

## ABSTRACT

*Social media users continue to grow throughout the world, especially in Indonesia which has five social media platform that are most actively used by its people, one of which is LinkedIn. Increased social media users produce a huge amount of data (big data), big data is processed to generate insights and make strategic decision for business, and the insights that obtained from big data can be applied in various fields, one of which is on financial institutions such as banks to support decisions in determining whether or not they are worthy of a need through creditworthiness analysis. Social media data contains information and content that can be used as alternative data by financial institutions such as Banks in conducting creditworthiness, even though social media data has a lot of irrelevant information to customer's credit conditions. Therefore, it is necessary to adjust the theoretical approach and the proper data processing. Through these problems, this study aims to conduct a creditworthiness analysis using LinkedIn social media data in the form of demographic and social network data. This study uses one of the models in the data mining method called prediction analysis with classification method and using decision tree and random forest algorithm. The results of this study indicate that the combination of demographic data and social network data processed using the random forest algorithm is proven to be able to produce the best creditworthiness model with an accuracy value of 77.27 percent.*

*Keywords: Big Data, Social Media, Creditworthiness, Prediction Analysis, Classification*