1. INTRODUCTION

Tracer Study, commonly known as an alumni tracking system, represents a systematic effort to gather information about graduates through the completion of questionnaires. As an invaluable instrument, Tracer Study goes beyond merely tracking the success of alumni; it serves as a key element in shaping graduation portfolios and enhancing overall improvements within the higher education environment.

The utility of implementing Tracer Study extends beyond academic evaluation, playing a pivotal role in determining how well a higher education institution prepares its graduates for the challenges of the workforce. In this context, alumni tracking becomes a critical foundation to ensure that the curriculum and learning experiences provided align with the competencies demanded in today's professional landscape.Telkom University already has a tracer study in the form of a questionnaire. However, alumni must fill in their personal data first in to the questionnaire. In the 2022 Telkom University tracer study data, there are 4306 student data who have graduated and filled out the tracer study questionnaire.

Tracer Study also functions as an effective tool in supporting the enhancement of graduation portfolios, subsequently elevating the reputation and appeal of higher education institutions. By evaluating the achievements and progress of alumni, colleges and universities can identify areas for improvement, optimize academic programs, and develop new strategies to ensure the success of graduates across various sectors.

Moreover, it is important to acknowledge that Tracer Study is not merely an internal evaluation tool but also serves as a guide for students who have completed their studies. By mapping the competencies acquired during their academic journey, Tracer Study helps align the skills of graduates with the practical demands of the real world. This creates a robust bridge between the realms of education and industry, ensuring that graduates possess not only academic knowledge but also the practical skills necessary for success in their careers.

Furthermore, Tracer Study provides a comprehensive overview of the positions held by graduates in the job market. This information not only offers in-depth insights into the impact and relevance of higher education on the workforce but also helps institutions understand career trends, industry needs, and changes in the business environment that may influence future educational strategies.

In 2018, Dika Rizky Nurcholis et al. Do research on Tracer Study Results Analysis of Telkom University Alumni using Minimum Spanning Tree (MST). The Kruskal algorithm which is summarized using five kinds of centrality, namely degree centrality, betweenness centrality, proximity centrality, eigenvector centrality, and overall centrality can be used to determine the most influential competencies. Based on the results of the study, the six most influential competencies were obtained, namely competency number (1) Knowledge in the field or discipline, (22) Ability to hold responsibility, (4) Internet Skills, (3) General knowledge, (8) Learning Ability, and (8) Critical Thinking [1].

In 2019, May Rozakhi Takkas et al. Do research on Analyzing Tracer Study Results for Telkom University Alumni with Forest of All Minimum Spanning Trees (MSTs). Based on research, the highest competency of the five centralities is number (21) Leadership. In other words, competency number (21) is the most influential and central competency among all other competencies with a score of 0.9802538 [2].

In 2021, Zahrina Aulia Adriani et al. Do research on the Prediction of University Student Performance Based on a Tracer Study Dataset Using an Artificial Neural Network. Based on research using the SMOTE (Synthetic Minority Oversampling Technique) method to overcome the imbalance of the dataset, the model accuracy is 0.87 with a 10% increase with K = 3 obtaining an accuracy of 0.78. The Evaluation Score increased towards class 2 Precision = 0.50, Recall 0.45, F1- Score = 0.47 with 0.87 accuracy model [3].

In 2022. Tutik et al. Designing a tracer study application for alumni of SMK Negeri 1 Sukorejo based on Android. With the stages of research that are done first making an android-based tracer study application. After that, knowing the effectiveness and efficiency through usability tests including learnability, efficiency, and errors. Learnability obtained a value of 97.14%, time base efficiency of 0.018 goals/sec and overall relative 87.9%, error obtained a value of 0.05. Based on the research results, the tracer study application has fulfilled the usability test and is suitable for use as a graduate tracing application at SMK Negeri 1 Sukorejo [4].

In this research, the analysis and classification of the company level of Telkom University students at the Local, National, and Multinational company levels will be elaborated. Here, the classification uses the Support Vector Machine (SVM) and XGBoost algorithms to compare the accuracy model and evaluation score of the company level.