

Generally we know, big data consist of a large volume of information. However, someone referred it as an educational resource that is described by high amount, speed, and variety. Additionally, big data is also depicted as huge informational collections that are hard to measure, control or analyses in a traditional way. Big data is often distinguished into 3 Vs which are Volume, Variety, and Velocity. The volume alludes to as a lot of information or expanding size of information. The size of big data can be estimated in terabytes and petabytes. To counter with this huge volume of information, high capacity storage frameworks are required. Type or Heterogeneity of the data is referred by the Variety. The information can be in an organized format (data sets) or in an unorganized format (pictures, video, messages, etc.). Big data insightful instruments are useful in handling of unorganized format. Velocity denotes the speed at which big data can get to. The information is almost present in real-time surroundings (Internet logs).

Big data is a fundamental part of development which recently acquired significant consideration from both academics and experts. Considering the significance of the educational area, the current propensity is moving towards scrutinizing the role of big data in this sector. So far, many examinations have been directed to grasp the use of big data in various fields for different purposes. However, a comprehensive survey is as yet ailing in big data in education. It has been tracked down that the four primary exploration topics under big data in education, essentially, student's conduct and execution, displaying and instructive data warehouse, improvement in the educational framework, and incorporation of big data into the educational program. The majority of the big data experts investigate on student's conduct and performances.

Demand of big data is significantly expanding in various fields of endeavor like insurance and construction, medical services, telecom, and e-commerce. Nonetheless, the educational area isn't an exemption in the present situation. In the educational realm, an enormous volume of information is created through web-based courses, teaching and learning activities. With the coming of big data, presently teachers can get to understand students' academic performance, learning method and give instant feedback. The timely and productive feedback inspires and fulfils the student, which gives a positive effect on their performance. Academic information can assist teachers to analyses their teaching method and influence changes as per students' necessities and prerequisite. Numerous web-based educational sites have been designed, and various courses dependent on individual student choices have been introduced. The improvement in the educational sector relies upon acquisition and innovation. The huge scope administrative information can play a vital role in solving various educational problems. Accordingly, it is important for professionals to understand the effectiveness of big data in education in order to reduce educational problems.

Numerous investigations were conducted over student's behaviour and performance topic. There were other topics also, but they are not so much focused. Hence, more investigation is expected in modelling the educational Data Warehouse later on, in order to improve the educational framework and reconciliation of big data into the educational program related topics.

Acknowledgement

The authors are highly appreciative to the Research Project for Young and Middle-Aged teachers of Aragatsotn Technical College.

Conflict of Interest

None

How to cite this article: Orkian, Bob. "Big Data and Its Impact on Educational Sector ." *J Sens Netw Data Commun* 10 (2021) : e001.

*Address to correspondence: Bob Orkian, Department of Computer Science, Aragatsotn Technical College, J6QF+WXV, Tsaghkahovit 0401, Armenia; E-mail: mail2bob@yahoo.com

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Received: 08 September, 2021; Accepted: 22 September, 2021; Published: 29 September, 2021