

AN INVESTIGATION OF THE EVOLUTION OF SMES' DIGITAL ACCOUNTING PRACTICES: AN UTAUT FRAMEWORK ANALYSIS ON BEHAVIORAL CHANGES MODERATED BY COVID-19

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Abstract

This study examines how COVID-19 pandemic conditions moderate the relationship between behavioral intention and use behavior in SME accounting application adoption. Using the UTAUT framework, we surveyed 366 Indonesian SMEs during and after the pandemic, analyzing data through PLS-SEM. Results confirm that Performance Expectancy ($\beta=0.38$), Effort Expectancy ($\beta=0.15$), Social Influence ($\beta=0.26$), and Facilitating Conditions ($\beta=0.11$) significantly influence Behavioral Intention, which mediates their effects on Use Behavior. Surprisingly, the pandemic period weakened rather than strengthened the intention-behavior relationship ($\beta=-0.15$, $p<0.01$), revealing a digital readiness gap between intention formation and execution capability. This finding challenges assumptions about crisis-driven technology adoption and suggests that external shocks may hinder rather than accelerate meaningful digital transformation in resource-constrained SMEs. Implications include need for staged implementation approaches and infrastructure development beyond training initiatives.

Keywords: Accounting software, behavioral intention, digital transformation, SMEs', UTAUT, COVID-19.

Introduction

The COVID-19 pandemic has fundamentally altered business operations worldwide, forcing rapid digital transformation across all sectors. Small and medium-sized enterprises (SMEs) have faced unprecedented challenges including labor movement restrictions, supply chain disruptions, and dramatic shifts in consumer behavior from offline to online platforms (Bahtiar, 2021; Wahyuni & Mardiana, 2022). These disruptions have accelerated the adoption of digital technologies, particularly in accounting and financial management systems.

Despite the critical importance of digital transformation, Indonesian SMEs have been slow to adopt new technologies, with only 13% connected to digital markets (Bahtiar, 2021). This slow adoption stems primarily from low digital literacy levels (Alomari & Abdullah, 2023). The pandemic has made digital transformation essential not merely for sales, but for entire operational ecosystems—from procurement to customer service and financial management.

The accounting field has experienced significant technological advancement, transitioning from manual procedures to computerized information systems (Chanthinok & Sangboon, 2021; Nyagadza, 2022).

Modern accounting applications offer cloud-based storage, real-time reporting, and integrated business intelligence capabilities. However, technology adoption faces persistent barriers as not all business owners embrace technological change despite its potential benefits. Understanding user acceptance factors therefore becomes crucial (Chanthinok & Sangboon, 2021; Wadi et al., 2021).

This study employs the Unified Theory of Acceptance and Use of Technology (UTAUT) framework to investigate how COVID-19 has influenced SMEs' adoption of accounting applications. UTAUT provides a comprehensive model by integrating technological factors from the Technology Acceptance Model (TAM) with social factors from the Theory of Planned Behavior (TPB), offering a robust framework for analyzing technology acceptance (Venkatesh et al., 2003). We extend the traditional UTAUT model by introducing the pandemic period as a moderating variable, examining how crisis conditions alter the relationships between behavioral intention and actual usage behavior.

By analyzing data from 366 Indonesian SMEs during and after the pandemic, this research provides insights into the evolution of digital accounting practices under crisis conditions. The findings contribute to

understanding how external shocks influence technology adoption patterns and offer practical implications for supporting SME digital transformation in developing economies.

The COVID-19 pandemic represents an unprecedented disruption that fundamentally altered business operations. Understanding how such crises influence technology adoption patterns is crucial for theory development and practical intervention. This study's findings will inform both academic understanding of technology acceptance under crisis conditions and policy initiatives supporting SME digital transformation. The COVID-19 Research Gap, despite extensive UTAUT applications, No studies examine how pandemic conditions moderate the intention-behavior relationship in SME accounting contexts. While Chanthinok & Sangboon (2021) and Saad et al. (2022) acknowledge COVID-19's influence, they treat it as a contextual factor rather than a theoretical moderator. Existing research captures single time points, missing how relationships evolve during crisis progression. The pandemic offers a unique natural experiment to observe behavioral changes under external shock. Most UTAUT studies focus on large organizations or individual consumers. SMEs face unique constraints limited resources, owner-manager dynamics, informal structures that may alter traditional UTAUT relationships. Developing Economy Context: Indonesian SMEs operate under conditions infrastructure limitations, digital literacy gaps, regulatory uncertainties not captured in Western-centric UTAUT models.

UTAUT Framework: Core Constructs and Evolution

The Unified Theory of Acceptance and Use of Technology (UTAUT) synthesizes eight prominent technology acceptance theories into a unified framework (Venkatesh et al., 2003). Table 1 summarizes the core constructs and their theoretical origins.

UTAUT in Digital Accounting Adoption

Performance Expectancy and Accounting Technology

While numerous studies confirm PE's positive influence on accounting software adoption (Abu Afifa & Nguyen, 2023; Hermanto et al., 2022), findings vary significantly across contexts. In developed economies, PE shows strong effects ($\beta=0.45-0.59$), whereas developing country studies report weaker relationships ($\beta=0.21-0.35$) (Alvi, 2021; Soong et al., 2020). This disparity suggests contextual factors—infrastructure quality, digital literacy, and organizational readiness—moderate PE's influence. However, existing research

Table 1
UTAUT core constructs and theoretical foundations

Construct	Definition	Theoretical Origin	Key Findings from Prior Research
Performance Expectancy (PE)	Degree to which users believe technology will help achieve performance gains	TAM (Perceived Usefulness), IDT (Relative Advantage)	Strongest predictor of intention ($\beta=0.35-0.59$) across contexts (Venkatesh et al., 2012; Abu Afifa & Nguyen, 2023)
Effort Expectancy (EE)	Degree of ease associated with technology use	TAM (Perceived Ease of Use), MPCU (Complexity)	Significant in early adoption stages, diminishes over time (Al-Okaily et al., 2023; Yu & Huang, 2020)
Social Influence (SI)	Perception that important others believe one should use the technology	TPB (Subjective Norm), TRA (Social Factors)	Stronger in mandatory settings; varies by cultural context (Omar, 2022; Khayer et al., 2021)
Facilitating Conditions (FC)	Organizational and technical infrastructure support	TPB (Perceived Behavioral Control), MPCU (Facilitating Conditions)	Direct effect on usage behavior, especially in resource-constrained environments (Ionescu, 2021; Le & Cao, 2020)

fails to explain why some SMEs with high performance expectations still resist adoption, indicating missing variables in current models.

Performance Expectancy represents users' beliefs that technology will enhance their job performance (Venkatesh et al., 2003). In SME accounting contexts, PE manifests through expectations of improved financial reporting accuracy, faster transaction processing, and better decision-making capabilities. The relationship between PE and Use Behavior operates through Behavioral Intention as users must first develop positive intentions before actualizing usage behavior (Davis et al., 1989; Venkatesh et al., 2012). Recent evidence confirms this mediation pathway in digital accounting adoption (Abu Afifa & Nguyen, 2023; Hermanto et al., 2022). Therefore:

H₁: Behavioral Intention mediates the relationship between Performance Expectancy and Use Behavior in SMEs' in using Accounting Applications.

Effort Expectancy: Conflicting Evidence

The relationship between EE and behavioral intention presents contradictory findings. While Al-Okaily et al. (2023) found strong positive effects in Jordanian SMEs ($\beta=0.42$), Yu & Huang (2020) reported insignificant relationships in Chinese contexts. These inconsistencies suggest that EE's influence may depend on unmeasured factors such as prior technology experience, training availability, or crisis conditions—gaps this study addresses by examining pandemic moderation effects.

Effort Expectancy reflects the perceived ease of technology use (Venkatesh et al., 2003). For SMEs with limited technical expertise, EE critically influences adoption decisions. The mediation through Behavioral Intention occurs as users evaluate effort requirements before forming usage intentions (Al-Okaily et al., 2023). While direct EE-usage relationships exist, the cognitive process of intention formation mediates this relationship, particularly in voluntary adoption contexts (Yu & Huang, 2020). Thus:

H₂: Behavioral Intention mediates the relationship between Effort Expectancy and Use Behavior in SMEs' in Using Accounting Applications.

Social Influence: Cultural and Contextual Variations

SI's impact varies dramatically across studies. Omar (2022) identified SI as the strongest predictor of e-AgriFinance adoption ($\beta=0.51$), while Shaikh et al. (2020) found minimal effects in Islamic fintech contexts ($\beta=0.12$). This variation highlights the need to understand how external shocks like COVID-19 might amplify or diminish social pressures for technology adoption. No existing studies examine whether crisis conditions fundamentally alter SI mechanisms in SME contexts.

Social Influence captures perceived social pressure from important others to adopt technology (Venkatesh et al., 2003). In SME contexts, SI operates through industry peers, business associations, and government initiatives. The mediation pathway reflects how social pressures first shape adoption intentions before translating into actual usage (Omar, 2022; Khayer et al., 2021). SMEs often adopt technologies to maintain legitimacy within business networks, making intention formation a crucial intermediate step. Hence:

H₃: Behavioral Intention mediates the relationship between Social Influence and Use Behavior in SMEs' in Using Accounting Applications.

Facilitating Conditions: The Resource Constraint Paradox

FC research reveals a paradox: resource-constrained SMEs show both the greatest need for and resistance to digital transformation. Mauricette et al. (2022) found that while 78% of SMEs acknowledged FC importance, only 23% had adequate support infrastructure. Le & Cao (2020) demonstrated that government support programs improved FC perceptions but didn't necessarily translate to usage behavior. This disconnect between perceived support and actual adoption remains unexplored, particularly during crisis periods.

Previous research related to the application of the UTAUT model to new technology acceptance behavior: cloud computing, mobile apps, online advertising, e-learning, e-gov and contact tracing apps, has resulted in the four components of UTAUT influencing the intention and behavior of using new technology (Alshami et al., 2022; Alviyana & Setiawati, 2023; El-Masri & Tarhini, 2017; Ionescu, 2019; Le & Cao, 2020; Mansoori et al., 2018; Tak & Panwar, 2017; Xie & Wang, 2023). Because today's users find it easier to understand and use technology, the internet, and applications in almost every aspect of their lives, Facilitating Conditions also play an important role in influencing the intention of system users to use digital-based technology. It will increasingly be reflected in SME companies that have been operating for a long time. The longer the company runs the business, the better it is able to condition the facilities needed in its business operations. In line with the previous research, the results show empirical evidence that knowledge of accounting software and the provision of facilities and completeness of facilities significantly influence accounting software utilization among SMEs (Ionescu, 2021; Le & Cao, 2020; Mauricette et al., 2022).

Facilitating Conditions encompass organizational and technical infrastructure supporting technology use (Venkatesh et al., 2003). While FC traditionally shows direct effects on usage, the mediation through Behavioral Intention captures how infrastructure perceptions influence usage decisions (Le & Cao, 2020; Mauricette et al., 2022). SMEs must perceive adequate support before forming adoption intentions, particularly for complex accounting systems. Therefore:

H₄: Behavioral Intention mediates the relationship between Facilitating Conditions and Use Behavior in SMEs' in Using Accounting Applications.

Behavioral intention is defined as a person's perceived or subjective possibility to engage in a particular behavior (Venkatesh et al., 2003, 2012). There are two

dimensions of Behavioral Intention. Firstly, it is the intention itself, namely the extent to which the user intends to continue using the system. The second is continuation, which is defined as how long the user intends to use the system. In accordance with the main concept of UTAUT, where behavioral intentions influence user behavior, in this case UKM. It is also in line with research on the application of similar technologies (Alviyana & Setiawati, 2023; Kostopoulos, 2015; Thongsri et al., 2018; Zhang & Xi, 2022).

Usage behavior is defined as the degree of variation and frequency related to the usage of technology. Use Behavior [UB] has two dimensions (Venkatesh et al., 2003, 2012). The first is the frequency with which users use the technology, which is defined as the depth of use. The breadth of use eventually is the second factor. It refers to the extent to which technology could provide more information for the users. Consistent with previous research, it is stated that the adoption of cloud-based AIS is influenced directly or indirectly by the risk of COVID-19, as well as its interaction with Behavioral Intention (Chanthinok & Sangboon, 2021; Saad et al., 2022). In the context of this research, the risk of COVID-19 significantly influences users' intention to use new cloud-based technologies. Continuing research by Saad et al (2022), this study will examine the pandemic year COVID-19 as a moderating factor, which is an adaptation of the situation and condition on technology development.

The COVID-19 pandemic fundamentally altered the intention-behavior relationship through three theoretical mechanisms:

1. Crisis-Induced Behavioral Acceleration Theory.

External crises compress decision-making timeframes and reduce the intention-behavior gap (Galbusera et al., 2021). Under pandemic pressures, SMEs faced immediate survival threats requiring rapid digital adoption. This urgency should strengthen the BI-UB relationship as intentions translate more quickly into action due to reduced deliberation time and heightened consequences of inaction.

2. Resource Scarcity Perspective Conversely.

Pandemic-induced resource constraints may weaken the BI-UB relationship. Despite positive intentions, SMEs faced financial pressures, staff reductions, and competing priorities that could prevent intention actualization (Wahyuni & Mardiana, 2022). The theory of planned behavior suggests that resource limitations create barriers between intention and behavior, potentially weakening their relationship.

3. Digital Necessity Framework.

The pandemic transformed digital adoption from optional to essential, fundamentally altering

the intention-behavior dynamic (Chanthinok & Sangboon, 2021). This "forced digitalization" could either strengthen the relationship (through eliminated choice) or weaken it (through reluctant compliance without genuine intention).

Given these competing theoretical perspectives and empirical evidence of accelerated digital transformation during COVID-19 (Saad et al., 2022), we propose:

H₅: The pandemic period moderates the relationship between Behavioral Intention and Use Behavior, with the relationship being stronger during the pandemic period compared to the post-pandemic period.

Research Methods

As the type of the research, a quantitative approach was carried out by analyzing a model based on UTAUT by adding one moderating variable, namely the COVID-19 pandemic situation. In order to observe the form of relationship between the UTAUT construct variables implemented in the behavior of SMEs in using accounting applications as a post-pandemic sustainability strategy.

Respondents in this study were SMEs with the criteria of having used an accounting application. By implementing a random sampling method, a sample of 366 SMEs was obtained. Random sampling is intended so that all populations could be selected as research sampling (Galbusera et al., 2021). Researchers collected data by distributing questionnaires online via Google Forms.

The questionnaire was developed based on an analysis of the literature consisting of 23 items: 5 items on Performance Expectancy, 6 items on Effort Expectancy, 3 items on Social Influence, 4 items on Facilitating Conditions, 3 items on Behavioral Intention and 2 items on Behavioral of Use, as measured by a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). The questionnaire used is an adjustment of the questionnaire used in research (Venkatesh et al., 2012).

The Partial Least Squares (PLS) model will be used as the statistical model in processing the data in this research paper. PLS has two evaluations, namely the evaluation of the structural model and the measurement model (Hair et al., 2019). The outer model is used to assess the validity and reliability of the model, and the inner model is used to assess the relationship between constructs or latent variables. PLS is a structural equation modelling (SEM) approach (Hatane et al., 2022). WarpPLS was chosen for SEM analysis in this study because it is a more efficient, accurate, and reliable statistical method that can solve the problem of data

that is not normally distributed (Kock, 2022). PLS-SEM can be used with one run for all variables that are arranged together in one model, where several independent variables can affect one or more dependent variables, and dependent variables can become independent variables to influence other dependent variables (Hair et al., 2019).

Results and Discussion

For data collection, 500 questionnaires were given out to the intended respondents as part of the data collection process. There are 366 surveys in total that were returned with the required information, which corresponds to a 73% response rate. According to Hair et al., (2019), using 100 respondents is required as a minimum sample size for PLS Analysis, and the number of responses in this survey exceeds the minimum sample size. The questionnaire was sent twice, which is during the pandemic period, and again in the post-pandemic period.

Convergent validity is indicated with cross-loading, and the indicator is considered valid for measuring the corresponding variable if the loading factor value is bigger than the correlation value of the indicator with other variables. Indicators that measure Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Behavioral Intention, and Use Behavior generally result in a bigger loading factor when compared to cross-loading on other variables, as can be seen from the measurement of cross-loading in Table 1. The indicator measuring the variable is then said to be considered valid.

Measurement Model Results

The measurement model assessment confirms the reliability and validity of all constructs. As shown in Figure 2, all constructs demonstrate strong internal consistency with R-squared values indicating substantial explanatory power. Performance Expectancy ($R^2=0.51$), Effort Expectancy ($R^2=0.61$), Social Influence ($R^2=0.31$), and Facilitating Conditions ($R^2=0.41$) show adequate reliability for exogenous constructs. The endogenous variables demonstrate strong explanatory power with Behavioral Intention achieving $R^2=0.71$ and Use Behavior $R^2=0.65$, exceeding the recommended threshold of 0.67 for substantial explanation (Chin, 1998).

The structural model reveals significant direct paths from all UTAUT constructs to Behavioral Intention. Performance Expectancy exhibits the strongest influence ($\beta=0.38$, $p<0.01$), followed by Social Influence ($\beta=0.26$, $p<0.01$), Effort Expectancy ($\beta=0.15$,

$p<0.01$), and Facilitating Conditions ($\beta=0.11$, $p<0.01$). These coefficients confirm the hierarchical importance of performance benefits in driving SMEs' intention to adopt accounting applications.

The direct relationship between Facilitating Conditions and Use Behavior ($\beta=0.49$, $p<0.01$) indicates that infrastructure and support systems directly enable usage behavior beyond their influence through intentions. Similarly, Behavioral Intention significantly predicts Use Behavior ($\beta=0.27$, $p<0.01$), though this relationship is notably moderated by the pandemic period.

The pandemic moderation effect ($\beta=-0.15$, $p<0.01$) reveals a significant negative interaction with the Behavioral Intention-Use Behavior relationship, as indicated by the dotted line in Figure 2. This negative coefficient suggests that pandemic conditions weakened rather than strengthened the translation of intentions into actual usage behavior, contradicting conventional crisis-driven adoption assumptions.

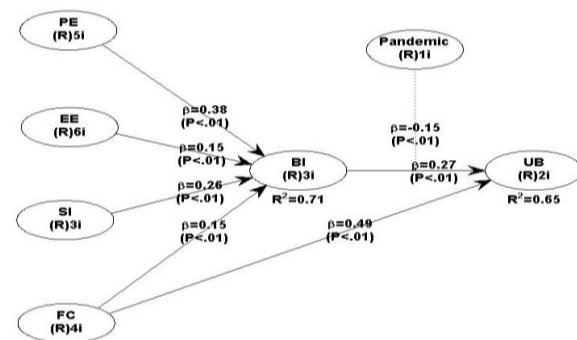


Figure 1. Path model

Structural Model Results

The Goodness of Fit Model is used to calculate the magnitude of the ability of endogenous variables to explain the diversity of exogenous variables or the magnitude of the contribution of exogenous variables to endogenous variables. In PLS analysis, the Goodness of Fit Model is calculated using predictive relevance R-Square and Q-Square (Kock, 2022). The following table 2 summarizes the results of the Goodness of Fit model:

Table 2
Goodness of fit model

Variable	R Square	Q Square
Behavior Intention [BI]	0,712	0,712
Use Behavior [UB]	0,652	0,649

The R-square for the Behavior Intention [BI] variable is 0.712, or 71.2%. This indicates that performance expectations [PE], effort expectations [EE], social Influence [SI], and facilitating conditions [FC] can account for the diversity of behavioral intention [BI]

variables by 71.2% or that these variables can account for 71.2% of Behavior Intention [BI], with the remaining 28.8% are contributions from other variables not covered. Additionally, the Behavior Intention [BI] variable's Q-square value is 0.712. It implies that behavioral intention [BI] can be strongly predicted by performance expectations [PE], effort expectations [EE], social influence [SI], and facilitating conditions [FC].

Furthermore, the R-square for Use Behavior [UB] is 0.652, or 65.2%. It demonstrates that Performance Expectations [PE], Effort Expectations [EE], Social Influence [SI], Facilitating Conditions [FC], and Behavioral Intention [BI] can each account for 65.2% of the diversity of Use Behavior [UB] variables, or in other words, that each of these variables contributes 65.2% to Use Behavior [UB]. Other factors not covered in this study contributed to the remaining 34.8%. Additionally, the Q-square for the Use Behavior [UB] variable is 0.652. It implies that behavioral intention [BI], facilitating conditions [FC], social influence [SI], performance expectations [PE], and effort expectations [EE] all have significant predictive power over usage behavior [UB].

Hypothesis Testing Results

Hypothesis Testing: Mediating Effects

The mediation analysis reveals differential impacts across UTAUT constructs. Performance Expectancy shows the strongest indirect effect on Use Behavior through Behavioral Intention ($\beta=0.102$, $p<0.01$), confirming H1. This aligns with technology adoption literature emphasizing performance benefits as primary drivers. However, Effort Expectancy's weaker significance ($\beta=0.040$, $p<0.10$) suggests that ease of use becomes less critical when adoption is necessity-driven rather than choice-based.

Social Influence ($\beta=0.071$, $p<0.05$) and Facilitating Conditions ($\beta=0.039$, $p<0.01$) demonstrate significant but modest mediation effects, supporting H3 and H4. These results indicate that external factors play supporting rather than primary roles in SME accounting technology adoption.

Hypothesis testing of the mediation effect of Behavior Intention (BI) with internal variables of user accounting apps including Performance Expectancy (PE) and Effort Expectancy [EE] on Behavior [UB] can be seen in Table 3: the indirect effect of Performance Expectancy (PE) on Use Behavior (UB) through Behavior Intention (BI) has a p-value of 0.003 at a significance level of 5%, and there is a significant influence between Performance Expectancy [PE] on Behavior [UB] through Behavior Intention [BI] of

0.102. However, Effort Expectancy [EE] on Use Behavior [UB] through Behavior Intention [BI] has a p-value of 0.141 and a path coefficient of 0.040. It shows that Expectation of Effort [EE] on Usage Behavior [UB] through Behavioral Intention [BI] is significant at the 10% significance level and not significant at the 5% significance level.

Table 3
Mediating effect hypothesis result

Path	Path Coeff	SE	P-Value	Result
[PE] → BI → [UB]	0,102	0,036	0,003**	Accepted
[EE] → [BI] → [UB]	0,040	0,037	0,141***	Accepted
[SI] → [BI] → [UB]	0,071	0,037	0,027**	Accepted
[FC] → [BI] → [UB]	0,039	0,037	<0,001*	Accepted

*Sig < 0,01; **Sig < 0,05; ***Sig < 0,1

Furthermore, the results of the hypothesis testing of the influence of mediation of Behavior Intention (BI) with external variables of user accounting apps which include Social Influence (SI) and Facilitating Conditions [FC on Behavior [UB] with a p value obtained of 0.027 which is the result of the indirect influence of Social Influence (SI) on Use Behavior (UB) through Behavior Intention (BI), and a path coefficient value of 0.071. It is shown, at a significance level of 5, that Social Influence [SI] significantly affects Use Behavior [UB] through Behavior Intention [BI] of 0.071. Meanwhile, <0.0001 is the p-value of the indirect impact of Facilitating Conditions [FC] on Use Behavior [UB] through Behavior Intention [BI] and a path coefficient of 0.039. It shows that the p-value above the 1% significance level indicates that facilitating conditions [FC] significantly affects age behavior [UB] through behavioral intentions [BI] of 0.039.

Hypothesis Testing: Moderating Effects

Table 4
Moderating effect hypothesis result

Moderating	Path Coeff	SE	P-Value	Result
YP * BI → UB	-0,146	0,051	0,002***	Accepted

**Sig < 0,05;

Hypothesis testing of the moderation effect on the Pandemic Year variable on the Influence of Behavior Intention (BI) on Use Behavior (UB) is in accordance with table 4 above: the Year Pandemic variable, which is a moderator variable on the Influence of Behavior Intention (BI) on Use Behavior (UB), has a p-value of 0.002 with a path coefficient of -0.146. It can be concluded that the Pandemic Year reduces the Influence of Behavior Intention [BI] on Use Behavior [UB] by 0.146.

The pandemic year significantly weakened the BI-UB relationship ($\beta=-0.146$, $p<0.01$), contradicting initial expectations but revealing important theoretical insights. This negative moderation can be explained through three theoretical lenses:

The pandemic exposed a critical readiness gap between intention formation and execution capability. While SMEs developed positive intentions toward digital accounting (necessity-driven), their actual capacity to implement these technologies lagged. This gap manifests through: 1) Technical infrastructure inadequacy (unreliable internet, outdated hardware); 2) Human capital constraints (digital literacy deficits among staff); 3) Organizational inertia (entrenched manual processes resistant to change).

The pandemic created multiple simultaneous pressures—health concerns, supply chain disruptions, demand volatility—competing for SME owners' limited cognitive resources. Despite forming positive intentions toward accounting digitalization, actualizing these intentions became secondary to immediate survival concerns. This cognitive bandwidth limitation weakened the intention-behavior translation.

Unlike voluntary technology adoption where intentions naturally progress to behavior, pandemic-forced digitalization created psychological reactance. SMEs formed surface-level intentions to comply with digital requirements (e.g., online tax filing) without deep commitment to comprehensive accounting system transformation. This shallow intention formation resulted in weaker behavioral follow-through.

Discussion

The conclusions of this study extend the UTAUT theory in respect to particular circumstances, notably the Covid-19 pandemic and the post-pandemic business recovery period. The results of both direct and indirect influence hypothesis testing for the UTAUT model in this research are aligned with previously conducted research, which states that Performance Expectancy, Effort Expectancy, Social Influence and Facilitating directly influence the Behavioral Intention of users of new systems or technology (Alviyana & Setiawati, 2023; Rahi & Abd.Ghani, 2019; Venkatesh et al., 2003, 2012). The Facilitating Conditions directly influenced Behavior and also influenced indirectly by these four factors through Behavioral Intention (Venkatesh, 2022; Venkatesh et al., 2012). In our study, we also found that the pandemic year played as moderator in the relationship between Behavioral Intention and Use Behavior. However, the moderation that occurred further weakened the form of this relationship, where the results of this study are very contradictory to the real

situation where SMEs should receive lots of incentives and capacity-building training from the government in the post-pandemic year.

Basically, the users of new technology will still choose to use a new apps or system if they have the belief that it is efficient and easy to use. It also motivates system users to keep using it again in the coming years. The research findings show that the performance expectation variable and the effort expectation variable have an impact on the intentions and behavior of Accounting Application users, in line with previous research (Venkatesh et al., 2003, 2012).

Furthermore, these two factors can be taken into consideration in developing Accounting Applications in Indonesia. Accounting Application developers have created a highly adaptable application. App developers create simple app menus, mobile-friendly and include online update capabilities, cloud-based storage, and online usage guides. It is good because it is compatible and mutually beneficial. However, socialization is still required for Indonesian SMEs to learn how accounting information systems can be integrated with other business operational systems, and this is one of the technological breakthroughs that must be the focus of their business innovation.

The findings of this research also support the UTAUT theory. Other variables classified as external variables include Social Influence and Facilitating Conditions, both of also affect SMEs' intentions and behavior when deciding whether to or not utilize a new system (Venkatesh, 2022; Venkatesh et al., 2012). It is something that needs to be reviewed in terms of its Influence on the Behavior Intention of SMEs in Indonesia because this external Influence plays an crucial role in molding the perceptions within each SME business actor. The government plays an crucial role in Social Influence and Facilitating Conditions; forms of assistance, socialization and education for SME business people are still very much needed in Indonesia.

Social Influence is a factor that influences the intention and behavior of utilizing accounting applications by SMEs due to the Influence of the social environment, whether competitive or simply to gain legitimacy within an industry group. Meanwhile, Facilitating Conditions are clearly a factor that influences the availability of Accounting Applications, be it the existence of service providers or affordability by application users. In this case, SMEs will believe that they have the resources to support the availability of new technology if they can bear the financial burden of their operations while preparing for non-financial problems that will arise. Non-financial requirements include the knowledge readiness of the firm's human resources, as well as the flexibility of the Accounting Application

that will be used to adapt to the company's inherent needs.

Our next finding is related to the pandemic year, which plays a moderating role in weakening the Influence of Behavior Intention on Use Behavior that is not consistent with the real situation where based on data provided by the Ministry of Cooperatives and SMEs, as many as 65.3% of MSMEs claim to have experienced an increase in capacity after following government programs in the post-pandemic business recovery era. This capacity increase includes the use of internet-based applications.

In line with this, several academic studies have concluded that in Indonesia, the number of usage of online technology-based applications during and after the COVID-19 pandemic is growing, which is stated to have had a positive impact on the Indonesian economy and encouraged digital economic growth and increased the competitiveness of SMEs (Bahtiar, 2021). Furthermore, developments in the digital economy that are present around us include a variety of e-commerce and financial technology (fintech) services, which are getting more well-known in society. It can be stated that the digital economy is growing, and the pandemic accelerates the growth of economic digitalization. Improving and increasing the provision of internet access in Indonesia is also a factor that encourages increased use of online technology-based applications. It makes it easier for people to access applications related to daily life, such as shopping, working and studying. In addition, the pandemic of COVID-19 has altered consumer behavior, who prefer to shop, work and study online. It is also one of the incentives for SME business actors to innovate in their business to create the awareness of their products and services online, thus requiring online technology-based applications. It should be followed by the use of online business applications such as marketing applications, financial applications and accounting applications. However, from the results of our study, it seems that all of these things cannot be generalized to all business players, especially SMEs. SMEs in Indonesia have not been able to integrate the use of online systems into their business fully; in fact, even though they are familiar with and use online marketing systems, sometimes the accounting and financial recording systems are still manual. So, from the results of our study, it can be concluded that the pandemic year has had an influence that weakens the strength of the Influence of behavioral intention on the behavior of SMEs in Indonesia to want to use an accounting system. It is indicated that further education and assistance is still needed. Further assistance so that the innovation process carried out during the business recovery period is synchronous and intact, in line with

marketing, which has entered the e-commerce era and also accounting and business finance, which has entered the financial technology (fintech) era.

All of these challenges can be overcome primarily by strengthening Indonesia's digital ecosystem and collaborating with local governments, start-up companies and universities to encourage the adaptability of SMEs to technological advances. Socialization and education are the two most important conditions for changing culture so that it adapts more easily to the times. The government, SME supervisory agencies, and the role of universities can all be sources of information and advice regarding business continuity and SME development strategies.

Conclusions and Implications

Our findings challenge UTAUT's assumption of stable intention-behavior relationships, suggesting this relationship is context-dependent and can be weakened under crisis conditions. This contributes three theoretical extensions:

1. External shocks may not uniformly enhance technology adoption, but rather cause complicated, potentially negative moderation consequences that require theoretical reconsideration, based on the Crisis Moderation Principle.
2. Traditional UTAUT understates the gap between intention generation and execution capacity, especially in resource-constrained environments. Future models should include "implementation readiness" as a boundary condition, depending on the perceived intention-capability gap.
3. Not all technologies are given equal importance during crises. Customer-facing technologies take precedence over back-office systems, implying the requirement for technology-specific UTAUT applications based on the Adoption Hierarchy Theory.

The behavioral intentions of SMEs in Indonesia in accepting new technological developments in the form of online-based accounting applications are influenced by internal factors, such as performance expectations from the application and effort expectations in using the application. Apart from that, it is also influenced by two external factors, namely Social Influence and Supporting Conditions. This is because most SME business people are more inclined to try the Accounting Application if they feel it is easy and effective to use. The existence of the COVID-19 pandemic does not necessarily increase the relationship strength between behavior based intentions and accounting application utilization behavior and instead reduces it. This was triggered by a lack of understanding regarding system integration in business operations by SMEs. At

this stage of business recovery after Covid-19, SMEs in Indonesia were declared to have increased their capabilities by the Indonesian Ministry of Cooperatives and SMEs, especially in entering the digital market with the e-commerce era, but this increase did not immediately occur. Where there is still a need for assistance and education that business operational systems need to be run in an integrated manner to run a business in the digital marketing era. for example, also by using online-based financial and accounting applications. In general, SMEs still tend to be selective in their use of technology so they are slow to adopt integrated digital services. This causes losses for MSMEs, especially when people's behavior shifts from physical stores to e-commerce, and the use of fintech in daily financial procedures begins to become a culture.

Today's people's lifestyles have shifted to digital, and technology is increasingly becoming an economic driver, especially during the pandemic and post-pandemic. In this way, SMEs can continue to adapt to existing changes and remain a strong economic support for the country. There needs to be support from various parties such as ministries, regional governments, banking, fintech, marketplaces institutions and all business actors to accommodate SMEs preparedness to be more competitive in domestic and global markets through digitalization. SMEs need to adapt by preparing integrated information and operational systems to enter online sales platforms. By selling online, business people can more easily reach customers from all corners of the country and increase sales.

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