

## DETERMINANTS OF THE USE OF DIGITAL-BASED ACCOUNTING INFORMATION SYSTEMS MICRO, SMALL AND MEDIUM ENTERPRISES IN DENPASAR CITY

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**ABSTRACT :** *Micro, Small and Medium Enterprises (MSMEs) are one of the drivers of economic growth in Indonesia and especially Bali as a major tourist destination in Indonesia and even in the world. The existence of MSMEs has shown its role in the national and regional economy because it is classified as a productive business that absorbs labor in the form of business entities or individuals. The Covid-19 pandemic that has hit almost all countries in the world, including Indonesia, has an impact on various sectors of life. If this continues, it will certainly threaten the Indonesian national economy which has implications for the tourism, trade and investment sectors. Bali, which relies on the tourism sector as the backbone of the economy, has had a tremendous impact on the economy, especially economic sectors that depend on activities tourism, one of which is the MSME sector. One strategy that can be applied by MSMEs in order to survive in the midst of the COVID-19 pandemic is to carry out digital-based technology transformations. The purpose of this study is to determine the factors that determine or determine the acceptance or adoption of technology, so that it can contribute to being applied to regulators or stakeholders along with the massive impact of economic digitization on all business sectors. The population of this study is all MSMEs registered at the Department of Cooperatives and MSMEs in Denpasar City with a total of 32026 MSMEs. The sample method used is random sampling. The sample is determined by the minimum amount according to the Slovin formula. By using an error tolerance threshold of 5%, the minimum number of samples determined is 395. Data processing for hypothesis testing is carried out using PLS-SEM analysis using SmartPLS V.3.0 software..*

**Keywords** - Computer Anxiety, Computer Self-Efficacy, Personal Innovativeness, Perceived Ease, Perceived Usefulness, Use of Technology

### I. INTRODUCTION

The existence of the Covid-19 pandemic which has an impact on the sustainability of MSMEs, then one of the strategies that can be applied is to transform digital-based technology [1]. By utilizing digital technology, MSME actors will have the same opportunities as big business actors, this is because they are on the same platform as for example a marketplace or e-commerce so they have the same opportunities in product promotion and sales. This argument is strongly supported by [2] which states that technology-based accounting information systems are a major requirement in business. Almai's research (2020) which took a sample of BUMN Creative Houses (RKB) in Serang City, Banten, provides empirical evidence that there has been an increase in income by 77% when using E-Commerce.

Behind the enormous benefits in implementing a digital-based information system (IS), it has been found that the adoption of information technology by MSME actors in Indonesia is still low, which is only around 16.33% of MSMEs that have adopted digital technology as proclaimed by [3]. This is one of the biggest challenges for growth and development of the digital economy in Indonesia. It was further said that the Covid-19 pandemic period was the right moment for MSME to transform towards digital.

The low acceptance of information systems by SMEs can be caused by several factors. One of them is the human factor. The low adoption of information systems occurs because of the reluctance or refusal of individuals managing MSMEs to [4]. The results of the study of [5] and [6] shows that the failure is more on the behavioral aspects of individuals in the organization. Therefore, the behavior of humans who operate the IS must be considered if you do not want the SI to fail in its acceptance, development and use. So, it can be said that the human factor is a behavioral aspect that determines the application of AIS.

Various models have been developed to examine behavioral antecedents that affect the acceptance or use of information technology, such as The Theory of Reasoned Action (TRA) developed by [7], Technology Acceptance Model (TAM) which was first introduced by [8], The Theory of Planned Behavior (TPB) was developed by [9] which is the development of TRA, then Social Cognitive Theory (SCT) by [10] in the context of using computers.

TAM is a model of acceptance of information technology systems used by users. TAM was developed by [11] based on the TRA model, by adding two main constructs in the TRA model. The constructs are perceived usefulness assessing users' beliefs about the benefits of information systems (IS) which are believed to improve performance, and perceived ease of use assessing users' beliefs that utilizing IT does not require a lot of effort, are two key indicators that determine the use of information systems.

The formation of perceived usefulness and perceived ease of use determines attitudes towards using technology, which in turn forms behavioral interest in using IT (behavioral intention to use) and ultimately influences the actual use of AIS (actual technology use) [11]. The factors that shape the perception of the ease and usefulness of a system are external factors outside of the users of the system. The external factors are computer anxiety [6] and personal innovation [12].

Empirical evidence can be shown by the research of [13] which examines the factors of perception and use of computers (use of information technology) through the external variable TAM (anxiety over computers, personal innovation, and self-confidence on computers). The findings show that: (a) perceived ease of use is a strong positive predictor of IT use, but perceived ease of use does not show a direct effect on information technology, (b) personal innovativeness has a positive effect on perceived ease of use and perceived usefulness, (c) anxiety computer has a negative effect on perceived usefulness and perceived ease of use, (d) computer self-confidence statistically affects perceived ease of use and perceived usefulness. The results of the research by [13] agree with several research results [14], [15] in terms of the effect of computer self-confidence on perceived ease of use. However, these findings contradict the results of research by [16] that computer anxiety does not directly affect perceived ease of use and perceived usefulness in terms of the effect of computer self-confidence on perceived ease of use.

The important thing that distinguishes this study from previous studies is that this study examines in an integrated manner the effect of computer anxiety variables, either directly or indirectly, on the use of AIS, mediated by self-confidence on computers and personal innovation variables and the main variable TAM (perceived ease of use, and perceived usefulness). No previous research has tested the effect of an integrated computer anxiety variable on the main variables of TAM (perceived ease of use, perceived usefulness, and use) and the external variables of TAM (personal innovation and self-confidence in computers).

## II. LITERATURE REVIEW

### 2.1 Technology Acceptance Model

Technology Acceptance Model (TAM) is a widely adopted application of TRA offering a basis for gaining a better understanding of user behavior in the acceptance and use of IS. TRA is a general behavior model developed by [7] which was later popularized by [6] and [17]. Based on these facts, this study uses TAM as a grand theory. This research focuses on the development and use of IS which is an IT-based IS. Likewise, [18] stated that TAM is the most widely used research model to examine user behavior in accepting and using IS. Furthermore, [17] stated that TAM has been tested with many studies, the results of which mostly support and conclude that TAM is a good model and the results are also consistent. TAM has 5 main constructs, namely perceived usefulness and ease of use, attitudes towards behavior, behavioral interest in using technology, and actual behavior or use of technology.

### 2.2 Useful perception

Perceived usefulness is defined as an individual's level of belief that the use of a particular IS will improve his performance. This concept describes the benefits of the system for users related to productivity, task performance, effectiveness, importance of a task and overall usefulness [18]. [17] defines that perceived usefulness is the extent to which a person believes that using a technology will improve his or her job performance. The definitions above indicate the existence of a belief about the decision-making process. Thus, it can be said that if a person believes that SI is useful, he will use it. On the other hand, if a person believes that SI is not useful, he will not use it. Previous studies have shown that perceived usefulness has a very strong effect on actual behavior or use [11] and [19]. However, [20] found the opposite, namely perceived usefulness had no

effect on actual use. Previous studies have also shown that perceived usefulness is an important variable and has the most influence on attitudes, interests, and behavior in using technology compared to other variables.

### 2.3 Perceived ease of use

Perceived ease of use is defined as a person's belief that the use of IS is easy and does not require a lot of effort from the user [11] dan [21]. This concept includes the clarity of the purpose of using the IS and the ease of using the system for the purposes according to the wishes of the user [11]. This definition shows that perceived ease of use is a belief about the decision-making process. Thus, it can be said that if a person believes that SI is easy to use, he will use it. Otherwise someone feels SI is not easy to use, he will not use it. Likewise, the use of IS is easy or does not require a lot of effort to increase user motivation in using IS to complete work [11] , [21] dan [4]. Previous studies have shown different results. [13]perceived ease of use does not affect use. However, [11] dan [21] perceived ease of use was the most prominent predictor of technology use.

### 2.4 Behavioral Interest

[17]defines interest (intention) is the desire to perform a behavior. Interest is not always static. Interests may change over time. The wider the time interval, the more likely changes in interests will occur. [22]suggests that a person's behavior is an expression of a person's desire or interest (intention), which is influenced by social factors, feelings (affects), and perceived consequences (perceived consequences). [11]suggested that the benefits felt by IS users would increase their interest in using IS. Likewise, [15]stated that a person's belief in the usefulness of IS will increase their interest and in the end the individual will use IS in his work. On the other hand, [23]stated that the level of willingness of individuals and groups to utilize IS is referred to as acceptance of the system. In addition, [4]stated that there is a direct and significant relationship between interest in the use of SI on the use of SI. Research conducted [11] and [21]shows that behavioral interest is a good predictor of technology use by system users.

### 2.5 Behavior

One theory about the use of information technology systems that is considered very influential and is generally used to explain individual acceptance of the use of IS is TAM [17]. TAM is an IT system acceptance model that will be used by users. [17]explains that user behavior in TAM is an action taken by a person (user), in the context of an IT system is the actual use (actual use). It is also said that the actual use cannot be observed by researchers who use a list of questions, so this actual use is mostly replaced by the name of perceived usage. The developed use of SI refers to how often users use SI (frequency of SI use).

### 2.6 Conceptual Framework.

Based on the explanation in the background and the results of previous research, the firm value research model can be formulated in Figure 1 below:

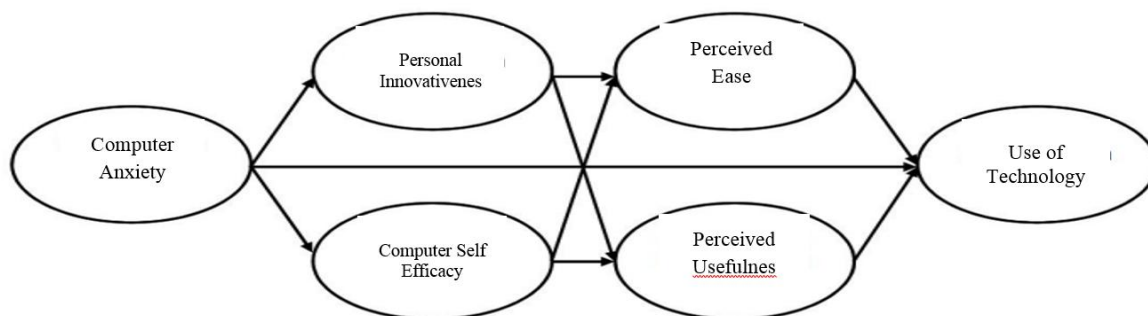


Figure 1. Conceptual Framework

## III. RESEARCH METHODS

This type of research is to use quantitative methods. The data used are primary data by conducting interviews and distributing questionnaires to respondents, in this case the MSME actors in Denpasar City as many as 395. The indicators of computer anxiety are 1) Computers don't scare me at all; 2) working with a computer makes me nervous; 3) the computer makes me feel uncomfortable; 4) the computer makes me feel no. Indicators of personal innovation in technology are 1) looking for ways to try technology-based information systems; 2) being the first to use a technology-based information system; 3) experimenting with technology-based information systems [24] and [25].

The indicators of self-confidence in computers are 1) comfortable to use independently; 2) able to use well independently; 3) have the knowledge to use it. Furthermore, the usefulness of perception is measured by the indicators used by researchers in this construct are those used by [2] and [24]. Perceived usefulness indicators are 1) work faster; 2) improve work performance; 3) increase productivity; 4) increase effectiveness;

5) make work easier. Perceived ease of use indicators are 1) clear and understandable, 2) easy to become skilled at, 3) easy to use, and 4) easy to learn. Finally, [4] stated that behavior is a real action or activity that is carried out. [11] and [17] also mention that behavior in the use of technology is actual use. The use of accounting information systems in this study is a real action of MSME actors in using technology-based information systems in operational activities at their place of business. The indicators used by researchers in this construct are those used by [2]. Indicators of the use of technology-based accounting information systems are 1) Frequency of use; 2) Time of using. The use of accounting information systems in this study is a real action of MSME actors in using technology-based information systems in operational activities at their place of business. The indicators used by researchers in this construct are those used [2]. Indicators of the use of technology-based accounting information systems are 1) Frequency of use; 2) Time of using.

Data processing for hypothesis testing was carried out using PLS-SEM analysis using the SmartPLS V.3 software. In the PLS-SEM analysis there are three categories of estimates obtained from three data iteration processes, namely the first process through testing the outer model to produce a weight estimate, the second process through testing the inner model to produce a path estimate and the third process through data interpretation to produce means and constants. Descriptive analysis is used to determine the description of the perception of each MSME manager regarding the use of digital-based information systems.

## IV. RESULT AND DISCUSSION

### 4.1 Demographic Characteristics of Research Respondents

395 questionnaires were distributed, 148 questionnaires could not be processed because the questionnaires failed to return and were also incompletely filled, so that only 247 questionnaires were returned, intact and complete so that they could be processed further. Based on the results of the respondents' demographic answers, it can be explained that 1) the age characteristics of the respondents in this study were dominated by the age range of 41-50 years as many as 92 people or 37.2%. 2) the characteristics of the education level of the respondents in this study were dominated by the undergraduate education level as much as 108 or 43.7%, 3) the characteristics of the length of business of the respondents in this study were dominated by under 5 years as many as 114 or 46.2% and 4) the gender characteristics of the respondents in this research it is dominated by women as much as 128 or 51.8%.

### 4.2 Path Analysis and Hypothesis Testing

Before conducting path analysis and hypothesis testing, the measurement model and measurement model are first examined. Based on the results of the SEM-PLS analysis with the help of the SmartPLS software, the test results are obtained as presented in the following table.

Table 1. Path Analysis and Statistical Testing

Note	Original	P Values	Information	Hypothesis testing
Computer Anxiety -> Personal Innovativeness	0.554	0.000	Significant	Supported
Computer Anxiety -> Self Confidence	0.793	0.000	Significant	Supported
Computer Anxiety -> System Usage	-0.022	0.813	Not significant	Not supported
Personal Innovativeness -> Perceptual Usefulness	0.061	0.269	Not significant	Not supported
Personal Innovativeness -> Ease of Use_	0.368	0.000	Significant	Supported
Self Confidence -> Perception Usefulness	0.682	0.000	Significant	Supported
Self Confidence -> Ease of Use_	0.435	0.000	Significant	Supported
Perception Usability -> System Usage	0.139	0.139	Not significant	Not supported
Ease of Use_ -> System Usage	-0.040	0.658	Not significant	Not supported

### 4.3 Discussion

Based on the test results in table 1, it is found that computer anxiety does not affect personal innovation, self-confidence and the use of information systems in MSMEs in Denpasar City. The unsupported direct influence of computer anxiety on personal innovation, self-confidence and use of information systems in MSMEs in Denpasar City can be justified that the results of this study indicate that in the TAM theory developed by [8], there are still other factors that are not found in the main construct of TAM. whereas it can



affect technology acceptance, namely intrinsic factors that come from within the individual and extrinsic factors that come from outside the individual[4]. In relation to these external factors, Computer anxiety which is anxiety over the use of computer technology can be categorized as an intrinsic factor that arises from within the individual itself. High anxiety tends to intimidate someone and makes using technology even more difficult. In TAM, belief in the difficulty of using technology will make someone tend to avoid using accounting information technology so that it will reduce the use of the technology, and vice versa. The results obtained in this study do not support the results of previous studies that computer anxiety negatively affects perceptions of interest in using technology. This is because there are similarities in the test indicators so that the measured results describe a similar situation where the fear of MSME actors is greater than their anticipation, so that when computer anxiety is high, fear will also be high, and the use of IT will also decrease. The results of this study are in line with the results of research by [16]that computer anxiety does not directly affect perceived ease of use and perceived usefulness.

Based on the test results regarding the direct effect of perceived usefulness and perceived ease of use on the use of information systems in MSMEs in Denpasar City, it shows that all hypothesized variables cannot be supported in the study. It can be explained that when an information system cannot be easily understood and used and is believed to be able to benefit its users, it will affect a person's behavior to use the information system. The perceived ease in using information systems has not been able to encourage someone to use information systems to support the company's operational activities. The perceived usefulness or benefits in using information systems has not become a factor that supports someone to use information systems. The results of this study have not been able to support previous research by [11]which stated that Percieved Ease of Use and Percieved Usefulness were the main determinants of behavior to use the system.

The unsupported variables of personal innovation, self-confidence, perceived usefulness, perceived ease of use are not as mediating variables, it can be explained that computer anxiety which is anxiety over the use of computer technology can be categorized as an intrinsic factor that arises from within the individual itself. High anxiety tends to intimidate someone and result in a loss of self-confidence and personal innovation, which in turn affects a person's attitude regarding perceived usefulness, perceived ease of use. The loss of perceived usefulness, perceived ease of use will make someone tend to avoid using information system technology so that it will reduce the use of information system technology.

## V. CONCLUSION, LIMITATIONS, SUUGESTIONS

Based on the results of testing each hypothesis, it was concluded that with regard to the intensity of use of information systems, it can be concluded that either through the direct influence of computer anxiety, perceived use and perceived ease and indirect influence through personal innovation, self-confidence, perceived use and perceived ease of use have no significant effect. on the use of information systems in MSMEs in Denpasar City. The implication of the results of this study is that the anxiety of MSME managers in computers needs to be supported by the development of locus of control from within MSME managers, so that computer confidence will be higher and can further increase the use of information systems.

This study has several limitations, namely, the instruments used in this study will not be the same if applied to other samples or studies. So that the results of this study can be generalized to other samples or studies, this instrument needs to be developed according to empirical conditions and retested. Respondents in this study were limited to MSMEs in Denpasar City, so the results of this study might be different if generalized to other companies or types of organizations. The data of this study is only based on the respondents' perceptions obtained through a questionnaire, so the possibility of bias in this study cannot be avoided. To obtain higher quality data, further researchers can combine data collection methods with interview techniques and in-depth observation methods.

Based on the results of the research and the conclusions obtained, it can be suggested that computer anxiety can be overcome by developing self-control from within the individual, in this case the student MSME managers must feel confident in their personal abilities that the use of information systems can be achieved if MSME managers are increasingly developing internal locus of control. control. In line with the development of technology and information, MSME managers in Denpasar City are advised to support the development of information resources through the use of computers that follow the trend of Information Technology. Alternatives that can be taken are, for example, providing various training or training on the development of systems and information technology in supporting the company's operational activities. For further research that research on end user computing in the MSME sector still needs to be done. For further researchers, it is recommended to conduct research using different population research locations, as well as using other variables such as stress, training, socio-economic conditions, and so on

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