

## READINESS AND ACCEPTANCE OF FARMER CARDS TO FARMERS IN SUMENEP REGENCY

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**Abstract:** The Farmer's Card becomes one of the requirements to get the subsidized fertilizer as a tool of access to banking services integrated into an E-wallet or ATM (Automatic Teller Machine). The new technology indicates the problem found in the field, which is the lack of awareness and knowledge of the farmers who own the Farmer's Card in understanding the function of each feature provided by the Card. This research is conducted to analyze the readiness and the acceptance factors of the farmers who own the Farmer's Card toward the interest of using the Farmer's Card in the Sumenep Regency. The Technology Readiness and Acceptance Model (TRAM), which is the collaboration of the Technology Readiness Index (TRI) and Technology Acceptance Model (TAM), is being used to analyze the interest in the use of the Farmer's Card. Quantitative data is collected through interviews with structured questionnaires that refer to the previous research indicators on the Technology Readiness and Acceptance Model (TRAM). The sample was conducted on 140 farmers who own the Farmer's Card. The analysis was performed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) through the SmartPLS software. The results of the hypothesis show that the function or the advantage of the Farmer's Card has a direct and significant influence on the interest of the farmers in using the Farmer's Card. On the other hand, the simplicity of using the Farmer's Card is considered insignificant and challenging for the farmers. The Farmer's Card program can be successful. It is suggested that the government and the farmers, who own the Farmer's Card, need to approach and improve their communication through intensive guidance.

**Keywords:** readiness, acceptance, farmer's card, PLS-SEM, subsidized fertilizer

**Abstrak:** Kartu Tani menjadi salah satu persyaratan untuk mendapatkan pupuk bersubsidi sebagai sarana akses layanan perbankan yang terintegrasi berupa e-wallet atau dalam bentuk ATM (Anjungan Tunai Mandiri). Teknologi baru tersebut menunjukkan adanya kendala yang ditemukan di lapangan yaitu kurangnya kesadaran dan rendahnya pengetahuan petani pemilik Kartu Tani dalam memahami kegunaan dari setiap fitur layanan Kartu Tani yang diberikan. Penelitian ini bertujuan untuk menganalisis faktor-faktor kesiapan dan penerimaan petani (pemilik Kartu Tani) terhadap minat penggunaan Kartu Tani di Kabupaten Sumenep. Model gabungan Technology Readiness Index (TRI) dan Technology Acceptance Model (TAM) menjadi Technology Readiness and Acceptance Model (TRAM) digunakan untuk menganalisis minat penggunaan Kartu Tani. Data kuantitatif dikumpulkan melalui wawancara dengan kuesioner terstruktur yang mengacu dari indikator penelitian sebelumnya pada model TRAM. Sampel dilakukan kepada 140 petani pemilik Kartu Tani. Analisis dilakukan dengan menggunakan Partial Least Squares-Structural Equation Modeling (PLS-SEM) melalui software SmartPLS. Hasil dari hipotesis menunjukkan bahwa kegunaan atau manfaat Kartu Tani memiliki pengaruh langsung dan signifikan terhadap minat petani menggunakan Kartu Tani. Disisi lain, kemudahan dalam menggunakan Kartu Tani dianggap tidak signifikan dan dirasa sulit bagi petani. Program Kartu Tani dapat berhasil, disarankan agar lebih ditingkatkannya komunikasi dan pendekatan dalam hal ini adalah pemerintah dengan petani pemilik Kartu Tani melalui pendampingan secara intensif.

**Kata kunci:** kesiapan, penerimaan, kartu tani, PLS-SEM, pupuk bersubsidi

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## INTRODUCTION

The agriculture industry will insist on making developments focused on the welfare of all stakeholders, mainly farmers. The fourth industrial revolution offers considerable potential for addressing human needs. The government created an e-wallet to deal with the issue of subsidized fertilizers by utilizing technical advancements in partnership with the Ministry of State-owned Enterprises or BUMN, the Regional Government, and the Ministry of Agriculture (Gunawan & Pasaribu, 2020). A digital wallet resembles a Farmer's Card. Farmers' Card provides access to banking services that are useful for transactions, savings, and loan distribution and are intended primarily to distribute subsidized fertilizers. Sumenep Regency became a complete pilot project in East Java Province to distribute and run the Farmer Card, which was started in mid-2017. Sumenep Regency was chosen because it had good natural resource potential, especially in agriculture. Second, the support of related agencies called the Agriculture Service of Sumenep Regency, which is active in carrying out agricultural dynamics in the form of counselling, agricultural policies, agricultural technology, and all of which are the ideals of agricultural development.

Preliminary research was conducted with interviews and direct observations of farmers who own the Farmer's Card in the Sumenep Regency. It is found that there are some obstacles in the implementation of the Farmer's Card. The barriers include it takes more time to meet the requirements of the registration documents in E-RDKK (Electronic Definitive Plan for Group Needs) because they have to change the old ID Card with the new Electronic ID CARD (E-KTP). The Farmer's Card, which is in the form of an ATM (Automatic Teller Machine) by BNI Bank, cannot be checked at any time due to the distance between the farmer's house and the branch office, which is far enough, and some farmers are less aware of the use of the Farmer's Card so that it affects the productivity because the factors of the fertilizer are essential in farming.

Previous research that discussed information technology in the form of Farmers' Cards in several areas, such as in the study (Mufidah & Prabawati, 2018), the implementation of the subsidized fertilizer distribution

program was quite good. However, it could not be redeemed using the Farmers' Card because it still had several obstacles. Based on research (Chakim, 2019), implementing the Farmers' Card significantly affects the distribution of subsidized fertilizers by influencing factors such as understanding and compliance with regulations. Kurniawati & Kurniawan (2018) explained that the obstacle to using the Farmers' Card was the lack of socialization in using the Farmers' Card.

Some previous research discusses the use of the TRAM model concept. Based on previous research, many factors can influence user interest in using technology. Shin & Lee (2014) stated that four constructs of technology readiness (optimism, innovation, discomfort, and insecurity) significantly affected the perceived ease of using technology. Chiu & Cho (2020) research revealed that positive technology readiness (optimism and innovation) affects perceived ease, usefulness/benefit and enjoyment. Acceptance factors of perceived ease, perceived usefulness/benefit and perceived enjoyment affect user interest in using technology.

The Progress Report of Farmer Cards for the 2021 Fiscal Year is known that East Java Province has the highest number of Farmer Cards printed at 3,662,425 million farmers, but the number of Farmer Cards used is only 2.85%. It is very different from Central Java Province, which has used Farmer Cards as much as 27.77%. In terms of a problem in the Province of East Java, namely the inability to use the printed Farmer's Card or minimal use of the Farmer's Card. In contrast, the success of technology in an organization is determined by the user actors' readiness factor, in this case, farmers. The goal of successfully using the technology is to minimize errors, difficulties and risks. The readiness and acceptance of farmers are part of the adoption stage of implementing the new technology system from the Farmers' Card. The Technology Readiness (TR) and Technology Acceptance Model (TAM) models can be used to reach the goals. Technology Readiness (TR) to measure user readiness for new technology (Colby & Parasuraman, 2001). Meanwhile, the Technology Acceptance Model (TAM) proposed by Hwang & Yi (2002) states that the use of new technology is influenced by behavioural interests that affect user perceptions, called perceptions of usefulness of use and perceptions of ease of use.

Based on this, in general, the performance analysis of the readiness and acceptance of farmers in using Farmers' Card goals to create and improve the quality of Farmers' Card so that users in Sumenep Regency can easily use it. The objective of this study is (1) to analyze the factors of farmers' readiness to accept the Farmers' Card in the Sumenep Regency and (2) to analyze the farmers' acceptance of the interest in using the Farmers Card in the Sumenep Regency.

## METHODS

The method of determining the location of this research was intentionally done (purposive sampling). Sumenep Regency is the only district in East Java to become a pilot project for Farmer Cards and according to Central BNI at the Farmer Cards workshop on February 17, 2021. The research was conducted from April to August 2021.

Primary data were obtained directly from respondents. In this study, respondents filled out a questionnaire consisting of several question instruments that had been structured. Then the respondents answered the question, and the results of the respondents' answers would be analyzed. Furthermore, secondary data is obtained from trusted agencies or parties still related to the research objectives. The results were obtained to test the objective theory by testing the relationship between Technology Readiness (TR) and Technology Acceptance Model (TAM).

A questionnaire test was conducted on 30 farmers using Farmers' Cards to ensure clarity and evaluate the validity and reliability of the questionnaire. After some revisions, the survey was completed and eliminated unnecessary question items. Hair et al. (2016) obtained 140 respondents from the results of 5 times the number of indicators. Respondents are the Farmers who own the Farmer's Card and use the card as a tool of payment in order to get subsidized fertilizer at the agricultural kiosks, which the government already appoints. The interviews are conducted at the farmer's house and at the farmer's group hall (the group of the farmers who own the Farmer's Card).

A survey instrument of the technology readiness factor based on research was taken and modified from (Priananda et al. 2020) and TAM factors in related studies (Agustian, 2014; Baskara, 2016). The answer

of each indicator's item on the instrument uses an ordinal size Likert scale that has gradations from very positive to very negative, such as Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), Strongly Disagree (SD). The steps to arrange the scale include: compiling the statement of object attitude, carrying out the trials on instruments, determining the score for each indicator, and conducting the item analysis to find out the reliability and validity of the instruments. It can be measured using a statement instrument (Table 1).

The questionnaire results are tested using the structural equation modelling partial least square (SEM-PLS) with SmartPLS 3.0 (Henseler et al. 2015). According to (Latan & Ramli, 2013), SEM-PLS is used to develop or build a hypothesis, to predict complex situations, and a feature to analyze multivariate data. Since this study applies the theoretical models to predict the farmers' behaviour, PLS is considered the right approach.

There are two model specifications of SEM-PLS (Figure 1): outer model and inner model. Outer model as the measurement model describes the relationship between the indicators and the latent variables through four testing stages: Convergent Validity with loading factor parameters, Discriminant Validity with cross-loading parameters, Composite Reliability, and Cronbach's Alfa. And Inner model describes the relationship between fellow latent variables to be evaluated by looking at the value of R-square (goodness-fit model), Q<sup>2</sup> predictive relevance, and hypothesis test (Hair Jr et al. 2016)

- H1: Positive technology readiness significantly positively affects the perception of usefulness
- H2: Positive technology readiness significantly positively affects the perceived ease of use
- H3: Positive technology readiness significantly positively affects the perceived enjoyment
- H4: Negative technology readiness significantly positively affects the perception of usefulness
- H5: Negative technology readiness significantly positively affects the perceived ease of use
- H6: Negative technology readiness significantly positively affects the perceived enjoyment
- H7: Perceive of usefulness significantly positively affects the behavioural intention to use
- H8: Perceive ease of use significantly positively affects the behavioural intention to use
- H9: Perceived enjoyment significantly positively affects the behavioural intention to use

Table 1. List of Research Instruments

Variable	Indicator	Source
Optimism	Farmers' Card provides convenience in obtaining subsidized fertilizers Farmers' Card is much more efficient in obtaining subsidized fertilizer The Farmer Card is easier to use in conducting financial transactions for farming Farmers' Card provides easy service	Priananda et al. (2020)
Innovativeness	Be the first to get a Farmer Card compared to other farmers Explain the use of the Farmer Card compared to other farmers Facing fewer problems than other farmers using Farmer Cards Mastering the use of Farmer Cards	
Discomfort	Thinking that the Farmers' Card makes it difficult to obtain subsidized fertilizer The Farmers' Card service does not help because the transaction process is not understood	Agustian (2014)
Insecurity	It's more dangerous/loss to use the Farmer's Card because you don't trust the bank or farm shop employees Difficulty checking the balance of subsidized fertilizers that you receive because you need to come to the nearest ATM or agricultural shop Lack of confidence in the security of using the Tani Card because the balance received is not in cash	
Perceived Usefulness (POU)	The use of Farmer Cards enhances effectiveness in farming Farmers' Card answers the need to get subsidized fertilizer The use of Farmer Cards improves farming performance Farmers' Card is efficient	Agustian (2014)
Perceived Ease of Use (PEOU)	Easy-to-use Farmer Cards The use of the Farmer Card is clear and easy to understand The use of the Farmer's Card is neatly organized Farmer's Card is easy to use	
Perceived Enjoyment (PEN)	Feel comfortable using the Farmers' Card Farmers' Card has an interesting service Find it easy to use Farmers' Card Feeling happy with the Farmer's Card	Baskara (2016)
Behavioural Intention To Use (BITU)	Interested in using the Farmer's Card Farmers' Card can be sustainable in the long term Satisfied using Farmer's Card	Agustian (2014)

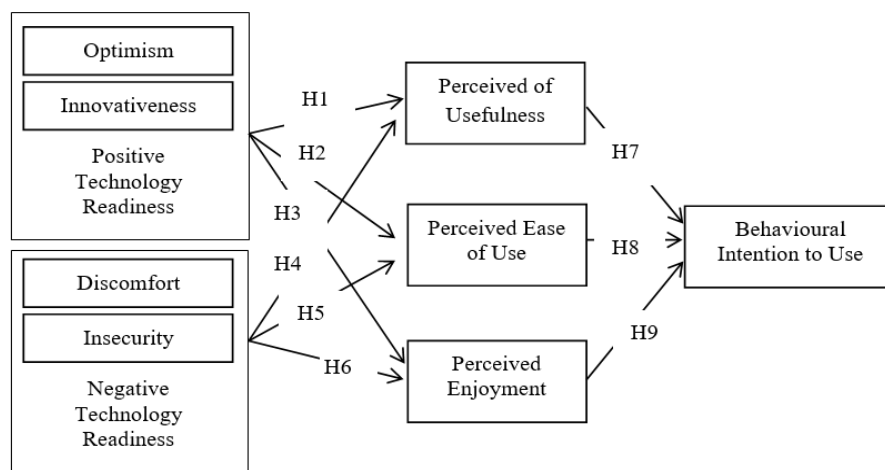


Figure 1. PLS-SEM, Structural Model (Shin & Lee, 2014)

In this research, TRI constructs significantly influence Perceived Ease of Use, Perceived Enjoyment and Perceived Enjoyment (PEN). In addition, Perceived Usefulness, Perceived Ease of Use and Perceived Enjoyment significantly influence Behavioral Intension to Use (Hsu & Lu, 2007). Thus, in the following research, they will influence Behavioral Intension to Use. Figure 2 will explain the framework of thought on this research.

This research uses a quantitative method. The first step is formulating the problems by looking for literature studies and studying the theories needed. Then determined, the model for this research, which in this case is the TRAM Model, is the combination of TRI and TAM theories. Next, the questionnaire preparation refers to the indicators and the questionnaire from the previous research using the TRAM Model. After that, analyze the research results using SEM-PLS, which consists of a model measurement and fit structural model test.

## RESULTS

### Demographic Profile

Table 2 shows the demographic profile of 140 farmers using the Farmers' Card in Sumenep Regency based on gender, age, and education level. The profile of farmers who use the Farmers' Card is described in Table 2. Male farmers' role is higher, with 80 or 57.1 percent. In line with research (Chakim, 2019), the role of female

farmers is less than that of male farmers. The use of information technology or the internet by Farmers' Card farmers in Sumenep Regency may be influenced by the demographic characteristics of farmers, such as age and education level. Most Farmers' Card farmers are over 50 years old and have low education (junior high school/junior high school graduates). Along with the increase in the age of farmers, the level of use of internet technology decreased (Kadir & Prasetyo, 2021). The level of education will affect the application of technology. Farmers with higher education will be able to apply more excellent technology (Mamilianti, 2020). Therefore, evaluative research is needed on the success or implementation of the Tani Card in the field when the Farmers' card is used by young farmers (less than 40 years old) and has a minimum education level of S1 (undergraduate degree). This research is in line with (Septiani et al. 2020), namely, farmers are still low in the use of technology. This technology gives them access to their farming performance.

### Measurement Model Assessment

Evaluation of the measurement model was carried out through four stages of testing. They are outer loadings, average variance extracted (AVE convergent validity), composite reliability, Cronbach's alpha, and discriminant validity (Ringle et al. 2015). To find out how each indicator relates to latent variables. With convergent and discriminant validity evaluated, measuring models or outer models from the indicator and composite reliability block the indicators (Ghozali, 2014).

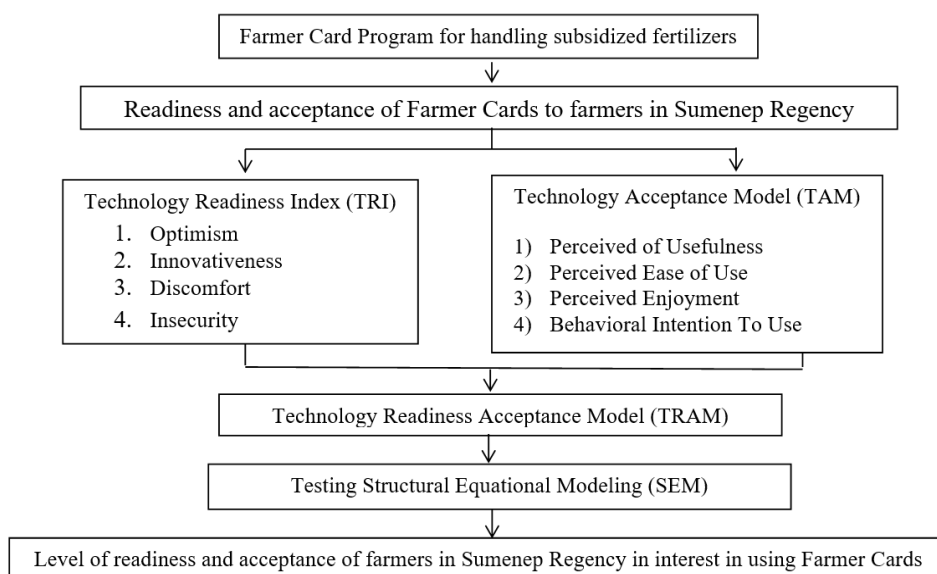


Figure 2. Framework

All variables have a loading factor value above 0.5, with the lowest loading factor value on innovativeness (INN2) of 0.522 and the highest value of 0.955 on the behavioural intention to use a variable (BITU3)(Table 3). It shows that all indicators have met the criteria of convergent validity and tend to have high validity, so it can be concluded that the indicators in each construct are highly correlated.

Fornell-Lacker’s cross-loading compares the AVE root value, where the AVE root value must be higher than the correlation between constructs with other constructs

(Table 4). All of the Farmers’ Card constructs can be declared valid because the AVE square root value of each variable is > its correlation coefficient, so all variables have high and valid discriminant validity, and it is known that there is no problem in the discriminant validity test. Therefore, based on the analysis test, discriminant validity is supported by all pairs of constructs. So, it can be concluded that the analysis of the model measurement used in this research has qualified at each stage and is worth continuing to the next stage, namely the structural model (inner model).

Table 2. Demographic Profile

Demographic Profile		Frequency	Percentage
Gender	Man	80	57.1
	Woman	60	42.9
	Total	140	100
Age	< 20 years	0	0
	20 – 30 years	1	0.7
	31 – 40 years	24	17.1
	41 - 50 years	44	31.4
	>50 years	71	50.7
	Total	140	100
	Level of Education	Elementary School	43
Junior High School		61	43.6
Senior High School		30	21.4
Diploma and Bachelor		6	4.3
Total		140	100

Table 3. Outer Loading Value

Variable	Item Code	Loading Factor	Variable	Item Code	Loading Factor
Optimism (OP)	OP1	0.804	Perceived Usefulness (POU)	POU1	0.883
	OP2	0.809		POU2	0.886
	OP3	0.869		POU3	0.936
	OP4	0.829		POU4	0.893
Innovation (INN)	INN1	0.704	Perceived Ease of Use (PEOU)	PEOU1	0.891
	INN2	0.522		PEOU2	0.887
	INN3	0.811		PEOU3	0.889
	INN4	0.709		PEOU4	0.858
Discomfort (DIS)	DIS1	0.782	Perceived Enjoyment (PEN)	PEN1	0.886
	DIS2	0.850		PEN2	0.819
Insecurity (INS)	INS1	0.715		PEN3	0.893
	INS2	0.549		PEN4	0.889
	INS3	0.620	Behavioural Intention to Use (BITU)	BITU1	0.943
		BITU2		0.945	
		BITU3		0.955	

With the SmartPLS application to measure the reliability of a construct in SEM-PLS, two ways can be used, Cronbach's alpha and composite reliability. Both are statistical techniques used to measure internal consistency in instrument reliability testing.

Measurement of reliability was calculated through average variance extract (AVE), composite reliability, and Cronbach's alpha. The results of all constructs obtained show that all AVEs have a value greater than 0.5, and composite reliability and Cronbach's alpha are more significant than 0.7, thus indicating high reliability (Table 5). In line with the research (Min et al. 2019), all indicators are significant and have more value than required.

### Structural Model Assessment

The structural model test (Inner Model) is performed after the accepted models fulfil the validity and reliability test. The structural model test can be known by looking at the value of R-square (goodness-fit model) and Q<sup>2</sup> predictive relevance, then determining the significant influence between research construct by looking at the coefficient path.

This test is carried out to explain the variance of each target variable (variables that are considered to be influenced by other variables in the model) with a measurement standard of about 0.670 as strong, about 0.333 as moderate, and 0.190 or below, indicating a weak level of variance (Ringle et al. 2015). The R-square value in Table 6 shows that all endogenous variables are around 0.333 (moderate).

The Q-square value of 0.97 with the Q-square assessment criteria > 0 indicates that the model has high predictive relevance, meaning that the level of model diversity shown by the independent variable in explaining the dependent variable is 0.97 or 97% and other factors still influence the remaining 0.03 or 3%. Thus, from these results, this research model can be declared to have good goodness of fit.

Two theories of TR and TAM analyze the factors influencing farmers' interest in using the Farmer's Card. By combining the two theories, this research provides several important theoretical contributions. The correlation between significant variables is known based on the P-value, which is smaller than so that the hypothesis is accepted and the correlation between the variables is declared significant (Table 7).

Table 4 . Discriminant validity test results (fornell-lacker's cross loading)

	BITU	PEN	PEOU	POU	NTR	PTR
Behavioural Intention to Use (BITU)	0.948					
Perceived Enjoyment (PEN)	0.710	0.872				
Perceived Ease of Use (PEOU)	0.604	0.801	0.882			
Perceived Usefulness (POU)	0.484	0.478	0.470	0.900		
Negative Technology Readiness (NTR)	0.483	0.520	0.489	0.428	0.711	
Positive Technology Readiness (PTR)	0.643	0.754	0.741	0.520	0.607	0.764

Table 5. Value of AVE, composite reliability and cronbach's alpha on discriminant validity test

Variable	AVE	AVE. Square Root	Composite Reliability	Cronbach's Alfa
Positive Technology Readiness (PTR)	0.584	0.764	0.917	0.894
Negative Technology Readiness (NTR)	0.506	0.711	0.833	0.784
Perceived Usefulness (POU)	0.809	0.900	0.944	0.922
Perceived Ease of Use (PEOU)	0.777	0.882	0.933	0.904
Perceived Enjoyment (PEN)	0.761	0.872	0.927	0.895
Behavioural Intention to Use (BITU)	0.898	0.948	0.964	0.943

Table 6. Coefficient of determination (R-square) test results

Variable	R Square	Information
Perceived Usefulness (POU)	0.290	Moderate
Perceived Ease of Use (PEOU)	0.552	Moderate
Perceived Enjoyment (PEN)	0.574	Moderate
Behavioural Intention to Use (BITU)	0.532	Moderate

Table 7. Bootstrapping analysis results

Code	Construct Variable	→	Construct Variable	t-stats	P-values	Information
H1	Positive Technology Readiness (PTR)	→	Perceived Usefulness (POU)	3.493	0.001	Significant
H2	Positive Technology Readiness (PTR)	→	Perceived Ease of Use (PEOU)	8.529	0.000	Significant
H3	Positive Technology Readiness (PTR)	→	Perceived Enjoyment (PEN)	8.742	0.000	Significant
H4	Negative Technology Readiness (NTR)	→	Perceived Usefulness (POU)	2.064	0.040	Significant
H5	Negative Technology Readiness (NTR)	→	Perceived Ease of Use (PEOU)	0.850	0.396	Not significant
H6	Negative Technology Readiness (NTR)	→	Perceived Enjoyment (PEN)	1.425	0.155	Not significant
H7	Perceived Usefulness (POU)	→	Behavioural Intention to Use (BITU)	2.504	0.013	Significant
H8	Perceived Ease of Use (PEOU)	→	Behavioural Intention to Use (BITU)	0.468	0.640	Not significant
H9	Perceived Enjoyment (PEN)	→	Behavioural Intention to Use (BITU)	5.402	0.000	Significant

The results show that positive technology readiness (PTR) has a significant positive effect on Perceived Usefulness (POU), Perceived Ease of Use (PEOU) and Perceived Enjoyment (PEN). The higher the sense of optimism and innovative thinking in the farmer, the higher the perception of usefulness, ease and convenience of using the Farmer Card for farmers, but on the contrary, if the sense of optimism and innovative thinking in the farmer is low then the perception of usefulness, ease and convenience of use for farmers is also higher, will also be low (Shin & Lee, 2014). The perceived benefits influence the behaviour of using an e-wallet. It aligns with the research (Violinda & Khorunnisya, 2022). The technology-based Farmer Card system will lead to benefits or benefits felt by farmers to support their farming.

Negative technology readiness (discomfort and insecurity) with the perception of user's use has a T-statistic value of 2,064 and a P-value of 0,040. It means that the negative technology readiness factor is inconvenient and inconvenient will affect the farmers' perception of the use of the Farmer's Card. Stakeholders should pay attention to the factor above about using the Farmer's Card to improve the technology. In comparison, negative technology readiness does not impact the perceived ease of use and

enjoyment. Discomfort occurs due to a lack of mastery and confidence in using the new technology, which causes a sense of discomfort in the implementation. Insecurity occurs due to the sense of not safety in using the Farmer's Card technology as the tool of transaction and the hesitation about the workability of the Farmer's Card.

The farmers' assessment of the usefulness and convenience of using technology will affect the interest of farmers to use or accept the Farmer Card system, which is declared accepted. Khadka (2018) and Liu et al. (2019), it is possible because farmers, as users, feel they need a technology that will make it easier to obtain subsidized fertilizers. Therefore, when technology has uses that make it easier to access subsidized fertilizers, the interest of farmers in using the technology becomes high. Perception of convenience has a negative influence on interest in the use. Otherwise, it is rejected. It is in line with research Khadka (2018) and Martens et al. (2017), which states that perceived ease of use does not significantly affect interest in using technology. Farmers as users feel that the Farmers' Card is quite challenging to learn, understand and operate. Therefore, when technology is quite challenging to use, the interest of farmers in using the technology tends to be low.



## Managerial Implications

This research provides several important implications for practice. The findings of this study identify readiness and acceptance in influencing user interest in using the Farmer Card, in this case by farmers in Sumenep Regency. The important role of the stakeholder in this situation is the government, which is required to improve the communication and coordination between institutions to provide intensive service to the farmers. In this case, it can be done by forming a special task force to succeed in the Farmer's Card program. Then, the special task force should be more active in approaching the farmers using seminars, training, and special mentoring to facilitate the farmers using the Farmer's Card.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

The user readiness factor consists of the TRI variable (optimism, innovativeness, discomfort, insecurity) on the acceptance of the Farmers' Card, which consists of the TAM variable (perceived usefulness, perceived ease of use, perceived enjoyment). If there is an increase in the confidence and attitude of farmers' interest in using the Farmers' Card, it will affect increasing perceptions of usefulness, ease and convenience in using the Farmers' Card to significantly support the process of using the Farmers' Card.

The user acceptance factor consists of the TAM variable (perceived usefulness, perceived ease of use, perceived enjoyment) on the interest in using the Farmers' Card (behavioural intention to use). Two significant hypotheses are the perception of usefulness and the perception of convenience. Therefore, the variable perception of usability/expediency and comfort perception of the farmers in using the Farmer's Card will affect the increase of the user's interest in using the services provided by the Farmer's Card.

### Recommendations

Because of the limitation of the farmers who are old and have low education, high school graduates only, the stakeholder/government should develop and improve the Farmer's Card with the instructor role (PPL), which provides intensive training to the farmers directly. Thus

farmers have an attitude of readiness and accept the Farmer Card as a new technology to help the progress of Indonesian agriculture.

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