

## **ABSTRACT**

Indonesia is known as an agrarian country that relies on the agricultural sector. One of the agricultural sub-sectors in Indonesia is tea plantations. There are several problems with fertilization in tea plantations. First, there are rising prices and scarcity of fertilizers used. Second, the fertilization applied to plantations is still not precise. Precision Agriculture Technology (PAT) is an alternative that can be used to assist in solving fertilization problems in tea plantations. PAT can support precision agriculture so that it has an impact on the sustainability of the quality of tea plantation production. This study aims to identify factors that can influence PAT adoption on plantations, produce models to support PAT adoption, and produce strategies aimed at PAT developers to adopt PAT on plantations. This study uses mixed methods, namely quantitative and qualitative analysis. Quantitative analysis was carried out using a data questionnaire which was processed by statistical testing using Structural Equation Modeling (SEM). Qualitative analysis was carried out using a value proposition canvas in the form of further investigation of potential PAT users, namely smallholder tea plantations, agricultural researchers, namely the Tea and Quinine Research Center (PPTK), as well as the PAT developer organization, namely the Telkom University IoT Research Center. This research produces a strategy that can be used by RC IoT Telkom University to adopt the PAT of tea plantations in Bandung Regency.

**Keywords – PAT Adoption, Precision Agricultural Technology (PAT), Tea Plantation.**