

## Chapter 6

# Big Data Analytics in Social Media: An Overview

**Janani Balakumar**  
*Bharathiar University, India*

**Vijayarani Mohan**  
*Bharathiar University, India*

### ABSTRACT

*The rapid development of online social media is the method of collaboratively produced content material presents new possibilities and challenges to both producers and patrons of knowledge. The term big data refers to large-scale information control and evaluation technologies that exceed the functionality of conventional data processing techniques. In the current scenario, social media has gained amazing attention within the last decade. Accessing social media platforms and websites such as Facebook, Twitter, YouTube, LinkedIn, Instagram, and Google+, web technologies have become more responsible. People are becoming more fascinated about and relying on social media platform for records, news, and opinion of other customers on diverse topics. Hence, these situations produce a large volume of data. The main objective of this chapter is to provide knowledge about big data analytics in social media. A brief overview of big data and social media are discussed. Research challenges in social media are also discussed.*

DOI: 10.4018/978-1-5225-3534-8.ch006

## **INTRODUCTION**

Big data is a term that designates the massive volume of information and normally it is in the form of structured, semi-structured and unstructured. However the amount of data is not necessary, instead of that, what organizations do with the data is incredibly important. Big data can be analyzed for insights that lead to better decisions and considered for business moves. It is being created by everything around us at all the times (Agrawal et al., 2011). Each digital process and social media exchange creates the big data. Big Data analytics is the progression of analyzing huge volumes of data sets which contain a range of data types to find out the hidden patterns, market trends, unknown correlations, customer preferences and some of the other useful business information.

Meanwhile, Big Data is a new developing field, there is a need for development of new architectures, frameworks, methodologies and algorithms for handling big data. Big Data might be produced by a handheld device, social media, multimedia and some other new applications that must have the features of volume, velocity, variety and veracity. Social media consists of methods, techniques, tools and technologies that use the internet to enable the communication in an open environment. In social media the process of being connected with people, the common entity is 'Big Data'. The following summary facts about social media (Gandomi, 2015),

- Generally 75% of Male users using Facebook and 83% of Female users.
- 22% of the world's total population use Facebook.
- 81% of pertaining of thousand checks Twitter at least once per day.
- The average Linkedin user spends 17 minutes on the site per month
- 93% of Pinterest users use the platform to plan or make purchases
- 29% of college students use Twitter, compared to 20% with a high school or less.
- Most Instagram users between 18-29 years old, six out of ten in online adults.

## **NEED FOR INNOVATIVE TECHNOLOGIES**

To support and execute the big data, the traditional analytic methods and technologies are ruined. Hence, there is a need to develop a new and efficient technology for the following reason (Bakshi, K. 2013),

- To store and execute the huge volume of dynamic data
- To handle the variety of data simultaneously
- To analyze and manage the unstructured data

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/big-data-analytics-in-social-media/207382](http://www.igi-global.com/chapter/big-data-analytics-in-social-media/207382)

## Related Content

---

### Patent Information Quality to Stimulate Innovations

Sérgio Maravilhas, Sérgio Goes Oliveira and Paulo Melo (2019). *Handbook of Research on Expanding Business Opportunities With Information Systems and Analytics* (pp. 120-144).

[www.irma-international.org/chapter/patent-information-quality-to-stimulate-innovations/208561](http://www.irma-international.org/chapter/patent-information-quality-to-stimulate-innovations/208561)

### Predictive Analytics to Support Clinical Trials Get Healthier

Ankit Lodha and Anvita Karara (2018). *Exploring the Convergence of Big Data and the Internet of Things* (pp. 222-239).

[www.irma-international.org/chapter/predictive-analytics-to-support-clinical-trials-get-healthier/187903](http://www.irma-international.org/chapter/predictive-analytics-to-support-clinical-trials-get-healthier/187903)

### Social Media Content Analysis and Classification Using Data Mining and ML

Sambhaji D. Rane (2021). *International Journal of Data Analytics* (pp. 75-84).

[www.irma-international.org/article/social-media-content-analysis-and-classification-using-data-mining-and-ml/285469](http://www.irma-international.org/article/social-media-content-analysis-and-classification-using-data-mining-and-ml/285469)

### Review of Big Data Applications in Finance and Economics

Ulkem Basdas and M. Fevzi Esen (2021). *Handbook of Research on Engineering, Business, and Healthcare Applications of Data Science and Analytics* (pp. 181-202).

[www.irma-international.org/chapter/review-of-big-data-applications-in-finance-and-economics/264310](http://www.irma-international.org/chapter/review-of-big-data-applications-in-finance-and-economics/264310)

### A Markov-Chain-Based Model for Group Message Distribution in Connected Networks

Peter Bajorski and Michael Kurdziel (2020). *International Journal of Data Analytics* (pp. 13-29).

[www.irma-international.org/article/a-markov-chain-based-model-for-group-message-distribution-in-connected-networks/258918](http://www.irma-international.org/article/a-markov-chain-based-model-for-group-message-distribution-in-connected-networks/258918)