

## **BIG DATA SECURITY AND PRIVACY: AN OVERVIEW**

Mrs. A. Priyadharshini<sup>1</sup>, Mr. A. P. Thangamuthu<sup>2</sup>, G. Vadivel<sup>3</sup>

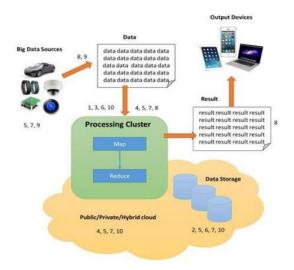
<sup>1</sup>Assistant Professor & SNMV College of Arts & Science <sup>2</sup> Assistant Professor & SNMV College of Arts & Science <sup>3</sup> Assistant Professor & SNMV College of Arts & Science \*\*\*

**Abstract** - *Big data is now emerging as a requirement in the world. Majority of humans have been linked to communications in different ways. People share information in different forms. The information that connects people is increasing at a large scale, creating security and privacy concerns. With larger data technologies growing at a faster pace, it creates space for security and privacy issues. These complications can not be properly considered, but the future of expected growth and prospects and large data will create barriers to long-term success. In this paper, we review various domains of security and privacy issues for large data such as health, social media, internet and social networking.* 

*Key Words*: Big Data, security and privacy, social media, social networking, IOT

### **1.INTRODUCTION**

"Big Data" refers to a collection of large and complex data sets. In current circumstances, the present system of current systems or systems violates the storage, storage and communications capacity. Database systems have greatly improved over the past four decades based on technology network and hydraulic models [1] for relevant and subject database systems. Database settings are implemented through web access and data management services as web services [1]. Due to the explosion of web-based services, integrated data management and social media and mobile computing, the amount of data to be handled has increased in the two decades into the Terabytes (TB) petabytes (PB) and zeta bytes (ZB). Such widespread complex data is known as large data [1].



#### 2. BIG DATA: DEPENDENCE ON DATA:

'Big Data' refers to novel ways, in which companies, including government and business, combine various digital rankings, and then divide statistical and other data mining technologies into confidential information and a surprise connection. [2] 'Big Data' is the most powerful version of Enlightenment Findings in databases or data mining. It is' indirectly, unaware of, and the ability of the typical database software to fully capture, store, manage and analyze the entire company. [2]

Biggest Internet companies like Google, Facebook, Amazon, EBay, Microsoft and Yahoo! -In a form or larger data, data is handled by a large asset and value creation. Google is an excellent example of the reliability of the data collected from its own services, not only by its functions (but also by determining search searches), and new data intensive services, such as voice recognition, translation and location based services, to train its search algorithms.

#### 3. BIG DATA : SECURITY AND PRIVACY ISSUES

Large quantities of large data databases are utilized by a wide range of data sources. It also raises security and privacy concerns in various domains. [1] Because of large data, data and information used for various purposes, security and privacy of a person are in danger. Here we discuss security and privacy issues in Big Data in this section. [1]

#### **SOCIAL MEDIA:**

The social media (content) that we upload or download is whether a blog, video, audio, slide, podcast, newsletter or an eBook. [3] Public social media are public and people share their information with each other.

#### SECURITY AND PRIVACY IN SOCIAL MEDIA:

Social media size is growing rapidly, based on text, images, audios and videos, and it is increasing, since it does not end the current trends, so the privacy of personal data and privacy data is very difficult to handle. [4]

Public social media has increased to a wide range of rankings. This data is shared and contains various forms. Security and privacy concerns have increased with such broader data. [4]



#### 4. SOCIAL NETWORKS:

Social networks have evolved into new epochs that can be linked to anyone or anyone who wants them to be connected to social networks. Daily photos, audio and text sharing on daily days, which requires large data on social networks, can generate data from social networking sites and other social networks up to several daily gigabytes, and data should be handled seriously. [5] Best examples of social information include Facebook, Twitter, Google, mobile phone companies, retail chains and government organizations. [7]

#### SECURITY AND PRIVACY IN SOCIAL NETWORKS:

Social networking sites empower its users to use the privacy setting so that privacy arrangements are provided by a userspecific social networking site that uses the user's privacy setting. [5] Example: Who can contact me on Facebook privacy settings 'Who can see my stuff?' Offers many options. A user can use his profile to use private and security according to his needs. The following issues are important concerns.

# THREATS AND ANTI-THREATS STRATEGIES FOR SOCIAL NETWORK SITES

Online social networks (OSN), such as Facebook, Tweeter, MySpace play an important role in our community, which is greatly affected by Information Technology (IT) [9]. Many are still reluctant to use these networking sites because of their user friendly and free costs. [10] Many people claim that these sites have done globally and less distinctly - resulting in a lesser mood in the world. Some people view this social change as positive as people are connected to each other. [10] Nowadays, almost all people share social networking websites with photos, videos, friends and relatives, discussing many things about daily life, and not just social issues, but others like politics that recently helped to establish rule in many countries. [10]

#### 5. INTERNET OF THINGS (IOT) :

IOT is a recent future concept, an integral part of the Internet, to help communicate with each other and users the microcontrollers, digital communication transistors and appropriate protocol layers of everyday life. [3]

#### SECURITY AND PRIVACY ISSUES IN IOT:

IOT is a network of networks, with a large number of objects, sensor devices ICT (communication technology). [3] Is it safe from a privacy perspective in large databases of PCD data? Networks are getting the most popular day, which is a new data age and New classes of privacy concerns have increased [3]. New approaches will be needed to address the new challenges of Big Data and face new challenges that are being developed in the future and include current and future aspects of social and technological solutions. [8]

#### **6. CONCLUSION**

In this paper, we have reviewed security and privacy issues in Big Data. It also specifies the different sources of databases as Big Data. The social media network and IOT have been reviewed to review security and privacy issues. We review issues of privacy and security in various domains of Big Data because time and time are reviewed for security and privacy issues, helping to better understand the vast aspect of the advanced data of technology development.

#### 7. References

1. Workshop Report: Big Data Security And Privacy Sponsored by the National Science Foundation, , The University of Texas at Dallas, September 16-17, 2014

2. Big Data: The End of Privacy or a New Beginning? By Ira S. Rubinstein, January 25, 2013

3. U M Fayyad, 'From Data Mining to Knowledge Discovery, An Overview,' in U M Fayyad, Advances in Knowledge Discovery and Data Mining 6 (Menlo Park: AAAI, 1996), cited in Tal Z Zarsky, 'Mine Your Own Business! Making the Case for the Implications of the Data Mining of Personal Information in the Forum of Public Opinion' (2003) 5 Yale Journal of Law and Technology

4. McKinsey Global Institute, 'Big Data: The Next Frontier for Innovation, Competition, and Productivity' May 1, 2011.

5. John Markoff ('How Many Computers to Identify a Cat? 16,000' NY Times B1, June 26 2012

6. ShashiRekha .H., Dr. Chetana Prakash, Kavitha G."Understanding Trust and Privacy of Big Data in Social Networks : A Brief Review ", 2014

7. Richard L Villars, Mathew East Wood and Carl W. Olofson "Big Data what it is and why you should care. June 2011

8. Won Kim, Ok-ran jeong, Sang – won lee. "On social websites". Sept 2009.

9. Omar Saeed Al Mushayt. Threats and Anti-threats Strategies for Social Networking Websites. International Journal of Computer Networks & Communications (IJCNC) Vol.5, No.4, July.

10. Comprehensive Social Media Security Analysis & XKeyscore Espionage Technology Adam Ali.Zare Hudaib