ABSTRACT

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Publication of data are inseparable in some institutions, both private and public. However, a gap appears because there are some sensitive data which to become disgrace in individual data owners were published. The best way to solve these problems is using Privacy-Preserving Data Publication (PPDP) approach. Various models in PPDP have been applied, but there are some defects such as higher Information Loss are generated from these model. Alternative PPDP models are needed to correct the deficiencies of commonly applied models in PPDP, i.e. Anatomy model. The purpose of this research is to know the result of Information Loss or how much information is lost due to Anatomy model and how to provides sensitivity data privacy. The method used in this research is Engineering method with Non-Participant Observation data collecting technique; using data from UC Irvine (UCI) Machine Learning Repository. There are three main phase in this research, namely: Pre-Process for collecting and sorting data, Processing for anonymizing data, and Post-Process to conclude the result from this research. Obtain an average Information Loss for Anatomy model in this research is 9.154,519 for all case. Those cases consist of a number of data in a group or cluster (k) and various types of sensitive attribute in a cluster (p); with Execution Time falls in around 35 second, as the result of separation between sensitive data and non-sensitive data (Explicit Identifier and Quasi-Identifier)

Keywords: Data Privacy, Anatomy, Information Loss