The increase in electricity use in Indonesia is increasing every year. Based on data taken from katadata.co.id[1],the increase in the number of electricity users in Indonesia from 2010 to 2020 was 33.25percent[1]. PT. PLN Persero as the sole electricity provider in Indonesia must provide electricity supply to the people of Indonesia in large quantities. However, PLN has difficulty because the electricity supply to remote areas is still limited. Based on information obtained from NewsSetup in the next 10 years the government plans to open the door for the private sector to get intothe electricity transmissionbusiness. The government conducted thefigures that aimed to ease the financial burden of PLN company [2]. Based on these problems, PLN is threatened because its customers can switch to using private electricity. According to Chiang, 2018 customer segmentation refers to the process of grouping customers into more specific ones in order to predict future customer actions or behavior. Based on research conducted by Andaleeb, the 2015 Customer Relationship Management (CRM) model is one way to understand more about Customer Segmentation, from the customersegmentationmodel. It grouped customers based on predefined variables that aimed to predict customer satisfaction as well.[3]

Based on what PLN explained earlier as a single electricity provider company in Indonesia is needed to understand how to implement the customer segmentation model in customer relationship manegement. (CRM) is used to predict or predict future customer actions or behavior based on facilities provided by PLN used by customers. Customer Relationship Management (CRM) is used to predict customer satisfaction by understanding customer behavior, customer loyalty and customer feedback to companies. which aims to improve performance, attract customer interest and increase the profitability of the company. But it is not enough with the Customer Relationship Management model to understand customer segmentation, there is a new model that has not been widely used by researchers before, namely the Key Account Marketing (KAM) model. Key Account Marketing (KAM) is a model that can also understand customer segmentation with a top-to-bottom approach while Customer Relationship (CRM) itself is an approach from the bottom. up [5].

Based on previous research Key Account Marketing (KAM) is used to increase broader sales and build relationships and increase customer commitment to establish a strong business. . In this study create a new model by combining the Customer Relationship Management model with Key Account Marketing to understand customer segmentation that aims to predict actions or actions. the behavior that will be taken by customers in the future so that companies such as PLN can make the company more familiar with the characteristics of its customers. The dataset used in this study data PLN customer transactions from 2019 to 2020. The research will be conducted by making a customer classification that will be divided into three customer classifications that are grouped by the area where the rental, the power used by the customer. customers, service units available in the area, payments made by customers such as manual or electronic. The data will be processed by several models of machine learning, models that KAmi use to classify such as Logistic Regression, Decision Tree and Random Forest Tree, later we will compare which models are faster at predicting customer segmentation in the merger of customer relationship management frameworks with key account marketing, using machine learning. Can help predict in the model to better clarify customer segmentation more quickly and accurately, then can help the company that is PLN by innovating what actions will be taken in the future to keep its customers such as adding electricity supply to remote areas because in the future there must be Housing to be built, then customers who want to add power to their business such as MSMEs that require considerable electricity. We want to develop a predictive model by combining Customer Relationship Management (CRM) and Key Account Marketing to make it more effective.

The following will be a research question to guide the research process:

1. What is the impact of using a combination of Customer Relationship Management and Key Account Marketing methods in measuring customer segmentation?

2. How effective is the implementation of Key Account Marketing in Customer Relationship Management?

This research aims to find out how effective Customer Relationship Management is to Key Account Marketing and PT. PLN Persero advantages of applying combination methods. The following will act as a research objective:

1. Create a new framework by adding Key Account Marketing in predicting customer segmentation.

2. Increase effectiveness or speed in predicting Customer Relationship Management by adding Key Account Marketing.

This paper is structured as follows. Part 2 presents a literature review of previous research on Customer Relationship Management (CRM) using machine learning, Previous research on Key Account Marketing (KAM), Part 3 describes the research framework including data collection and research design. Part 4 presents the results of the study. The final section provides conclusions, offering future research potential and current limitations.