Chapter 54
An Analysis of Big Data Analytics

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ABSTRACT

In the development of the advanced world, information has been created each second in numerous regions like astronomy, social locales, medical fields, transportation, web-based business, logical research, horticulture, video, and sound download. As per an overview, in 60 seconds, 600+ new clients on YouTube and 7 billion queries are executed on Google. In this way, we can say that the immense measure of organized, unstructured, and semi-organized information are produced each second around the cyber world, which should be managed efficiently. Big data conveys properties such as unpredictability, 'V' factor, multivariable information, and it must be put away, recovered, and dispersed. Logical arranged data may work as information in the field of digital world. In the past century, the sources of data as to size were very limited and could be managed using pen and paper. The next generation of data generation tools include Microsoft Excel, Access, and database tools like SQL, MySQL, and DB2.

1. INTRODUCTION

In the development of advanced world, information has been creating each second in numerous regions like Astronomy, Social locales, Medical fields, transportation, web based business, logical research, horticulture, video and sound download. As per an overview, in 60 second, 600+ new client on YouTube and 7 billions of queries are executed on Google. In this way, we can say that the immense measure of

organized, unstructured and semi organized information are produced each second around the cyber world which should be managed efficiently. Big Data conveys properties such as unpredictability, 'V' factor, multivariable information and it must be put away, recovered and dispersed the data.

Logical arranged data may works as information in the field of digital world. In past century the source of data so as to size are very limited which could be managed using pen paper. The next generation of data generation tools includes Microsoft Excel, Access and database tools like SQL, MySQL, and DB2 etc.

Now a day's, Advancement in Telecommunication and computation Technology are led on exponential growth and availability of data. When the data are increasing exponentially, parallel to it emerges many relative issues e.g. security, management, timeliness, incompleteness, Human collaboration, data Analysis skill.

2. LITERATURE REVIEWS

2.1 Need of Literature Review

The need of literature review is to overview the concepts, relations, cases and understanding the subjects to micro and macro level. Our chapter has been allowed to explore and review more literature part by part. Literature has been divided into different domains as (i) Big Data Analytics, (ii) Smart City, (iii) Water Management and (iv) Combinations of domains.

2.2 Literature Review

2.2.1 Big Data and Applications

Manish Kumar Kakhani, Sweetie Kakhani (2013) spoke about the basic concept of big data. The number of data is increasing continually in what percentage and area. What's the current & future research area expected in big data. They also spoke about big data in other fields of analytics. They're also mentioned about the tools and techniques the big data industry uses. The diverse possibilities of big data applications and how to manage, store, process and analyze big data were also discussed .

GuJifa, Zhang Lingling(2014) explained about the DATA, DIKW, Big Data, and Data Science relationship. The authors explained how information can be derived from small / big data, and it can be translated into knowledge and used with wisdom. It has gathered various meanings of big data and data science identified by different users.

Sampada Lovalekar (2014) defined Big Data definition, and how it varies from conventional data. They highlighted the problems and opportunities associated with big data. How various tools such as NOSQL, HADOOB and other HADOOB based projects are useful in big data research and management.

Amir Gangoti, Murtaza Haider (2015) identified academics and practitioners ' concepts & characteristics of big data. The paper also commented on analytical techniques (text, audio, video, social media & predictive analytics), statistical methods used for structured and unstructured data and characteristics, i.e. quantity, velocity and variety etc. The real-world data processing is not feasible for big data on a wide scale.

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