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FACTORS INFLUENCING THE ADOPTION OF CLOUD COMPUTING AMONG MSMES IN BANDUNG CITY USING EXTENDED UTAUT2 WITH TECHNOLOGY READINESS

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ABSTRACT

With the evolution of the world, digital technology has transformed information, communication, and connectivity, largely driven by Industry 4.0 technologies, among which cloud computing stands out. Cloud computing facilitates data storage and information exchange via the internet, offering significant advantages to businesses, particularly Micro, Small, and Medium Enterprises (MSMEs), by enabling them to manage data independently and efficiently. The adoption of cloud computing is anticipated to advance digitalization in Indonesia, potentially increasing income and creating employment opportunities in the coming years. This research aims to identify the factors influencing cloud computing adoption among MSMEs in Bandung City. Utilizing the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2) with Technology Readiness, the study collected 158 valid responses through an online questionnaire from MSMEs that have utilized or are currently utilizing cloud computing services in Bandung City. The data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM). The findings reveal that Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, and Optimism positively influence the intention of MSMEs to adopt cloud computing. Furthermore, Behavioral Intention positively affects Actual Usage. This research shows that MSMEs with a strong intention to adopt cloud computing are more likely to integrate it into their daily operations. Enhancing MSMEs' knowledge and digital skills can further facilitate their use of cloud computing services, given their positive perception of these services. Recommendations for MSMEs include focusing on improving digital skills, while the government should implement digital literacy programs to support MSMEs in using cloud computing. However, this study is limited to MSMEs in Bandung City, which may restrict the generalizability of the findings. Future research should explore the types of services used by MSMEs, incorporate additional variables, employ different methodological approaches, and consider a broader sample.

INTRODUCTION

As global development continues to advance, technology plays a crucial role in transforming various aspects of society. In the 21st century, the most significant leap has been witnessed in the development of digital technology, which has revolutionized information, communication, and connectivity (Conceição et al., 2020). This digital evolution has paved the way for the adoption of Industry 4.0 technologies, including cloud computing, big data analytics, and the Internet of Things, enhancing automation, networking, and overall efficiency (Javaid et al., 2022). Businesses, in particular, have been completely impacted by these advancements, leading to significant changes in how they operate and compete in the market. For example, digital technology implementation for big data across industries has enabled firms to store and process massive amounts of data that leads to better decisions and more effective use of resources. This results in better economic and environmental performance, which reduces cost, increases productivity, and minimizes waste and energy consumption (Li, Dai & Cui, 2020).

One of the key technologies driving this change is cloud computing, which is used to store data and exchange information through internet-connected servers, databases, and networks (Moura & Hutchison, 2016). On-demand self-service, quick adaptability, and controlled service are also some of the main characteristics of cloud computing. It allows users to access data more efficiently and supports the use and development of applications (Golightly et al., 2022). Moreover, cloud computing enables businesses to expand their digital networks without the need to build expensive data centers, which makes it beneficial for organizations with limited resources (Islam et al., 2023).

Improved access and internet bring new opportunities for business engagement, especially for MSMEs, that leads to possible growth and expansion in such business endeavors (Wulandari et al., 2023). MSMEs refer to individually established business enterprises owned by individuals, groups, or communities (Purba, 2019). According to a press release from the Coordinating Ministry for Economic Affairs of the Republic of Indonesia in 2023, the Ministry of Cooperatives and MSMEs stated that Indonesia has 65.5 million MSMEs and contributes up to 61% to the country's GDP. In 2020, 70% of MSMEs in Indonesia used cloud computing, surpassing larger corporations (Waranggani, 2020). This high adoption rate highlights the significance of cloud computing in enhancing MSMEs' productivity and overall business performance by reducing operating costs and providing convenient access to a variety of services without significant capital investments (Nurhaliza, 2023).

An example of cloud computing usage is agricultural businesses in Indonesia have successfully utilized cloud technology to optimize its operations. By getting data through an application, it has reduced costs and increased production. Popular cloud computing services for MSMEs include Software as a Service (SaaS) platforms like Email, Google Drive, Google Workspace, and Dropbox. Additionally, businesses can utilize Platform as a Service (PaaS) such as Microsoft Azure and Amazon Web Service, and Infrastructure as a Service (IaaS) like Google Cloud Platform, which offers more personalized solutions but often at higher costs. While MSMEs are offered numerous application developers, not all MSMEs are eager to use this technology.

Nevertheless, MSMEs across Indonesia face similar difficulties when implementing cloud computing, including infrastructure and government-related factors. As of 2023, only 29%, or approximately 19.14 million of the total MSMEs in Indonesia, utilize basic cloud services like email. It also shows lower rates for advanced cloud services such as artificial intelligence and machine learning (Amazon Web Service, 2023). Enterprises of all sizes encounter challenges primarily due to a lack of knowledge and training in digital technology (Mawarsari, 2023). Additionally, many businesses in Indonesia feel that government support for cloud computing is inadequate, which discourages them from focusing on utilizing these services (Gui et al., 2020). Despite challenges in skills and knowledge, most MSMEs recognize the importance of implementing digital technology in their businesses (Alam, Ramadhani & Patmaniar, 2023).

Bandung City has been chosen as the study area due to its significant contribution to Indonesia's Creative Economy and its reputation as a smart city (Ritchi et al., 2024). According to the Department of Cooperatives and Small Businesses, Bandung hosts 10,181 MSMEs, with the majority being Micro Enterprises (Diskominfo Bandung, 2024). While there has been an 8.03% growth in MSMEs in Bandung from 2018 to 2022, the low adoption of digital technology, including cloud computing, has restrained further progress (Diskominfo Bandung, 2024). Without embracing advanced technology and preparing for cloud computing adoption, Bandung risks lagging in competitiveness and development (Puspitaningsih, Liana & Irianti, 2022). To address this, the Department of Communication and Informatics in Bandung City has organized a digital program event for MSMEs, emphasizing the need for cloud computing adoption. By encouraging them, the utilization of cloud computing will not only benefit MSMEs but also contribute to the overall advancement of Indonesia's enterprises.

Given the significant benefits that cloud computing can offer to MSMEs, it is crucial to understand the factors influencing their adoption decisions. Identifying these factors can help stakeholders, including MSMEs owners and governments, in addressing existing barriers and enhancing the adoption rate. This study aims to fill this gap by examining the factors influencing cloud computing adoption among MSMEs in Bandung City using an extended UTAUT2 model with Technology Readiness as an additional indicator.

The objectives of this research are to identify the factors influencing the adoption of cloud computing and to assess the relationship between independent variables and cloud computing adoption among MSMEs in Bandung City. These objectives are derived from the research questions of (1) what factors influence MSMEs in Bandung City to adopt cloud computing and (2) how the relationship between independent variables and cloud computing adoption among MSMEs in Bandung City is.

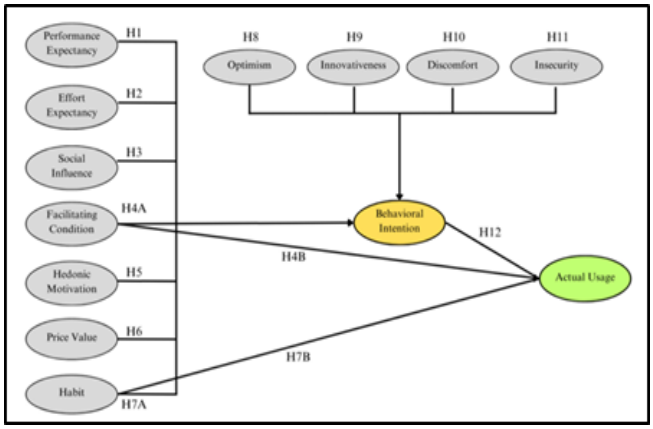
LITERATURE REVIEW

Cloud Computing is an internet-based computing model where all services are easily accessible anytime, anywhere, and can be delivered in real-time (Vikas et al., 2013). In order to identify factors influencing the behavioral intention and actual usage of cloud computing among MSMEs in Bandung City, Extended UTAUT2 with Technology Readiness are used as indicators for this research. Performance

Expectancy refers to the extent to which users believe that utilizing a technology will be beneficial when carrying out particular tasks. Effort expectancy describes how easy it is for users to utilize the technology. Social Influence is the level to which users feel that important people like friends and family members think they should use a particular technology. Facilitating conditions is user perceptions of the tools and support available for executing an action. Hedonic motivation is the happiness and satisfaction experienced when using technology. Price value is described as users' perceptions towards the balance between the costs of applications and its supposed benefits. Habit is the point at which people participate in behaviors automatically as a result of learning. Behavioral intention refers to the desire to perform a certain behavior, which in turn influences the actual use of technology (Venkatesh et al., 2003; Venkatesh, Thong & Xu, 2012; Dodds et al., 1991; Limayem et al., 2007).

Technology readiness refers to individuals' willingness to adopt and utilize technologies to achieve objectives both in their personal lives and professional environments. Optimism refers to a positive perspective on technology, believing it provides people with more power, adaptability, and efficiency in their everyday lives. Innovativeness reflects a tendency to lead the way in the acceptance and development of technology, performing as a pioneer and innovator in the industry. Discomfort is defined as the feeling of being overwhelmed by technology, lacking control over its source. Insecurity entails a lack of trust in technology which is caused by doubts about its reliability and apprehensions regarding its potential negative effects (Parasuraman, 2000). The conceptual framework of this study can be seen in figure 1.

Figure 1: Conceptual Framework



Hypotheses:

H1: Performance expectancy (PE) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H2: Effort expectancy (EE) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H3: Social influence (SI) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H4A: Facilitating conditions (FC) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H4B: Facilitating conditions (FC) has a positive influence on MSMEs' actual usage (AU) of cloud computing services adoption.

H5: Hedonic motivation (HM) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H6: Price value (PV) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H7A: Habit (HT) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H7B: Habit (HT) has a positive influence on MSMEs' actual usage (AU) of cloud computing services adoption.

H8: Optimism (OPT) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H9: Innovativeness (INN) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H10: Discomfort (DIS) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H11: Insecurity (INS) has a positive influence on MSMEs' behavioral intention (BI) in adopting cloud computing services.

H12: Behavioral Intention (BI) has a positive influence on MSMEs' actual usage (AU) of cloud computing services adoption.

RESEARCH METHODS

In this study, the researcher will use a quantitative method, using online questionnaires with close-ended questions as the main tools for data collection to address the formulated research questions. The responses will subsequently be analyzed using statistical methods. The population that will be assessed in this study is members of the MSMEs in Bandung City. Therefore, the researcher determines the sample size by employing proportion estimation. In this study, there are 14 connections to the latent variables, which leads to the minimum sample being 140 respondents. Moreover, PLS-SEM is suitable for analyzing small sample sizes and is commonly portrayed as a valuable technique for multivariate data analysis (Hair et al., 2019; Hair et al., 2011; Hair et al., 2014). Thus, the researcher will utilize a sample size of 140. The researcher uses a non-probability sampling technique, specifically purposive sampling, also known as judgment, selective or subjective sampling. The approach of purposeful sampling is employed to select individuals who will be suitable to provide the desired information (Kelly, 2010). The respondents must be part of Micro, Small, and Medium Enterprises (MSMEs), have experience with cloud computing at least once, either currently using it or have used it in the past, and domicile in Bandung City.

RESULT AND DISCUSSION

Descriptive Statistic

This research explores the Extended UTAUT2 Model through a survey comprising 44 questions, each rated on a 5-point Likert scale, with responses ranging from 1 for "Strongly Disagree" to 5 for "Strongly Agree".

The following table presents a summary of descriptive statistics, including average, maximum, and minimum values. The highest average is for PE1, with a score of 4.636, reflecting respondents' high expectancy of using cloud computing services and perceiving them as useful in daily life. Conversely, DIS3 has the lowest average, which is 1.665. This code suggests a negative statement about the belief in cloud computing services are not made for regular individuals. This low average for DIS3 indicates that people do not feel these services are not designed for them. Therefore, a low value indicates a positive outcome, as a smaller number reflects a lower tendency of customers feeling discomfort using cloud computing.

Table 1. Descriptive Statistics Summary

No.	Code	Average	Max	Min	No.	Code	Average	Max	Min	No.	Code	Average	Max	Min
1	PE1	4.636	5	3	16	HM2	4.163	5	1	31	INN4	4.297	5	2
2	PE2	4.603	5	3	17	HM3	3.675	5	1	32	DIS1	1.708	5	1
3	PE3	4.435	5	3	18	PV1	3.665	5	1	33	DIS2	1.675	5	1
4	EE1	4.053	5	1	19	PV2	3.751	5	1	34	DIS3	1.665	5	1
5	EE2	4.167	5	1	20	PV3	3.933	5	1	35	DIS4	1.670	5	1
6	EE3	4.254	5	2	21	HT1	4.120	5	1	36	INS1	1.718	5	1
7	EE4	4.077	5	2	22	HT2	3.670	5	1	37	INS2	1.756	5	1
8	SI1	3.904	5	1	23	HT3	3.722	5	1	38	INS3	1.756	5	1
9	SI2	3.780	5	1	24	OPT1	4.158	5	1	39	INS4	1.665	5	1
10	SI3	3.789	5	1	25	OPT2	4.364	5	2	40	BI1	4.249	5	2
11	FC1	4.053	5	1	26	OPT3	4.234	5	1	41	BI2	4.258	5	2
12	FC2	4.005	5	1	27	OPT4	4.311	5	2	42	BI3	4.258	5	2
13	FC3	4.230	6	1	28	INN1	4.191	5	1	43	AU1	4.077	5	1
14	FC4	4.120	5	1	29	INN2	4.163	5	1	44	AU2	4.053	5	1
15	HM1	4.072	5	2	30	INN3	4.321	5	2					

Indicator Reliability

This value represents the correlation between each indicator and its corresponding latent variable assessed through the outer loading factor. The outer loadings of each indicator can be used to determine its reliability. An acceptable minimum value for indicator reliability is 0.70 (Wong, 2013), although values between 0.40 and 0.70 can also be acceptable (Hulland, 1999).

Table 2. Indicator Reliability Result

Variables	Code	Outer Loadings
Performance Expectancy (PE)	PE1	0.841
	PE2	0.869
	PE3	0.847
Effort Expectancy (EE)	EE1	0.860
	EE2	0.898
	EE3	0.910
	EE4	0.870
Social Influence (SI)	SI1	0.848
	SI2	0.916
	SI3	0.902
Facilitating Conditions (FC)	FC1	0.848
	FC2	0.817
	FC3	0.784
	FC4	0.736
Hedonic Motivation (HM)	HM1	0.845
	HM2	0.911
	HM3	0.707
Price Value (PV)	PV1	0.874
	PV2	0.894
	PV3	0.928
Habit (HT)	HT1	0.862
	HT2	0.910
	HT3	0.851
Optimism (OPT)	OPT1	0.861
	OPT2	0.882
	OPT3	0.856
	OPT4	0.848
Innovativeness (INN)	INN1	0.854
	INN2	0.813
	INN3	0.623
	INN4	0.601
Discomfort (DIS)	DIS1	0.855
	DIS2	0.767
	DIS3	0.783
	DIS4	0.744
Insecurity (INS)	INS1	0.642
	INS2	0.730
	INS3	0.703
	INS4	0.827
Behavioral Intention (BI)	BI1	0.930
	BI2	0.914
	BI3	0.859
Actual Usage (AU)	UB1	0.938
	UB2	0.967

In this research, the results indicate that all the tested indicator loadings are reliable, as their values exceed the minimum threshold of 0.40. The following table shows the results of the indicator reliability.

Internal Consistency Reliability

The researcher conducted an internal consistency reliability test using composite reliability and Cronbach's alpha, with minimum acceptable values of 0.7 and 0.6, respectively, to determine the reliability of the indicators.

Table 3. Internal Consistency Reliability Result

Indicators	Cronbach's Alpha	Composite Reliability (rho_c)
PE	0.812	0.888
EE	0.908	0.935
SI	0.868	0.919
FC	0.810	0.874
HM	0.769	0.864
PV	0.881	0.927
HT	0.848	0.907
OPT	0.885	0.920
INN	0.708	0.818
DIS	0.802	0.867
INS	0.722	0.818
BI	0.885	0.929
AU	0.900	0.951

All constructs exceed the minimum requirements for both Cronbach's alpha and composite reliability (rho_c). Therefore, the researcher concludes that each variable has passed the internal consistency reliability test and is suitable for further evaluation.

Convergent Validity

To assess validity, the researcher evaluated convergent validity using the average variance extracted (AVE), with a minimum acceptable value of 0.5. Convergent validity is assessed by examining the AVE, which indicates how well the construct explains more than half of the variance in its indicators.

Table 4. Convergent Validity Result

Indicators	Average Variance Extracted (AVE)
PE	0.726
EE	0.783
SI	0.791
FC	0.635
HM	0.682
PV	0.808
HT	0.765
OPT	0.743
INN	0.535
DIS	0.621
INS	0.530
BI	0.812
AU	0.909

The results indicate that all indicators surpass this threshold. Consequently, it can be concluded that all the variables are valid.

Discriminant Validity

After evaluating convergent validity, the researcher must also assess discriminant validity. This measures how distinctly different a construct is from other constructs.

Assessing discriminant validity ensures that each construct explains unique characteristics not captured by other constructs. This assessment will be conducted using the Fornell and Larcker criterion.

Table 5. Discriminant Validity Test

Indicators	AU	BI	DIS	EE	FC	HM	HT	INN	INS	OPT	PE	PV	SI
AU	0.953												
BI	0.601	0.901											
DIS	-0.199	-0.244	0.788										
EE	0.236	0.394	-0.102	0.885									
FC	0.271	0.388	-0.24	0.487	0.797								
HM	0.286	0.541	-0.352	0.5	0.66	0.826							
HT	0.339	0.604	-0.279	0.422	0.596	0.66	0.875						
INN	0.237	0.311	-0.642	-0.002	0.179	0.337	0.318	0.731					
INS	-0.11	-0.287	0.711	-0.096	-0.249	-0.393	-0.38	-0.703	0.728				
OPT	0.217	0.515	-0.618	0.224	0.369	0.566	0.542	0.659	-0.706	0.862			
PE	0.376	0.557	-0.33	0.342	0.55	0.621	0.576	0.288	-0.292	0.497	0.852		
PV	0.217	0.41	-0.25	0.381	0.494	0.607	0.603	0.279	-0.326	0.415	0.399	0.899	
SI	0.254	0.287	-0.122	0.16	0.401	0.295	0.305	0.168	-0.185	0.241	0.249	0.314	0.889

Table 4 shows that each construct has a higher value of the square root of AVE than its correlations with all other constructs. Thus, the researcher concludes that each variable has met the requirements for discriminant validity and passed the measurement model test.

Collinearity Assessment

Collinearity assessment is conducted to determine if indicators display multicollinearity with other indicators. This is evaluated using the VIF value, which should be less than 5 to avoid multicollinearity issues.

Table 6. Collinearity Result

Indicators	VIF	Indicators	VIF	Indicators	VIF
PE1	1.763	HM2	1.894	INN4	1.336
PE2	1.776	HM3	1.358	DIS1	2.112
PE3	1.804	PV1	2.192	DIS2	1.545
EE1	2.567	PV2	2.545	DIS3	1.428
EE2	2.912	PV3	2.896	DIS4	1.767
EE3	3.182	HT1	1.778	INS1	1.260
EE4	2.419	HT2	2.821	INS2	1.714
SI1	1.890	HT3	2.289	INS3	1.622
SI2	3.348	OPT1	2.211	INS4	1.275
SI3	2.711	OPT2	2.594	BI1	3.312
FC1	1.779	OPT3	2.331	BI2	2.914
FC2	2.045	OPT4	2.314	BI3	2.069
FC3	1.783	INN1	2.071	AU1	3.021
FC4	1.402	INN2	1.714	AU2	3.021
HM1	1.802	INN3	1.622		

The VIF values for each indicator, as shown in Table 5, all meet the requirement of being below 5. Therefore, no multicollinearity occurred between indicators in this analysis.

Coefficient of Determination (R^2)

R^2 shows how much of an endogenous variable's variance may be explained by independent variables. According to the rules, an R^2 value is considered weak (0.25), moderate (0.50), and strong (0.75). The results of the R^2 model testing are shown in the table below.

Table 7. R^2 Test

Variables	R-square
Actual Usage	0.384
Behavioral Intention	0.498

According to the results, the R^2 value for Behavioral Intention is 0.498 or 49.8%, indicating an almost moderate level of explanation. This means that PE, EE, SI, FC, HM, PV, HT, OPT, INN, DIS, and INS collectively explain 49.8% of the BI construct. Meanwhile, Actual Usage has an R^2 value of 0.384 or 38.4%, which is considered weak. This suggests that FC, HT, and BI account for approximately 38.4% of AU. The remaining percentage of each endogenous variable's R^2 is explained by other variables outside the framework of this study.

f^2 Effect Size

Table 8. f^2 Effect Size Test

Indicators	AU	BI
AU		
BI	0.431	
DIS		0,004
EE		0,038
FC	0.006	0,026
HM		0,005
HT	0.007	0,078
INN		0,010
INS		0,010
OPT		0,034
PE		0,066
PV		0,000
SI		0.021

f^2 effect test has 3 categories of sizes, 0.02 as small, 0.15 as medium, and 0.35 as large effects. FC and HT toward AU show a small f^2 effect size, with values of 0.008 and 0.056, respectively. Moreover, all indicators toward BI also depict a small f^2 effect size. However, BI toward AU shows a large f^2 effect size since the value is 0.431, which is more than 0.35.

Predictive Relevance (Q^2)

A value of Q^2 greater than 0 is considered to be having good value. It can generate the endogenous constructs' predictive relevance. A Q^2 of 0.02 indicates a low degree of predictive relevance, 0.15 a moderate degree, and 0.35 a strong degree.

Table 9. Q^2 Effect Size Test

Variables	Q^2
AU	0.100
BI	0.399

The outcome shows that both variables have values greater than 0, surpassing the Q^2 test. The BI value of 0.399, indicates a high level of predictive significance. Meanwhile, AU's value of 0.100 is considered as having a low predictive value.

Path Significant (p-value or t-statistic)

The path significance test is performed using the bootstrapping method in SmartPLS 4.0, with 5000 subsamples and 158 cases. This research will employ a two-

tailed t-test with a significance level of 5% and a confidence level of 95%. Therefore, a result can be considered as significant if the p-value is less than 0.05 and the t-test value exceeds 1.96.

Table 10. Path Significant Result

Hypotheses	T-statistics (|O/STDEV|)	P values	Result
BI → AU	9.391	0	**Significant**
DIS → BI	0.867	0.386	Insignificant
EE → BI	2.250	0.025	**Significant**
FC → AU	0.744	0.457	Insignificant
FC → BI	1.995	0.046	**Significant**
HM → BI	0.797	0.425	Insignificant
HT → AU	1.119	0.263	Insignificant
HT → BI	2.648	0.008	**Significant**
INN → BI	1.227	0.220	Insignificant
INS → BI	1.061	0.289	Insignificant
OPT → BI	2.002	0.045	**Significant**
PE → BI	2.535	0.011	**Significant**
PV → BI	0.169	0.866	Insignificant
SI → BI	1.644	0.100	Insignificant

Out of the fourteen hypotheses, six of them are significant or accepted, while the rest are insignificant or rejected. The significant hypotheses have p-values below 0.05 and t-test values exceeding 1.96, meeting the acceptance criteria. These hypotheses include BI → AU, EE → BI, FC → BI, HT → BI, OPT → BI, and PE → BI. On the other hand, the remaining hypotheses fail to meet the criteria, especially the relationship between DIS → BI, FC → AU, HM → BI, HT → AU, INN → BI, INS → BI, PV → BI and SI → BI.

Path Coefficient (β)

In the final stage of statistical analysis, this test aims to determine the extent to which independent variables affect dependent variables. The following table displays the path coefficient result.

Table 11. Path Coefficient Result

Hypotheses	Path Coefficient (β)
BI → AU	0.644
DIS → BI	-0.070
EE → BI	0.171
FC → AU	0.075
FC → BI	0.174
HM → BI	0.087
HT → AU	0.095
HT → BI	0.309
INN → BI	0.109
INS → BI	-0.124
OPT → BI	0.229
PE → BI	0.253
PV → BI	-0.015
SI → BI	0.114

Based on the results, the independent variable Habit (HT) has the highest β value toward Behavioral Intention (BI) at 0.309 and it is positive. This means that for each

additional 1 point in Habit, BI increases by approximately 0.309 points. Optimism (OPT) and Performance Expectancy (PE) have similar β values and are positive toward BI, at 0.229 and 0.253, respectively. Effort Expectancy (EE) and Facilitating Conditions (FC) have β positive values of 0.171 and 0.174, respectively, meaning that for each 1 point increase in these variables, BI is predicted to increase by the corresponding value. Additionally, BI's path coefficient is 0.644, showing that each 1 point increase in BI increases Actual Usage (AU) by 0.644 points. The results are not close to +1, hence all the variables still give a weak relationship. It might be that the respondents are not fully aware of the importance of cloud computing.

Conversely, Discomfort (DIS), Hedonic Motivation (HM), Innovativeness (INN), Insecurity (INS), Price Value (PV), and Social Influence (SI) have insignificant β values toward BI. Habit (HT) and Facilitating Conditions (FC) also show an insignificant β value toward AU. Furthermore, for DIS, INS, and PV toward AU have negative values, indicating the directions are reversed. It generates -0.070, -0.124, and -0.015. Negative direction means that each additional point in a particular variable can decrease the point in its latent variable.

Hypothesis Testing

In Chapter II, the researcher determined the hypotheses to be tested in this study. This section will evaluate these hypotheses using path coefficients, t-tests, and p-values to determine their significance.

Table 12. Hypothesis Testing Result

Hypotheses		Path Coefficient (β)	T-statistics (|O/STDEV|)	P values	Result	Conclusion
H1	PE → BI	0.253	2.535	0.011	**Significant**	**Accepted**
H2	EE → BI	0.171	2.250	0.025	**Significant**	**Accepted**
H3	SI → BI	0.114	1.644	0.100	Insignificant	Rejected
H4A	FC → BI	0.174	1.995	0.046	**Significant**	**Accepted**
H4B	FC → AU	0.075	0.744	0.457	Insignificant	Rejected
H5	HM → BI	0.087	0.797	0.425	Insignificant	Rejected
H6	PV → BI	-0.015	0.169	0.866	Insignificant	Rejected
H7A	HT → BI	0.309	2.648	0.008	**Significant**	**Accepted**
H7B	HT → AU	0.095	1.119	0.263	Insignificant	Rejected
H8	OPT → BI	0.229	2.002	0.045	**Significant**	**Accepted**
H9	INN → BI	0.109	1.227	0.220	Insignificant	Rejected
H10	DIS → BI	-0.070	0.867	0.386	Insignificant	Rejected
H11	INS → BI	-0.124	1.061	0.289	Insignificant	Rejected
H12	BI → AU	0.644	9.391	0	**Significant**	**Accepted**

CONCLUSION

The objective of the first research question is to identify factors that influence the adoption of cloud computing among MSMEs in Bandung City using the Extended UTAUT2 with Technology Readiness. Six of the fourteen hypotheses were found to

have significant impact on MSMEs' intention to use cloud computing. The accepted hypotheses include Performance Expectancy, Effort Expectancy, Facilitating Conditions, Habit, and Optimism towards Behavioral Intention, along with Behavioral Intention positively influencing the Actual Usage of MSMEs. These hypotheses were accepted because they met the minimum requirement of a t-statistic above 1.96 and a p-value below 0.05. This suggests that the hypotheses derived from the samples can represent the population in the study. Furthermore, for the second research question, the relationship between all the independent variables towards dependent variables are mostly positive, except for Discomfort, Insecurity, and Price Value that generate negative path coefficients. The negative relation reveals that if an increase occurs in these three variables, then Behavioral Intention is decreased, and vice versa. On the other hand, the rest of the variables, such as Social Influence, Hedonic Motivation, Innovativeness towards Behavioral Intention have a positive but not significant effect. This means that although several factors can help in increasing the intention to adopt cloud computing, more efforts must be given to ensure that this intention will transform into use among MSMEs in Bandung City, particularly for the one that not having significance but positive hypotheses.

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