

A Review on Big Data Analytics

Abhinav Kathuria

Guru Nanak College, Killianwali, Sri Muktsar Sahib, Punjab, India

ABSTRACT

In the recent years, many businesses are exploiting big data. Over the last ten years, due to the technological advancement huge amount of data can be stored and is being generated in almost every sector. Actually, it is the collection of unstructured data collected from different sources. Many social media websites like Facebook, Twitter etc. are also generating a huge amount of data. Different techniques are needed to fetch meaningful information, processing and analysis of this data and many have been developed over the years. For example, many organizations may need information on their products so that they can improve the loopholes and can improve their marketing strategy.

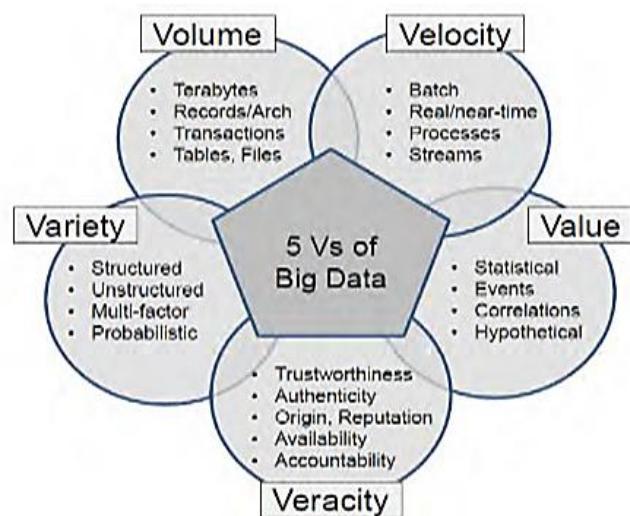
Keywords: Big Data, Data Analytics, Hadoop

I. INTRODUCTION

When the data is available in huge amount, it is known as big data. There are many sources of data for example audio, video, database tables etc. Twitter generates about 250 Million tweets per day; 4 billion people watching YouTube per day etc are examples showing how data is being generated in huge amount. With an increase in the storage capabilities, it is also easy to store and process this huge amount of data. Big Data Analytics is the process of examining huge amount of data to discover hidden patterns, unknown relations, market trends etc. It will help companies/industries to make informed decisions which will help them to improve their products. Many different tools and techniques are available to process and analyze the huge amount of data, amongst which Hadoop is the mostly used.

II. CHARACTERISTICS OF BIG DATA

The characteristics of big data can be described in the following figure:-



- **Volume:**-This is the first thing that comes to the mind when people think of the term Big Data. Actually, a huge amount of data is being generated in every field these days and many storage techniques are available to store this data.
- **Velocity:**-It refers to the speed by which data is being generated and the speed at which data can be processed and analyzed. In fact, all social media messages are viral within seconds.
- **Variety:**-Data collected is in various forms. It is not in structured form. Mostly data is unstructured and data analyst has to cope up with the problems of storing and analysis of data.
- **Veracity:**-When we are coping with high volume, speed, and type of information, it's insufferable

that every one of the info goes to be 100 percent correct. The standard of knowledge is varied greatly.

- Value:-It is the most important part of Big Data. If we are having huge amount of data it is good thing, unless we turn it into value for someone, it is useless. So there must be tools and techniques available to convert this huge amount of data into some value.

III. CONCLUSION

In this analysis, we've examined the innovative topic of huge knowledge that has recently gained innumerable interest because of its perceived new opportunities and advantages. within the data era we tend to square measure presently living in, voluminous sorts of high-velocity knowledge square measure being created daily, and among them lay intrinsic details and patterns of hidden data that ought to be extracted and utilized. Hence, big data analytics is applied to leverage business amendment and enhance the process, by applying advanced analytic techniques to huge knowledge and revealing hidden insights and valuable data. Accordingly, the literature was reviewed to produce associate degree analysis of the massive data analytics ideas that square measure being researched, further as their importance to decision making. Consequently, huge knowledge was mentioned, further as its characteristics and importance. Moreover, a number of the massive knowledge analytics tools and ways especially were examined. Thus, huge knowledge storage and management, further as huge knowledge analytics process were elaborated.

IV. REFERENCES

- [1]. Adams, M.N.: Perspectives on Data Mining. International Journal of Market Research 52(1), 11–19 (2010).
- [2]. Sameera Siddiqui, Deepa Gupta," Big Data Process and Analytics : A Survey", International Journal Of Emerging Research in Management & Technology, ISSN: 2278-9359, Volume 3, Issue 7, July 2014.
- [3]. Bharti Thakur, Manish Mann," Data mining for big data: A Review", International journal of advanced Research in Computer Science and Software Engineering, ISSN: 2277 128x, Volume 4, Issue 5, May 2014.
- [4]. Ankita S. Tiwarkhede, Prof. Vinit Kakde," A Review Paper on Big Data Analytics", International Journal of Science and Research (IJSR), ISSN (Online): 2319-7064, pp: 845-848.
- [5]. D.Fisher, R.Deline, M.Czerwinski and S. Drucker,"Interaction with big data analytics", Volume 19, No.3, May 2012.
- [6]. J.Gantz, D. Reset," The Digital Universe in 2020: Big Data, Bigger digital shadow, and biggest growth in the far east", in Proc : IDC view, IDC Anal, Future, 2012.