

Research Article

Unified Theory of Acceptance and Use of Technology (UTAUT) Model on the Use of E-Commerce -Based Accounting Information Systems in MSMEs

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Abstract: This study aims to examine the factors influencing the use of e-commerce-based accounting information systems (AIS) among Micro, Small, and Medium Enterprises (MSMEs) in Bengkulu City by applying the Unified Theory of Acceptance and Use of Technology (UTAUT) model. The variables analyzed include performance expectancy, effort expectancy, social influence, facilitating conditions, behavioral intention, and use behavior. This research employs a quantitative approach using primary data collected through an online questionnaire distributed to MSMEs that have implemented e-commerce-based AIS. A total of 120 respondents were selected using purposive sampling, and the data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) with SmartPLS software. The results indicate that performance expectancy, effort expectancy, and social influence have a positive and significant effect on behavioral intention. Furthermore, facilitating conditions and behavioral intention significantly influence the actual use behavior of e-commerce-based AIS. The model demonstrates good reliability, validity, and predictive relevance, confirming the suitability of the UTAUT model in explaining technology acceptance in the MSME context. These findings suggest that perceived benefits, ease of use, social support, and adequate infrastructure play crucial roles in encouraging MSMEs to adopt and continuously use e-commerce-based accounting information systems. This study contributes to the literature on accounting digitalization and provides practical insights for MSMEs and policymakers in promoting technology adoption to enhance financial management efficiency and business competitiveness.

Keywords: Accounting Information Systems; E-Commerce; MSMEs; Technology Adoption; UTAUT.

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1. Introduction

In the digital era, accounting information systems (AIS) are no longer limited to manual transaction recording but have instead utilized digital technology to support business operations. In practice, particularly among MSMEs, this technology utilization is often realized through the use of e-commerce platforms that serve as sales channels, inventory management, and revenue recapitulation. This development requires business actors, especially Micro, Small, and Medium Enterprises (MSMEs), to be able to adapt in financial management and business reporting to remain competitive amidst rapid technological change (Jannah & Triyanto, 2021). Along with these developments, e-commerce (electronic commerce) has become a form of modern trade innovation that is increasingly used by business actors. E-commerce is an electronic commerce mechanism that utilizes the internet network to conduct transactions for goods and services, including the processes of purchasing, selling, marketing, inventory management, and distribution of products or services online through various digital platforms (Laudon & Traver (2020).

The accounting information system used in this study is an e-commerce-based sales and inventory management system used by MSMEs to record and manage sales transactions

and inventory changes in an integrated manner through an online platform, allowing for quick and accurate financial information (Manik, 2018; Dewi & Damayanthi, 2023). This system automatically records every sales, purchase, and payment transaction and stores it in a digital database. With the increasing use of e-commerce, the process of recording sales transactions, managing inventory, and summarizing revenue has become faster and more well-documented. This transformation continues to contribute to improving operational efficiency, transparency, and the accuracy of MSME financial information (Laudon & Laudon, 2020). The following data on e-commerce competition in 2025 (Ahdiat, 2025) can be considered:

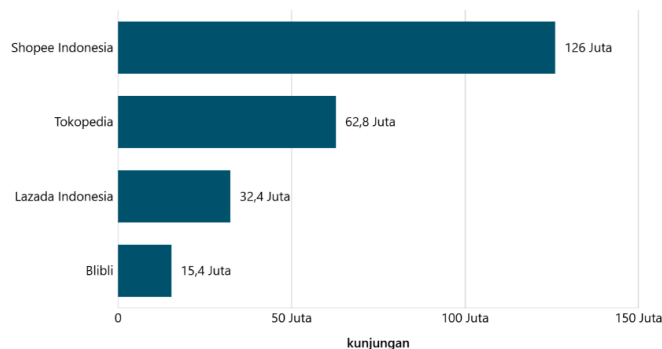


Figure 1. E-Commerce Competition in 2025.

Source. Databoks.com 2025

With increasing competition in the digital commerce world, MSMEs are required to adapt to existing developments, starting with the digitization of sales and business records, which will facilitate them in managing the accounting information needed for making informed decisions. The use of an e-commerce-based accounting information system (AIS) offers various conveniences for business actors, especially MSMEs. Through this platform, MSMEs can sell products and services more flexibly, without being restricted by location or time. For consumers, e-commerce has become the primary choice for buying and selling transactions because it can be easily accessed via mobile devices without the need to visit a store in person (Budiastuti et al., 2020).

In the context of e-commerce, accounting information systems assist businesses in recording sales transactions and managing inventory, as well as automatically summarizing revenue through the platform. The process of generating complete financial reports still requires further processing, either manually or through a separate accounting system. However, this integration not only simplifies transaction recording but also increases the reliability of the resulting accounting information (Romney & Steinbart, 2021). This presents significant opportunities for MSMEs that have utilized e-commerce as a marketing and sales channel.

Various studies using the UTAUT model have shown mixed results, with variables such as performance expectations, business expectations, social influence, and facilitation conditions having different effects on the acceptance and use of information systems. This empirical gap encourages researchers to conduct further research to obtain more comprehensive results. Given the importance of implementing e-commerce-based information systems in MSME business activities, especially for MSMEs that play a significant role in driving the regional economy, this study is expected to make a significant contribution to accelerating MSME digital transformation. This study is a replication and development of previous studies, focusing on the use of e-commerce-based AIS and the research object, namely MSMEs in Bengkulu City. To date, studies that specifically examine the UTAUT model on the use of e-commerce-based AIS in MSMEs are still limited. This condition has the potential to create differences in technology acceptance patterns that are interesting to study further.

Therefore, this research is important to be conducted in filling the research gap. Theoretically, this research enriches the study of the application of the UTAUT model in the context of e-commerce-based MSMEs. Practically, the results are expected to provide input for MSMEs in optimizing digital technology and for the government in designing more effective digital-based development strategies. Therefore, the researcher here is interested in conducting a study entitled "UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT) MODEL ON THE USE OF E-COMMERCE-BASED ACCOUNTING INFORMATION SYSTEMS IN MSMEs"

2. Literature Review

Unified Theory of Acceptance and Use of Technology (UTAUT) Model

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a model developed by Venkatesh et al. (2003) to explain the acceptance and use of technology by individuals. This model integrates eight previous theories of technology acceptance, namely the Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), Combined TAM and TPB, Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT), into one comprehensive conceptual framework. The purpose of developing UTAUT is to provide a more comprehensive understanding of user behavior in accepting and using technology.

UTAUT is categorized as a grand theory because it can explain up to approximately 70% of the variation in user behavior, which is higher than previous technology acceptance models which on average can only explain approximately 40% of the variation in behavior. This shows that UTAUT has stronger predictive power in identifying factors that influence technology adoption by individuals, especially in an organizational context (Venkatesh et al., 2003). The UTAUT model emphasizes that technology acceptance is influenced by performance expectations, effort expectations, social influence, and facilitating conditions which together influence the intention and behavior of technology use (Nurabiah et al., 2023).

Use Behavior

Usage behavior is a concept that explains the extent to which individuals actually use an information technology system or application in their daily activities. Venkatesh et al. (2003) define usage behavior as the actual condition when individuals utilize a technology system, so this concept reflects not only intentions but also actual use in practice.

Even if a system has a certain level of complexity, users tend to continue using it if the system is perceived to improve performance and provide tangible benefits. Davis (1989) emphasized that perceived usefulness is a major factor determining an individual's decision to use technology, even when ease of use is relatively low. This view is in line with Venkatesh et al. (2003) who stated that performance expectations play an important role in influencing behavioral intention, which is ultimately reflected through actual use behavior.

Furthermore, Wibowo (2006) stated that usage behavior can be identified through the frequency of an individual's interaction with technology. The more frequently a person uses a system, the higher their level of acceptance and belief in the technology's benefits. Thus, usage behavior reflects the consistency of system utilization in supporting user productivity.

Behavioral Intention

Behavioral intention refers to an individual's desire to perform a specific action related to the use or utilization of a technology system or service (Venkatesh et al., 2003). Davis (1989) explains that intention is a person's desire to perform a behavior, but has not yet been realized in real action, while behavior is the realization of that intention in the form of actual action.

This concept aligns with the Theory of Reasoned Action (TRA), which states that individual behavior arises from an intention to perform it. The stronger a person's intention, the greater the likelihood that the actual behavior will occur (Ajzen & Fishbein, 1980).

an e-commerce- based Accounting Information System (AIS) in MSMEs, behavioral intentions reflect the business owner's desire to utilize the system continuously. This intention is influenced by perceived usefulness, ease of use, positive experiences with the system, and the quality of service received.

Performance Expectancy

Performance expectancy is defined as the degree to which an individual believes that the use of a technology will help improve their job performance (Venkatesh et al., 2003). In this study, performance expectancy is understood as the extent to which MSMEs believe that the use of e-commerce- based AIS can provide real benefits in improving their business performance.

Performance expectations encompass perceived usefulness, which is the belief that utilizing an e-commerce- based AIS can improve the effectiveness and efficiency of business management. Furthermore, extrinsic motivation describes external incentives that encourage users to use the system because they perceive it as providing valuable outcomes, such as increased revenue, ease of transactions, and opportunities for business promotion.

Performance expectations are also related to job suitability, namely the extent to which the system's features and functions match the needs and job characteristics of MSME actors.

Relative advantage indicates the perception that the system provides greater benefits compared to previous methods, while outcome expectations describe users' beliefs about the positive impacts of using the system, such as ease of financial recording, accurate decision-making, and increased business competitiveness (Venkatesh et al. , 2003).

Effort Expectancy

Effort expectancy refers to the extent to which users perceive an e-commerce- based AIS to be easy to use and to reduce the amount of effort and time required to conduct business activities. This concept reflects users' perceptions of the system's simplicity, which influences their comfort and motivation to utilize the technology.

Venkatesh et al. (2003) stated that ease of use of technology is crucial because a system perceived as easy will increase users' comfort and confidence in its benefits. Conversely, systems perceived as complicated tend to decrease interest and intensity of use. This finding aligns with Davis (1989), who asserted that perceived ease of use significantly influences technology acceptance.

Effort expectations include perceptions of ease of use, the level of system complexity, and the assessment that the system can be used without requiring significant effort. Systems that are perceived as simple and easy to operate tend to increase the intensity of technology use (Venkatesh et al. , 2003).

Social Influence

Social influence is defined as the extent to which an individual feels that important people around him or her consider it necessary for him or her to use a technology (Venkatesh et al. , 2003). In the context of MSMEs, social influence includes encouragement, recommendations, and support from business partners, MSME communities, and regulators that can influence business actors' decisions in using e-commerce- based AIS.

Social influence is reflected through subjective norms, namely the perception that important parties expect MSMEs to use the system. Social factors also play a role through the internalization of group norms and social interactions, while image reflects the perception that the use of innovative systems can improve the image and social status of entrepreneurs within the MSME community (Venkatesh et al. , 2003).

Facilitating Conditions

Facilitating conditions refer to the extent to which individuals believe that technical support and infrastructure are available to facilitate the use of a system (Venkatesh et al. , 2003). In this study, facilitating conditions are defined as the belief of MSMEs that the use of e-commerce- based AIS is supported by adequate technical facilities, training, and mentoring.

Facilitating conditions include perceived behavioral control , which is an individual's assessment of their own capabilities and the availability of resources and technical support. Furthermore, facilitating conditions relate to objective factors in the organizational environment, such as the availability of devices and internet access. Compatibility is also important, namely the extent to which the system is perceived as being appropriate to the needs, values, experiences, and business practices of MSMEs (Moore & Benbasat in Venkatesh et al. , 2003).

3. Materials and Method

This study uses a quantitative approach with primary data. Data collection was conducted through a survey using a questionnaire distributed online. The study was conducted on Micro, Small, and Medium Enterprises (MSMEs) domiciled in Bengkulu City. The study population was all MSMEs in Bengkulu City. The sample was determined using a purposive sampling technique with the criteria of MSMEs that have used an e-commerce- based Accounting Information System. The number of samples used was 120 respondents, adjusted to the number of research indicators and deemed adequate for SEM-PLS analysis. Data were collected through a questionnaire using Google Form to facilitate data distribution and processing. Data analysis was carried out using the Partial Least Square–Structural Equation Modeling (PLS-SEM) method with the help of the SmartPLS application to test the relationship between research variables.

4. Results and Discussion

Analysis Results

Measurement Evaluation (Outer Model)

Convergent Validity Test Results

Table 1. Loading Factor Values.

Variables	Item	Loading	Rule of Thumb	Conclusion
<i>Performance</i>	PE1	0.804	0.700	Valid
<i>Expectancy</i>	PE2	0.753	0.700	Valid
	PE3	0.810	0.700	Valid
	PE4	0.748	0.700	Valid
<i>Effort Expectancy</i>	EE1	0.800	0.700	Valid
	EE2	0.765	0.700	Valid
	EE3	0.725	0.700	Valid
	EE4	0.775	0.700	Valid
<i>Social Influence</i>	SI1	0.757	0.700	Valid
	SI2	0.733	0.700	Valid
	SI3	0.731	0.700	Valid
	SI4	0.751	0.700	Valid
<i>Facilitating Condition</i>	FC1	0.736	0.700	Valid
	FC2	0.798	0.700	Valid
	FC3	0.772	0.700	Valid
	FC4	0.838	0.700	Valid
	<i>Behavioral Intentions</i>	BI1	0.838	0.700
	BI2	0.751	0.700	Valid
	BI3	0.830	0.700	Valid
<i>Use Behavior</i>	UB1	0.831	0.700	Valid
	UB2	0.795	0.700	Valid
	UB3	0.848	0.700	Valid
	UB4	0.811	0.700	Valid
	UB5	0.742	0.700	Valid

Source: Data Processed by SmartPLS, 2025

According to the analysis results from the table, the loading values for the variables Performance Expectancy, Effort Expectancy, social influence, facilitating condition, behavioral intentions, and Use Behavior show figures exceeding 0.7. This indicates that all indicators used in these variables are valid.

Average Variance Extracted (AVE)

Table 2. Average Variance Extracted (AVE).

Information	AVE value
<i>Performance Expectancy</i>	0.608
<i>Effort Expectancy</i>	0.588
<i>Social Influence</i>	0.552
<i>Facilitating Condition</i>	0.619
<i>Behavioral Intentions</i>	0.652
<i>Use Behavior</i>	0.650

Source: Data Processed by SmartPLS, 2025

The calculation results in the table, the AVE values obtained for the variables Performance Expectancy, Effort Expectancy, social influence, facilitating condition, behavioral intentions, and Use Behavior > 0.5, where all variables can be determined according to convergent validity based on the AVE value.

Discriminant Validity Test Results

Table 3. Cross Loading.

	<i>Performance Expectancy</i>	<i>Effort Expectancy</i>	<i>Social Influence</i>	<i>Facilitating Condition</i>	<i>Behavioral Intentions</i>	<i>Use Behavior</i>
PE1	0.804	0.313	0.245	0.320	0.514	0.301
PE2	0.753	0.205	0.101	0.317	0.412	0.317
PE3	0.810	0.253	0.252	0.365	0.527	0.466
PE4	0.748	0.235	0.166	0.305	0.373	0.262
EE1	0.304	0.800	0.267	0.229	0.452	0.273
EE2	0.215	0.765	0.281	0.215	0.467	0.341
EE3	0.294	0.725	0.235	0.125	0.392	0.240
EE4	0.188	0.775	0.241	0.139	0.398	0.219
SI1	0.174	0.225	0.757	0.178	0.407	0.344
SI2	0.149	0.202	0.733	0.146	0.464	0.418
SI3	0.240	0.304	0.731	0.303	0.483	0.424
SI4	0.186	0.259	0.751	0.287	0.443	0.407
FC1	0.277	0.244	0.233	0.736	0.321	0.454
FC2	0.305	0.226	0.173	0.798	0.336	0.466
FC3	0.353	0.062	0.299	0.772	0.348	0.510
FC4	0.383	0.219	0.265	0.838	0.377	0.484
BI1	0.531	0.462	0.424	0.398	0.838	0.513
BI2	0.477	0.438	0.449	0.269	0.751	0.458
BI3	0.439	0.456	0.590	0.391	0.830	0.598
UB1	0.351	0.294	0.455	0.476	0.500	0.831
UB2	0.445	0.314	0.411	0.482	0.556	0.795
UB3	0.314	0.281	0.458	0.528	0.551	0.848
UB4	0.359	0.271	0.471	0.573	0.525	0.811
UB5	0.297	0.266	0.368	0.380	0.490	0.742

Source: Data Processed by SmartPLS, 2025

From the discriminant validity test results shown in the table, the loading values for each instrument— Performance Expectancy, Effort Expectancy, social influence, facilitating conditions, behavioral intentions , and Use Behavior— exceeded the loading values for the indicators from other variables. Therefore, it can be understood that the data from the applied instruments meet the discriminant validity criteria.

Fornell Larcker Criterion

Table 4. Fornell Larcker Criterion.

Variables	<i>Behavioral Intentions</i>	<i>Effort Expectancy</i>	<i>Facilitating Condition</i>	<i>Performance Expectancy</i>	<i>Social Influence</i>	<i>Use Behavior</i>
<i>Behavioral Intentions</i>	0.808					
<i>Effort Expectancy</i>	0.560	0.767				
<i>Facilitating Condition</i>	0.440	0.235	0.787			
<i>Performance Expectancy</i>	0.595	0.326	0.421	0.780		

Variables	<i>Behavioral Intentions</i>	<i>Effort Expectancy</i>	<i>Facilitating Condition</i>	<i>Performance Expectancy</i>	<i>Social Influence</i>	<i>Use Behavior</i>
<i>Social Influence</i>	0.608	0.335	0.310	0.253	0.743	
<i>Use Behavior</i>	0.652	0.354	0.610	0.439	0.539	0.806

Source: Data Processed by SmartPLS, 2025

The discriminant validity analysis obtained from the table above shows that the AVE root values for Performance Expectancy, Effort Expectancy, social influence, facilitating conditions, behavioral intentions, and Use Behavior exceed the correlation between these variables and the other variables. Therefore, it is concluded that discriminant validity is met.

Composite Reliability

Table 5. Reliability Test Results

Variables	Cronbach's alpha	Composite reliability
<i>Performance Expectancy</i>	0.787	0.861
<i>Effort Expectancy</i>	0.766	0.851
<i>Social Influence</i>	0.730	0.831
<i>Facilitating Condition</i>	0.794	0.866
<i>Behavioral Intentions</i>	0.733	0.849
<i>Use Behavior</i>	0.865	0.903

Source: Data Processed by SmartPLS, 2025

Based on the results of data processing using SmartPLS presented in Table 5, all applied variables have Cronbach's Alpha and Composite Reliability above the minimum limit of 0.70. The Performance Expectancy variable obtained a Cronbach's Alpha of 0.787 and a Composite Reliability of 0.861. Then, Effort Expectancy showed a Cronbach's Alpha of 0.766 and a Composite Reliability of 0.851. Social Influence obtained a Cronbach's Alpha of 0.730 and a Composite Reliability of 0.831.

Then, for Facilitating Condition, the Cronbach's Alpha was 0.794 and the Composite Reliability was 0.866. Behavioral Intentions obtained a Cronbach's Alpha of 0.733 and a Composite Reliability of 0.849, and Use Behavior obtained a Cronbach's Alpha of 0.865 and a Composite Reliability of 0.903.

So it can be understood that the entire established construct has met the reliability criteria, which makes the research instrument declared reliable and consistent as well as suitable for use in a more in-depth analysis of the inner model.

Structural Model Testing (Inner Model)

R-Square (R²)

Table 6. R-Square (R²).

Variables	R ²
<i>Behavioral Intentions</i>	0.648
<i>Use Behavior</i>	0.554

Source: Data Processed by SmartPLS, 2025

R² value obtained from the behavioral intentions variable is 0.648, which shows the large influence/contribution of the Performance Expectancy, Effort Expectancy and Social Influence variables on behavioral intentions, namely 64.8% (in the medium category), while the remaining 35.2% is influenced by variables outside the study. Then, the R² value obtained for Use Behavior is amounting to 0.554 which shows the large influence/contribution of the Facilitating Condition variable and behavioral intentions on Use Behavior, namely 55.4% (included in the moderate category), while the remaining 44.6% were influenced by variables outside the research.

FIT Model

Table 7. FIT Model.

	Saturated model	Estimated model
SRMR	0.076	0.078
d_ULS	1,717	1,838

d_G	0.673	0.685
Chi-square	460,406	462,617
NFI	0.678	0.676

Source: Data Processed by SmartPLS, 2025

The model testing results yielded an SRMR of 0.076, which is below the established criteria of 0.08. This indicates that the research model has a relatively good fit. Therefore, the applied model is considered feasible and can be used for more in-depth analysis and hypothesis testing.

Q-square

Table 8. Q-square.

Variables	SSO	SSE	Q ² (=1-SSE/SSO)
<i>Behavioral Intentions</i>	360,000	215,250	0.402
<i>Use Behavior</i>	600,000	397,879	0.337

Source: Data Processed by SmartPLS, 2025

From the results of this analysis, the Q-square value of the behavioral intentions and Use Behavior variables was obtained > 0, so it can be understood that the applied model has relatively good predictive relevance.

Hypothesis Testing

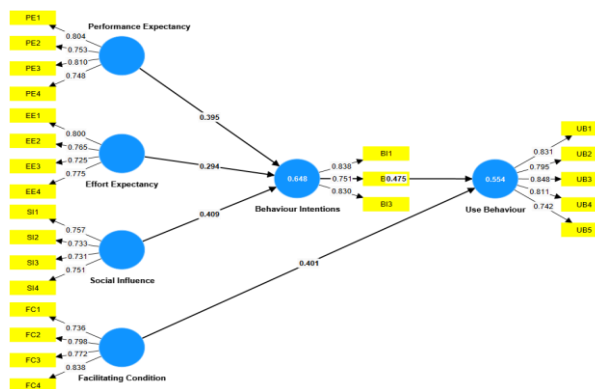


Figure 2. Research Result Model.

Figure is the result of the Research Results Model, then more complete details can be seen in Table.

Table 9. Hypothesis Test.

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Conclusion
<i>Performance Expectancy</i> -> Behavioral Intentions	0.395	0.396	0.067	5,912	0,000	H1 accepted
<i>Effort Expectancy</i> -> Behavioral Intentions	0.294	0.291	0.057	5,137	0,000	H2 accepted
<i>Social Influence</i> -> Behavioral Intentions	0.409	0.409	0.065	6,316	0,000	H3 is accepted

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Conclusion
Facilitating Conditions -> Use Behavior	0.401	0.412	0.082	4,907	0,000	H4 accepted
Behavioral Intentions -> Use Behavior	0.475	0.469	0.083	5,720	0,000	H5 is accepted

Source: Data Processed by SmartPLS, 2025

Performance Expectancy and Behavioral Intentions

The results of the first hypothesis test that examines the relationship between Performance Expectancy and Behavior Intentions show the original sample with a value of 0.395 and a t-statistic of 5.912. This value exceeds the t-table at a significance level of 5% (1.96) through a p-value of 0.000. Then a positive path coefficient value is obtained, which explains that Performance Expectancy has a positive and significant effect on Behavior Intentions , thus indicating that the first hypothesis (H1) is accepted.

Effort Expectancy and Behavioral Intentions

The results of the second hypothesis test that examines the relationship between Effort Expectancy and Behavior Intentions show the original sample with a value of 0.294 and a t-statistic of 5.137. This value exceeds the t-table at a significance level of 5% (1.96) through a p-value of 0.000. Then a positive path coefficient value is obtained, which explains the positive and significant influence between Effort Expectancy and Behavior Intentions , so that shows the second hypothesis (H2) is accepted.

Social Influence and Behavioral Intentions

The results of the third hypothesis test that examines the relationship between Social Influence and Behavioral Intentions show the original sample with a value of 0.409 and a t-statistic of 6.316. This value exceeds the t-table at a significance level of 5% (1.96) through a p-value of 0.000. Then a positive path coefficient value is obtained, which explains that Social Influence has a positive and significant effect on Behavioral Intentions, thus indicating that the third hypothesis (H3) is accepted.

Facilitating Conditions and Use Behavior

The results of the fourth hypothesis test that examines the relationship between Facilitating Condition and Use Behavior show the original sample with a value of 0.401 and a t-statistic of 4.907. This value exceeds the t-table at a significance level of 5% (1.96) through a p-value of 0.000. Then a positive path coefficient value is obtained, which explains the positive and significant influence between Facilitating Condition and Use Behavior , thus indicating that the fourth hypothesis (H4) is accepted.

Behavioral Intentions and Use Behavior

The results of the fifth hypothesis test that examines the relationship between Behavior Intentions and Use Behavior show the original sample with a value of 0.475 and a t-statistic of 5.720. This value exceeds the t-table at a significance level of 5% (1.96) through a p-value of 0.000. Then a positive path coefficient value is obtained, which explains that Behavior Intentions have a positive and significant effect on Use Behavior , thus indicating that the fifth hypothesis (H5) is accepted.

Discussion

Performance Expectancy and Behavioral Intentions

The first hypothesis in this study states that " Performance Expectancy has a positive effect on Behavioral Intentions in the use of e-commerce -based accounting information systems in MSMEs in Bengkulu City." Performance Expectancy describes the level of confidence of MSMEs that the use of e-commerce- based AIS can provide real benefits for business performance. These benefits are reflected in the system's ability to help complete work more quickly, increase the effectiveness of operational activities, and support sustainable business development.

According to the results of the hypothesis test on the structural model, Performance Expectancy is proven to have a positive and significant effect on Behavioral Intentions. These results show that the greater the performance benefits perceived by MSMEs from using an e-

commerce-based accounting information system, the higher the intention of MSMEs to adopt and use the system continuously. Thus, the perception of improved performance is a major factor that shapes user behavioral intentions in accepting digital accounting technology.

The results of this study indicate that MSMEs view e-commerce-based AIS as a tool that helps accelerate work completion and improve operational effectiveness. This positive perception of these benefits fosters the belief that accounting information systems are a crucial part of supporting business processes, thus strengthening MSMEs' intention to continue using the system in their business activities.

In terms of behavioral intentions, this study demonstrates a strong commitment and tendency among MSMEs to maintain the use of e-commerce-based AIS. This intention stems from the MSMEs' perception that the system provides tangible support for operational activities and facilitates more structured and systematic financial information management.

The results of this study are in line with the UTAUT model proposed by (Venkatesh et al., 2003) which states that Performance Expectancy is the main determinant in influencing the Behavioral Intentions of technology users. Furthermore, this result is also in line with previous research by (Lestari et al., 2025) which found that Performance Expectancy has a positive and significant effect on Behavioral Intention. These findings indicate that when users experience benefits in the form of ease, speed, and improved performance in using a system, a stronger intention to continue using the system will emerge.

Effort Expectancy and Behavioral Intentions

The second hypothesis applied reveals that "Effort Expectancy has a positive effect on Behavioral Intentions in the use of e-commerce-based accounting information systems in MSMEs in Bengkulu City." Effort Expectancy reflects the level of ease felt by MSME actors in learning, understanding, and operating e-commerce-based AIS in their business activities.

According to the results of the hypothesis test on the structural model, Effort Expectancy was proven to have a positive and significant influence on Behavioral Intentions. These findings indicate that the easier an e-commerce-based AIS is to understand and use, the higher the intention of MSMEs to adopt and use the system continuously. Thus, the perception of ease of use is a crucial factor driving the acceptance of digital accounting technology among MSMEs.

The results of this study indicate that MSMEs view e-commerce-based AIS systems as relatively easy to use and require minimal effort. This ease of use helps MSMEs record and manage their business finances, thus the system is perceived as providing convenience and reducing the workload in daily operations.

Regarding behavioral intentions, this study shows a strong tendency among MSMEs to continue using e-commerce-based accounting information systems. This intention stems from the system's ease of use, which provides a positive user experience, making MSMEs more motivated and confident in maintaining the system's use to support their business activities.

The results are consistent with the UTAUT model proposed by Venkatesh et al. (2003), which states that Effort Expectancy is a key determinant influencing the Behavioral Intentions of technology users. These findings also support previous research by Tambunan (2023), who stated that the easier an e-commerce-based accounting information system is to understand and use, the higher the intention of MSMEs to utilize the system in their business operations.

Social Influence and Behavioral Intentions

The third hypothesis applied reveals that "Social Influence has a positive effect on Behavioral Intentions in the use of e-commerce-based accounting information systems in MSMEs in Bengkulu City." Social Influence describes the extent to which MSME actors feel encouragement, support, and influence from the social environment, such as colleagues, business partners, and the work environment, in encouraging the use of e-commerce-based AIS.

According to the results of the hypothesis test on the structural model, social influence was proven to have a significant positive effect on behavioral intentions. These findings indicate that the stronger the influence and support from the surrounding environment, the higher the intention of MSMEs to use e-commerce-based AIS. This social support provides MSMEs with confidence that using the system is the right step and beneficial for their business activities.

The results indicate that the work environment and business networks play a significant role in shaping MSMEs' attitudes and intentions toward using AIS. MSMEs tend to be more receptive to and adopt a system when they see that their colleagues or business partners have already used it. The experiences and practices demonstrated by their social environment serve

as a reference point that strengthens MSMEs' confidence in adopting e-commerce-based accounting technology.

Regarding the Behavioral Intentions variable, this study shows a strong tendency among MSMEs to maintain the use of e-commerce-based AIS in their business activities. This intention is formed not only due to perceived operational benefits but also due to social support, which provides a sense of security and confidence in the continued use of the system.

The results obtained are consistent with the UTAUT model (Venkatesh et al., 2003), which explains that social influence is a major factor in influencing an individual's behavioral intention to accept and use technology. Furthermore, these findings support previous research by Dadas & Rahanatha, 2019, which concluded that the influence of the social environment, such as colleagues and business partners, plays a significant role in encouraging someone to use technological systems that are considered capable of increasing work effectiveness and efficiency.

Facilitating Conditions and Use Behavior

The fourth hypothesis applied states that "Facilitating Conditions have a positive effect on Use Behavior in the use of e-commerce-based accounting information systems in MSMEs in Bengkulu City." Facilitating Conditions reflect the level of confidence of MSMEs that adequate infrastructure, resources, and environmental support are available to support the effective use of accounting information systems. With adequate facilities and support, MSMEs will be more encouraged to use the system in their daily business activities.

Based on the results of hypothesis testing on the structural model, Facilitating Conditions were proven to have a positive and significant influence on Use Behavior. This finding indicates that the availability of supporting facilities, whether in the form of human resource capabilities, technological facilities, or work environment support, plays a significant role in encouraging the behavior of using e-commerce-based AIS in a real and sustainable manner in MSMEs.

The results of this study indicate that MSMEs in Bengkulu City generally have adequate facilitation conditions to support the use of AIS. The technical capabilities of human resources are a key factor in facilitating the adoption and use of the system, thereby minimizing operational challenges. Furthermore, support from the surrounding environment also helps MSMEs overcome various technical obstacles that arise during system use.

In terms of use behavior, this study shows that MSMEs not only use e-commerce-based AIS but also experience satisfaction in using it. This satisfaction reflects the system's ability to meet financial management needs and support business operations, including through a system interface that promotes convenience and ease of use for MSMEs.

The results of this study indicate that the availability of facilities, human resource capabilities, and adequate environmental support can encourage the use of e-commerce-based AIS among MSMEs in Bengkulu City. Supportive facilities and environmental conditions provide a sense of comfort and security for users, enabling optimal system use.

The findings align with the UTAUT theory proposed by Venkatesh et al., 2003, which explains that facilitating conditions have a direct influence on use behavior. Furthermore, the results also support previous research by Rochmawati et al., 2020, which found that facility support and work environment readiness play a significant role in encouraging the use of accounting information systems. The availability of adequate facilities allows users to feel more comfortable and assisted in operating the system, thus encouraging optimal and sustainable use of the accounting information system.

Behavioral Intentions and Use Behavior

The fifth hypothesis applied reveals that "Behavioural Intention has a positive effect on Use Behavior in the use of e-commerce-based accounting information systems in MSMEs in Bengkulu City". Behavioral Intention describes the level of desire, intention, and commitment of MSME actors to use the system continuously, while Use Behavior reflects the actual behavior of users in operating accounting information systems in daily business activities.

Based on the results of hypothesis testing on the structural model, Behavioral Intention was proven to have a positive and significant influence on Use Behavior. These findings indicate that strong usage intentions can encourage MSMEs to actively and sustainably use e-commerce-based accounting information systems. In other words, the greater the user's desire and commitment to the system, the higher the level of system use in business operations.

The results indicate that MSMEs in Bengkulu City have a strong tendency to continue using e-commerce-based AIS. This intention is formed because MSMEs feel that the system is able to support operational activities, assist with financial management, and provide

convenience in carrying out business activities. Positive perceptions of the system's benefits strengthen users' commitment to maintain its use in the long term. In terms of Use Behavior, this study shows that MSMEs not only have the intention to use the system but have also implemented it in real business activities. User satisfaction with the system indicates that e-commerce-based AIS has been able to meet the needs of MSMEs.

Overall, the results show that high behavioral intention will drive increased use behavior among MSMEs in Bengkulu City. MSMEs' intention and commitment to continue using e-commerce-based AIS are important factors driving actual system usage behavior in business operations. The stronger the user's desire to utilize the system, the higher the level of sustained system use.

The findings of this study align with the UTAUT theory proposed by Venkatesh et al., 2003, which explains that behavioral intention is the main factor influencing use behavior. Furthermore, the results also support previous research by Lestari et al., 2025, which concluded that an individual's belief in the benefits of a system will increase their intention to use it, which in turn encourages consistent use of the system in their daily activities.

Research limitations

This study has limitations in interpreting the results. Although the term "e-commerce-based accounting information system" is used, the object of study does not yet reflect a comprehensive accounting information system.

This study focuses more on the use of e-commerce platforms as sales and inventory management systems used by MSMEs. The e-commerce platforms studied, such as Shopee, Tokopedia, and others, in practice provide features for recording sales transactions, managing stock, and summarizing revenue. However, these platforms do not yet provide complete accounting functions in accordance with accounting standards.

In this study, e-commerce is positioned as a sales and inventory management system, as well as a revenue summary that generates financial transaction data, which can then be input into the MSME accounting system, rather than as a fully integrated accounting information system. This limitation causes the research results to reflect more on the acceptance and use of e-commerce technology to support MSME business activities, particularly in the sales and inventory management aspects, rather than the implementation of a comprehensive accounting information system.

5. Conclusion

This study aims to test the UTAUT model in utilizing *e-commerce-based AIS* in MSMEs in Bengkulu City. Based on the results of the data analysis, several conclusions can be drawn, including:

- a. *Performance Expectancy* influences *Behavioral Intention to use e-commerce-based AIS* in MSMEs. This shows that the greater the confidence of MSMEs that implementing *e-commerce-based AIS* can improve the efficiency of financial recording, the accuracy of accounting reports, and support business decision-making, the greater their intention to use the system continuously.
- b. *Effort Expectancy* influences *Behavioral Intention to Use an E-Commerce-Based AIS*. This indicates that ease of use, feature simplicity, and ease of integration between the *e-commerce platform* and accounting system are important factors encouraging MSMEs to adopt and utilize an *e-commerce-based AIS* in their business activities.
- c. *Social influence* influences *behavioral intention to use e-commerce-based AIS*. Support from the surrounding environment, such as fellow MSMEs and the business community, plays a role in encouraging MSMEs to use AIS integrated with *e-commerce*.
- d. *Facilitating Conditions* influence *the Use Behavior of e-commerce-based AIS*. The availability of technological infrastructure, internet access, supporting devices, and technical support has been shown to significantly assist MSMEs in using *e-commerce-based AIS* in their operational activities and financial records.
- e. *Behavioral Intention* influences *the Use Behavior of e-commerce-based AIS* in MSMEs. A strong intention to use the system will be reflected in actual usage behavior, such as routine use of *e-commerce-based AIS* in transaction recording, financial management, and accounting report preparation.

The results obtained validate that *the Unified Theory of Acceptance and Use of Technology* (UTAUT) model can be used to explain the acceptance and use of *e-commerce-based accounting*

information systems among MSMEs in Bengkulu City. The four main constructs of UTAUT, namely *Performance Expectancy*, *Effort Expectancy*, *Social Influence*, and *Facilitating Conditions*, are proven to play a role in shaping *Behavioral Intention* and *Use Behavior* towards the use of e-commerce-based accounting information systems, thereby supporting the process of accounting digitalization and increasing the competitiveness of MSMEs in the era of electronic commerce.

The accounting information system examined in this study is an e-commerce based sales and inventory management system used by MSMEs in Bengkulu City. Therefore, future research is expected to focus on MSMEs that implement accounting information systems comprehensively across their overall business operations.

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