INFORMATION SHARING AND PRIVACY OF DATA: PUBLISHING AND PRESERVATION

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Abstract: *In the field of computing, many individuals share information and data with others and receive from others. In this whole process of sharing data and information, the most important thing is privacy. To maintain the privacy of the sensitive data and information of the users is very important .There is lot of Ongoing research on this topic related to privacy that how privacy and sensitive information related to various individuals can be maintained without the violation of individuals personal information. There is a solution to this problem that is privacy preserving. In this method data can be published and privacy is preserved. This is known as PPDP.*

Key Words: *PPDP, Publishing, Preserving, Violation.*

1. INTRODUCTION:

In today's world ,internet is everywhere. So ,it is easy to share information and data with others .But the most vital part of this is privacy. Privacy of sensitive data and information is essential part of information sharing. Many agencies ,organizations, companies take the data from their employees ,individuals and so on and then publish for generating the required information. But its difficult to maintain privacy while collecting the sensitive data and then publishing the information from it .Now the question arises that how we can preserve the privacy and publish data. The answer is we can preserve the privacy on same time while publishing the data using various techniques like data anonymization . Such kind of techniques can help in preserving the privacy of the sensitive information. In this way various organizations and governments take use the sensitive information of others without any kind of violation related to the privacy of others and privacy can be maintained.

2. CONCEPT OF DATA ANONYMIZATION:

Data anonymization can be described as the technique that can change normal data in form of text to a format that is not able to be read by humans .All of this is done with the help of hash functions and encryption techniques . The technique of data's anonymization allows the transmission of the sensitive information among various organizations, departments, companies and so on. This technique preserve of privacy protection on same time form any unauthorized access to sensitive information .In this way the sensitive data can be protected to be disclose among non intended users or attackers. Method of data anonymization is also helpful for maintaining security in the cloud computing environment.

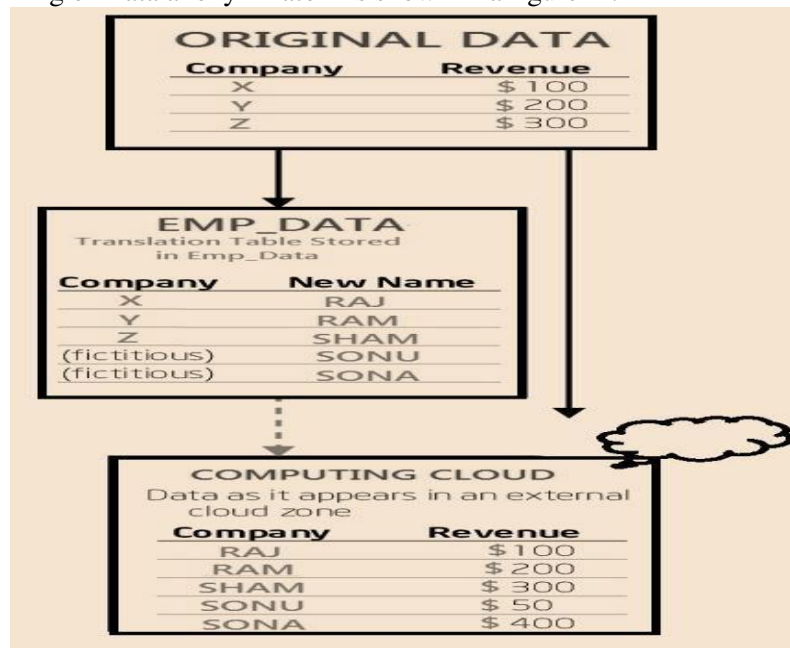## 3. WORKING: The Working of Data anonymizatoin is shown in a figure 1-:

FIGURE-1 DATA ANONYMIZATION

In the basic data anonymization the person who will publish the data, have the basic form of table which includes various identifiers and sensitive attributes. where Explicit Identifier is also included which is a set of attributes that describe the explicit information about a person Quasi identifier is also included can be used to identify the person related to any particular record. For the protection of privacy and publishing the data on same time, the method of data anonymization hide the original identity of record owner and keep the sensitive attributes separate for future data analysis purpose.

4. CONCLUSION:

Now a days sharing of information is very frequent and common among various companies ,employees ,individuals , organizations and so on. Publishing of the data and on the same time preservation of the privacy is a approach that will expand and develop on higher levels for enhancing the level of privacy protection. This method is not only helpful for government agencies but for the individuals also.

5. ACKNOWLEDGEMENT:

During this research paper, I have put my best efforts for completing this research paper. I hope that this research paper will be helpful for the future authors who want to do further research related to privacy preservation .

REFERENCES:

Papers
1. Privacy Technology Focus Group Report (PDF). United States Department of Justice. 2006. p. 52.
2. Bin Zhou; Jian Pei; WoShun Luk (December 2008). "A brief survey on anonymization techniques for privacy preserving publishing of social network data". Newsletter ACM SIGKDD Explorations Newsletter. 10 (2): 12–22.
3. "Data anonymization". The Free Medical Dictionary.

Books
1. Ragunathan, Balaji (June 2013). The Complete Book of Data Anonymization: From Planning to Implementation. CRC Press. ISBN 9781482218565.
2. Aris Gkoulalas-Divanis, Grigorios Loukides (2012). Anonymization of Electronic Medical Records to Support Clinical Analysis (SpringerBriefs in Electrical and Computer Engineering). Springer. ISBN 9781461456674.