

## **Cultivation of Accounting-Based Financial Management Technology and E-Commerce Adoption on the Development of MSMEs in Banyumas Regency (An Approach to Planned Behavior Theory)**

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### **Abstract**

The long-term goal of this research is to enrich the development of science, especially the development of MSMEs related to the adoption of information technology by studying using Theory of Planned Behavior. The specific purpose of the study is to examine what factors influence the adoption of government program applications at MSMEs in Banyumas Regency. Data collection in this study was carried out by distributing questionnaires through direct delivery to 100 respondents of MSMEs in Banyumas Regency who were respondents. The sampling technique in this study using random sampling techniques. Whereas for data analysis using Statistical Product and Service Solution (SPSS) and Structural Equation Modeling (SEM) with the AMOS program. From the results of data processing and analysis it was found that Theory of Planned Behavior was able to identify the factors that influence the adoption of Accounting-based Financial management technology and E-Commerce Adoption at MSMEs in Banyumas Regency

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## INTRODUCTION

Banyumas is one of the regencies in Central Java with a fairly high MSME growth rate. Although the growth of MSMEs in the Regency of Banyumas is quite rapid, it is not in line with the development process. According to Mr. Warno Noto S.H as the Head of the MSMEs Empowerment, Protection, and Supervision Section stated that "The growth of MSMEs in Banyumas district is very rapid. However, the development of MSMEs in the Banyumas district is still relatively slow, human resources are still low, the lack of technological knowledge about production and the limited market share and capital are factors that inhibit the development of MSMEs, and there are even a few MSMEs that can only survive operating for two to three only year.

Broadly speaking, human resource factors, technological knowledge and marketing strategies are the main factors that hamper the development of MSMEs in Banyumas Regency. So far the government has launched various programs to support the progress of the development of MSMEs in Banyumas Regency, one of the programs to assist financial management is the issuance of accounting supportive financial management software, including SQL Ledger, GNUCash and Turbo Cash to support MSMEs operational activities. In addition, the government also supports the movement of MSMEs product marketing techniques through the Deputy for Business Development and Restructuring in Business Systems Development Affairs to conduct internet utilization assistance activities in the form of websites for MSMEs through a site called [www.sentraukm.com](http://www.sentraukm.com). This activity is an activity that has been carried out in the 2007 fiscal year in 2 provinces, namely in Bandung, West Java and in the City of Surakarta, Central Java (Department of Cooperatives, 2008).

Unfortunately, based on field surveys it is known that the MSMEs actors have not maximized the government programs, some of the MSMEs practitioners claimed not to know about the programs that were proclaimed by the government. Some are not willing to use program facilities provided by the Government for various reasons. The behavior of MSMEs actors certainly affects the existence of an MSMEs. In the theory of planned behavior, the main factor of an individual's displayed behavior is the intention to display a certain behavior (Ajzen, 1991: 5). Intention is assumed to be a motivational factor that influences behavior. Intention is an indication of how hard someone is trying or how much effort is made to display a behavior.

This study tries to apply alternative models that are expected to explain the phenomenon of the adoption process of accounting-based financial management technology and e-commerce technology for MSMEs, as well as factors that can make a person feel the use of accounting-based financial management technology and the use of e-commerce profitably.

## LITERATURE REVIEW

### Theory of Planned Behavior (TPB)

According to Grizzell (2003) Theory of Planned Behavior is a Theory of Reasoned Action that is enhanced by the addition of Perceived Behavior Control. Theory of Planned Behavior is a theory that predicts the consideration of behavior because behavior can be considered and planned. Then this theory was further developed by several researchers (for example: Krugger and Carrud, 1993; Ajzen, 1991; Stavroc, 1991; Sharma et. Al. 2003). Peach et. al. (2006) and Wellington et. al. (2006) states that Theory of Planned Behavior has advantages over other behavioral theories, because Theory of Planned Behavior is a behavioral theory that can identify a person's beliefs about control over something that will occur from the results of behavior, thus distinguishing between one's desired behavior and those that will no will.

Ajzen (2002) suggests that Theory of Planned Behavior has emerged as one of the most influential frameworks and concepts that are popular in humanitarian research. According to this theory, human behavior is guided by 3 types of considerations:

- a. Confidence regarding possible consequences or other responses to behavior (trust behavior).
- b. Beliefs about normative expectations from others and motivation to agree with expectations based on normative beliefs
- c. Confidence regarding the presence of factors that may be further across from behavior (Trust Control).

In other words, Theory of Planned Behavior is a development theory of Theory of Reasoned Action. In line with this, East, (1997) states that Theory of Planned Behavior is derived from Theory of Reasoned Action, with the difference being the addition of the variable Perceived Behavior Control to the research framework.

### Micro, Small and Medium Enterprises

In accordance with Law Number 20 Year 2008, the definition of Micro, Small and Medium Enterprises as follows "Micro Business is a productive business owned by individuals and / or individual

business entities." Small Business is a productive economic business that stands alone, which is carried out by people individuals or business entities that are not subsidiaries or branches of the company that are owned, controlled, or become a part of either directly or indirectly of Medium Enterprises or Large Enterprises that meet the criteria of Small Business. "

### **Accounting information system**

Belkaoui (2000) defines accounting information as quantitative information about economic entities that are useful for making economic decisions in determining choices between alternative actions.

### **E-commerce Implementation**

E-commerce is defined by Ellswood (1995) as the implementation of business with the help of information technology and communication technology. E-commerce (electronic commerce) can simply be interpreted as an activity or sale and purchase transaction electronically. Buying and selling activities that occur are identical to conventional trading activities. The difference is only when the payment process occurs, and the delivery of products by sellers is done electronically (online via the Internet).

### **Theoretical Framework**

The Government through the Ministry of Cooperatives and the Ministry of Information Communication has launched various facilities to support the development of MSMEs in Indonesia. The facilities are in the form of financial management technology based on accounting and e-commerce technology specifically for MSME entrepreneurs. Phenomenon in the field, especially in Banyumas Regency shows that MSME actors have not used all the facilities that the government has planned.

This study examines the factors that influence MSMEs in adopting and using accounting and e-commerce-based financial management technologies, with the aim of identifying factors that can be maximized so that reuse of accounting and e-commerce-based financial management technologies for Micro Businesses Small Medium

### **Hypotheses development and research methods**

According to the mentioned theoretical and conceptual framework and based on the study's problem, questions and objectives, our hypotheses are placed as follows:

1. Attitude towards behavior influences intention to use in adopting accounting and e-commerce-based financial management technologies for MSMEs
2. Subjective norm influences intention to use in adopting accounting and e-commerce-based financial management technologies for MSMEs
3. Perceived behavior control influences intention to use in the adoption of accounting and e-commerce-based financial management technologies for MSMEs
4. Intention to use affects the usage behavior in the adoption of accounting and e-commerce-based financial management technologies for MSMEs
5. Perceived behavior control influences usage behavior in the adoption of accounting and e-commerce-based financial management technologies for MSMEs

The method used in this research is descriptive verification method with a quantitative approach. The population in this study is the MSMEs in Banyumas Regency. The research sample included 100 MSMEs trade sector actors at MSMEs in Banyumas Regency. Data collection in this study was carried out by distributing questionnaires through direct delivery to MSMEs in Banyumas District who were respondents. The sampling technique in this study using purposive sampling technique. The data analysis technique uses Statistical Product and Service Solution (SPSS) and Structural Equation Modeling (SEM) with the AMOS program.

## **FINDING**

### **The effect of attitude towards behavior on intention to use in the adoption of accounting and e-commerce based financial management technologies for MSMEs**

Attitude toward behavior positively influences Intention to Use, which means that the higher the attitude behavior will increase the intention to use. These results support previous research conducted by Ajzen (1991), and research by Dharmmesta and Khasanah (1999) which states that the variables that influence an individual's intention to do something (intention to use) are attitude toward behavior, subjective norm, and perceived behavior control.

Attitude toward behavior that affects Intention to Use reveals that MSMEs who have an attitude of acceptance towards technology adoption will be interested in adopting accounting and e-commerce-based financial management technologies. MSMEs who feel that adopting accounting and e-commerce based

financial management technologies will not produce anything negative, will be interested in adopting accounting and e-commerce based financial management technologies. The phenomenon in Banyumas District shows that MSMEs will be interested in using financial management technology based on accounting and e-commerce if they see the benefits of the application. Based on the interview process, it is known that the principals who have not used accounting and e-commerce-based financial management technology because of their concern about the difficulties they face when using various applications and in contact with technology. The stigma that arises will influence the MSMEs to find a path that they think is safe and comfortable, namely the conventional system.

#### **The influence of subjective norms on intention to use in the adoption of accounting and e-commerce based financial management technologies for MSMEs**

The relationship between Subjective Norm and Intention to Use has a significant positive effect. This means that subjective norm influences intention to use. These results are consistent with research by Barnet and Persley (2004) and Ajzen (1992) which states that interest (intention to use) is influenced by perceived behavior control and subjective norms. Ajzen (2004) also states that perceived behavior control has a strong influence on interest (intention to use).

Subjective Norms also influence the growth of interest in MSMEs to adopt accounting and e-commerce-based financial management technologies.

Good social value in the eyes of the public about financial management technology based on accounting and e-commerce and positive views from important people such as friends or family of MSME practitioners about financial management technology based on accounting and e-commerce will influence the desire of MSME actors to adopt management technology accounting and e-commerce based finance. So far, there are a number of MSMEs that have begun to glance at accounting and e-commerce-based financial management technologies in Banyumas, even though they are not large enough. Based on field data it is known, that there is a social value stigma that arises that the use of financial management technologies based on accounting and e-commerce is in accordance with the regulations of the Banyumas Regent. The recommendation from the Bupati is proven to be able to act as a norm reference for MSME practitioners to use accounting and e-commerce-based financial management technology.

#### **The effect of perceived behavior control influences intention to use in the adoption of accounting and e-commerce-based financial management technologies for MSMEs**

Perceived Behavior Control positively influences intention to use, which means that an increase in perceived behavior control influences intention to use. The results of this study support the study of Ajzen (2004) which states that although perceived behavior control has a strong effect on intention to use. One's perception or thinking that adopting accounting and e-commerce based financial management technology is easy to do enables the person to adopt accounting and e-commerce based financial management technology in their marketing needs, and interest in adopting growing accounting and e-commerce based financial management technology in a person really allows that person to really adopt the technology of financial management based on accounting and e-commerce. The open minded attitude of MSMEs in Banyumas Regency has proven to encourage the realization of the use of financial management technologies based on accounting and e-commerce. The attitude of self-control that accepts something new that is felt to be beneficial will certainly have an impact on the use of financial management technologies based on accounting and e-commerce.

#### **The effect of intention to use affects the usage behavior in the adoption of accounting and e-commerce based financial management technologies for MSMEs**

Intention to Use positively affects Usage Behavior, which means that the higher or increasing intention to use will affect the increase in usage behavior. These results support the research of Wellington et. al. (2006) where the intention (Intention) is a feeling when someone plans or intends to do it, which will soon be manifested in behavior (Usage Behavior). This result is also consistent with Ajzen's (2004) study which states that interest (intention to use) can have a strong influence directly on Usage behavior.

If the MSMEs feel that they can control their behavior to continue to use accounting and e-commerce based financial management technology after they decide to use accounting and e-commerce based financial management technology, it will generate interest in MSMEs to adopt the adoption of financial management technology based accounting and e-commerce. The use of accounting and e-commerce-based financial management technology adoption by MSME actors is due to the interest that arises because of the consideration of MSME actors as a whole, namely attitude toward behavior, subjective norm, and perceived behavior control.

#### **The effect of perceived behavior control on usage behavior in the adoption of accounting and e-**

### **commerce-based financial management technologies for MSMEs**

Perceived Behavior Control positively influences Usage Behavior, which means that an increase in perceived behavior control influences usage behavior. The results of this study support the study of Ajzen (2004) which states that although perceived behavior control has a strong effect on usage behavior when mediated by intention to use, but if perceived behavior control directly on usage behavior the effect is there but it is weak.

Ajzen (1992) states that a strong perception factor is important for convincing oneself so as to generate strong interest in a person. Raising and growing attitudes toward behavior, subjective norms, and perceived behavior control needs to be done so that the interest to conduct financial management and use e-commerce remains. The results of this study support previous studies and prove that the Theory of Planned Behavior can be applied to assess the behavior of MSME actors in the adoption of accounting and e-commerce-based financial management technologies for MSMEs. One's perception or thought that adopting accounting and e-commerce based financial management technology is easy to do enables the person to adopt accounting and e-commerce based financial management technology in their marketing and marketing needs, and interest in adopting accounting and e-commerce based financial management technology what grows in a person really enables that person to really adopt accounting and e-commerce based financial management technologies. If the MSMEs feel that they can control their behavior to continue to use accounting and e-commerce-based financial management technologies, it will generate interest in MSMEs to adopt accounting and e-commerce-based financial management technologies.

### **CONCLUSION**

1. Attitude toward behavior positively influences Intention to Use, which means that the higher the attitude behavior will increase the intention to use. These results support previous research conducted by Ajzen (1991), and research by Dharmmesta and Khasanah (1999)
2. The relationship between Subjective Norm and Intention to Use has a significant positive effect. These results are consistent with research by Barnet and Persley (2004) and Ajzen (1992). A good social value in the eyes of the community about e-commerce and positive views from important people such as friends or family of MSME practitioners about e-commerce will influence the desire of MSME entrepreneurs to adopt e-commerce.
3. Perceived behavior control influences intention to use in the adoption of accounting and e-commerce-based financial management technologies for MSMEs
4. Intention to use affects the behavior of users in the adoption of accounting and e-commerce-based financial management technologies for MSMEs. Intention to Use positively affects Usage Behavior, which means that the higher or increasing intention to use will affect the increase in usage behavior. These results support the research of Wellington et. al. (2006) where the intention (Intention) is a feeling when someone plans or intends to do it, which will soon be manifested in behavior (Usage Behavior). This result is also consistent with Ajzen's (2004) study which states that interest (intention to use) can have a strong influence directly on Usage behavior.
5. Perceived behavior control influences usage behavior in the adoption of accounting and e-commerce-based financial management technologies for MSMEs. The results of this study support the study of Ajzen (2004) which states that although perceived behavior control has a strong effect on usage behavior.

### **Theoretical Implications**

This research has broad implications in the future, especially for research relating to the relationship of behavioral factors in the implementation of new systems and technologies. Based on the findings of the research results and conclusions on the hypotheses and research problems, it can be explained that in the application of a system must pay attention to the socialization of costs and benefits to employees when they use the new system.

### **Research Limitations**

This study has limitations that need to be considered in evaluating the results of research. The limitation of this study lies in the instrument of measuring the research variables used by translating the previous research instruments conducted abroad and in the private sector, so that there may be differences in cultural backgrounds, and characteristics of respondents resulting in differences in understanding. It is also possible that respondents mistakenly perceive their true intentions so that future research needs deeper study.

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## Appendix

Table 1. Reliability Test Results

No	Variable	Cronbach Alpha	Information
1	attitude towards	0.928	Reliabel
2	subjective norm	0.864	Reliabel
3	perceived behavior control	0.894	Reliabel
4	intention to use	0.951	Reliabel
5	usage behavior	0.721	Reliabel

Source: Data processed, 2019

Table 2. Validity Test Results

No	Variable	correlation	Signifikansi	Information
1	<i>attitude towards</i>	0.230**-0.822**	0.01	Valid
2	<i>subjective norm</i>	0.298**-0.782**	0.01	Valid
3	<i>perceived behavior control</i>	0.713**-0.835**	0.01	Valid
4	<i>intention to use</i>	0.445**-0.843**	0.01	Valid
5	<i>usage behavior</i>	0.602**-0.815**	0.01	Valid

Source: Data processed, 2019

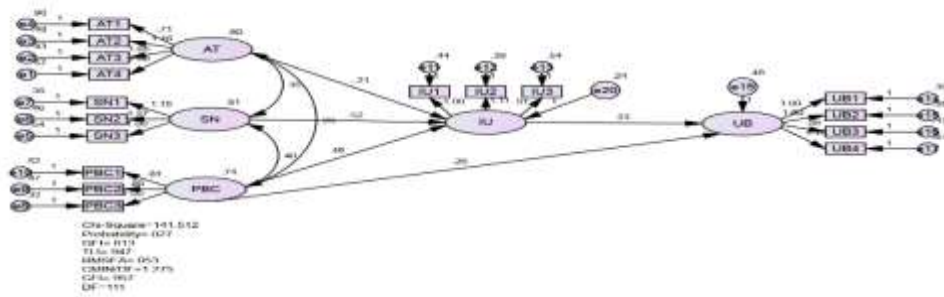


Figure 1. Estimated Full Model Equation

Table 3. Evaluation of Fit Structural Model Indexes

Indeks fit	Result	Recommended value	Evaluasi model
Chi-Square	141,512	The smaller the better	
Probabilitas	0,027	> 0,05	Moderate
Chi-Square/DF	111	<2	fit
GFI	0,813	> 0,90	fit
RMSEA	0,063	< 0,08	fit
AGFI	0,097	> 0,90	fit
IFI	0,093	> 0,90	fit
TLI	0,947	> 0,90	fit
CFI	0,967	> 0,90	fit
NFI		> 0,90	fit

Source: Data processed, 2019

Table 4. Output of Regression Weights  
Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P	Label
IU	<--- AT	.211	.152	3.395	.003	par_13
IU	<--- SN	.515	.214	2.413	.016	par_14
IU	<--- PBC	.458	.139	3.301	***	par_15
UB	<--- IU	.232	.204	3.138	.012	par_16
UB	<--- PBC	.256	.189	2.350	.034	par_20
AT4	<--- AT	1.000				
AT3	<--- AT	1.051	.159	6.609	***	par_1
AT2	<--- AT	1.155	.178	6.500	***	par_2
AT1	<--- AT	-.713	.159	-4.488	***	par_3
SN3	<--- SN	1.000				
SN2	<--- SN	1.272	.186	6.830	***	par_4
SN1	<--- SN	1.178	.168	7.021	***	par_5
PBC3	<--- PBC	1.000				
PBC2	<--- PBC	.897	.120	7.461	***	par_6
PBC1	<--- PBC	.843	.120	7.009	***	par_7
IU1	<--- IU	1.000				
IU2	<--- IU	1.105	.158	6.984	***	par_8
IU3	<--- IU	.906	.145	6.246	***	par_9

			Estimate	S.E.	C.R.	P	Label
UB1	<---	UB	1.000				
UB2	<---	UB	.997	.147	6.775	***	par_10
UB3	<---	UB	.977	.130	7.501	***	par_11
UB4	<---	UB	1.153	.164	7.027	***	par_12

Source: Data processed, 2019