ABSTRACT

District X is one of the sub-districts in Klaten Regency. District X is one of the sub-districts that has the highest rice yields in Klaten Regency, which is 24239 tons of rice, 9672 tons of corn and soybeans, and 320 tons of other vegetable crops in 2020. District X has one obstacle that causes the decline in crop production, namely the lack of the number of machinery and agricultural equipment owned. In mid-2019, the Balai Penyuluhan Pertanian Lapangan (PPL) *of District X created an organization to optimize the use of machine tools, namely* Unit Pelayanan Jasa Alsintan (UPJA). *UPJA in District X consists of 2-3 combined farmer groups. At the end of 2018, BPP Mektan appealed to farmers, especially millennial farmers in Central Java to be able to advance technology-based agriculture, namely by creating an application to facilitate the UPJA organization itself, namely UPJA Smart Mobile. The UPJA organization has used the UPJA Smart Mobile application but until now the use of the application has not been maximized, this is because many farmers do not know the UPJA Smart Mobile application and farmers prefer to order machine tools or other agricultural services personally. This can cause many problems, including tracing UPJA revenues and tracing the use of machines that are less controlled, low accountability, to avoid the risk of fraud.*

This study aims to determine the factors that influence the use of UPJA Smart Mobile in Klaten Regency and strategies that can be given to increase the use of UPJA Smart Mobile in Klaten Regency. This study uses the Unified Theory of Acceptance and Use of Technology 2 (UTAUT) framework because the UTAUT 2 framework is a technological approach that can explain 70% of the variants of the technological approach, besides this, the UTAUT 2 framework is a development of 8 *other technology approach models. Such as Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB), Technology Acceptance Model (TAM), Motivational Model (MM), Combined TAM-TPB, Model of Personal Computer Utilization (MPCU), Social Cognitive Theory (SCT) and Innovation Diffusion Theory (IDT). This study uses 7 independent variables, namely Performance Expectancy, Effort Expectancy,*

Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, and Habit, 2 dependent variables, namely Behavioural Intention and Use Behaviour, and 3 moderating variables, namely Age, Gender, and Experience.

The data in this study were collected using a questionnaire via google form and obtained 38 respondents who have used UPJA Smart Mobile. The data was processed using the statistical method Partial Least Square Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0 software. All processed data has met the PLS-SEM test criteria such as measurement model testing and structural model testing so that the data can be said to be valid. The results of data processing state that there are several factors that influence the frequency of use (Use Behavior) of the UPJA Smart Mobile application, namely Social Influence, Price Value, and Experience, these three variables have a positive and significant effect on the frequency of use of UPJA Smart Mobile among farmers in Indonesia. KLATEN County. The strategy given to the Field Agricultural Extension Center (PPL) District X is in accordance with the factors that positively and significantly influence the use of the UPJA Smart Mobile application. This research is expected to provide benefits and be a consideration for the local government of KLATEN Regency in adopting agricultural technology and this research can be a reference for further research regarding community readiness in implementing a technology, especially agricultural technology.

Keywords: *Technology Adoption*, UPJA *Organization*, UPJA *Smart Mobile*, UTAUT 2.