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RESEARCH ARTICLE

Exploring Drivers Influencing E-Commerce AI Adoption Among Social Media Natives

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ABSTRACT

This study aims to explore the significance of drivers in influencing the adoption of e-commerce AI specifically on the natives of social media. In this study also, two theories which are the Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM) are integrated to measure the degree of influence acquired from the determinants acquired from both theories. This is about the main objective of the research which is to investigate the underlying drivers that influence the social media natives to adopt e-commerce AI. Integrating the two theories has formed five drivers into one research framework. The five determinants include Attitude (Att), Subjective Norms (SN), Perceived Behavioural Control (PBC), Perceived Usefulness (PU), and Perceived Ease of Use (PEoU). The target population for this research is the social media natives of Malaysia who are at the age of 0-43 years old in the year 2024. Quantitative measurement is used in assessing the statistical output from the data acquired from the research instrument of the questionnaire survey form. The data analysis and findings generated help in examining the acceptance of hypotheses. This study will assist not only the developer but also for e-commerce platform to understand the drivers that will influence their customers who are mostly from the social media natives in adopting e-commerce AI. Unintentionally, this research will also provide a crystal-clear view to the users on the presence and convenience of e-commerce AI for them.

INTRODUCTION

The rise of technologies like Artificial Intelligence (AI), Cloud Computing, and Big Data has significantly transformed e-commerce, impacting consumer behavior and expectations (Soni et al., 2020). As businesses adapt to these changes, AI has become a crucial component for platforms like Amazon and Uber, enabling them to analyze consumer habits and preferences effectively (Mishra & Tripathi, 2021). This shift from traditional to digital commerce has prompted e-commerce platforms to adopt advanced technologies to meet evolving consumer demands (Khrais, 2020).

With the increasing dominance of digital natives from Generations Y and Z—who are comfortable with technology—e-commerce has experienced substantial growth (Bolton et al., 2013). The COVID-19 pandemic accelerated this trend, pushing more consumers online and highlighting the need for businesses to embrace e-commerce strategies that cater to tech-savvy users (Chia, 2020). As these generations are expected to represent a significant portion of consumers by 2025 (Deloitte, 2019), understanding the factors that drive their adoption of e-commerce AI is essential for enhancing

customer satisfaction and loyalty. This research aims to explore these determinants within Malaysia's e-commerce sector, focusing on how businesses can better align their offerings with the preferences of social media natives (Brandtzæg, 2016).

LITERATURE REVIEW

The COVID-19 pandemic accelerated the adoption of e-commerce as consumers turned to online shopping due to lockdowns (Chia, 2020). Digital natives from Generations Y and Z are particularly influential in this shift, driving demand for seamless online experiences (Badri, 2020). With their comfort in technology and AI literacy, these generations represent a significant market segment for e-commerce platforms. As businesses increasingly adopt omni-channel strategies, integrating AI features becomes essential for improving customer engagement and satisfaction.

AI helps businesses understand and predict consumer behavior, it enhances customer satisfaction by tailoring services to individual needs (Gochhait et al., 2020). E-commerce AI encompasses various applications such as chatbots and recommendation engines that enhance user experiences by providing personalized interactions (Bawack et al., 2022). Given the rapid evolution of technology and the growing importance of social media natives in the market, it is crucial for e-commerce companies to understand the factors influencing their adoption of AI. This research aims to explore these determinants within Malaysia's e-commerce sector, focusing on how businesses can align their strategies with the preferences of this tech-savvy demographic.

Attitude (Att) & Intention to Adopt E-commerce AI

Developing a behavioural intention to perform an act requires the exhibition of one's feeling which resembles the element of attitude. Attitude is acquired from the Theory of Planned Behaviour (TPB) developed by Fishbein & Ajzen (1975). In the Technology Acceptance Model (TAM), Davis (1989) explained that the attitude of one will influence his or her behavioural intention to perform the actual usage of technology. Based on the literature reviews, there are several past research has been conducted to prove that Attitude works as the determinant in developing the intention to perform an act such as the intention of e-procurement adoption by Gamal Aboelmaged (2010) and adoption of the e-document management system to implement e-Government by Hung et al. (2009).

Consumers from social media natives who portray positive attitudes towards the presence of AI in e-commerce platforms would be more preferably to adopt e-commerce AI features while using the platform. Concerning the pros and cons associated with the results gained after opting in AI, the results were expected to have an impact on the decision of the social media natives to decide whether to opt in or opt out of the AI features. According to Ajzen (2006), the beliefs that an individual withstands when integrated with the values of expected outcomes will generate the attitude of an individual.

H1: Attitude significantly influences the adoption of e-commerce AI among social media natives.

Subjective norms (SN) & Intention to Adopt E-commerce AI

In reference to Santos & Liguori (2020), subjective norms resemble the courage received from others such as the individual's peers, family, educators, and advisors. The use of subjective norms also clarifies the reasoning of one's innermost thoughts on why he or she intends to adopt a tool or service (Trafimow & Finlay, 1996). In other words, it is the influence that the user acquires on his or her intention as it represents the pressure that the individual perceives from society as well as their opinions in performing the specified activity. According to Teo (2009), subjective norms are considered a driving factor as users often start to have the intention to adopt a tool or service not just because it is advantageous for them but is also driven by the usage of the person they admire.

Referencing Venkatesh & Davis (2000), subjective norms correlate to the behavioural intention of one in performing a behaviour which in this research context is for the social media natives to have the intention to adopt AI e-commerce. The individual may be driven to perform an act if the people who are considered important to the user are expecting the user to adopt such behaviour even if the user does not intend to perform such an act in the first place. According to Ajzen (2006), the result of this research is expected to be in favour of the social media natives to develop the intention to adopt e-commerce AI if they discover their closed circle, whose insights are worthy, encourage them to adopt AI while using e-commerce platforms. They are expected to be driven by the perceived social pressure.

H2: Subjective norm significantly influences the adoption of e-commerce AI among social media natives.

Perceived Behavioural Control (PBC) & Intention to Adopt E-commerce AI.

According to Ajzen (1991), as for the driver of perceived behavioural control, the intention to adopt an action is determined by the degree of clarity and hardship of an act to be implemented. In other words, it resembles the individual's trust in his or her capacity to adopt e-commerce AI. Following Baronas and Louis (1988), they have discovered that the capability of one to have control over his or her surroundings will lead to desired and favourable outcomes which similarly affects the adoption of information system technology. With greater control perceived, users get to develop positive attitudes which will lessen the worries of users as they can take charge of any negative implication that might occur (Hajli & Lin, 2016).

This research will assist in determining whether perceived behavioural control will impact the adoption of AI e-commerce by social media natives. This is driven by the presence of factors that lead to the execution of the behaviour which is known as control beliefs. Concerning this research, control beliefs include the aspects of the beliefs to adopt e-commerce AI with an individual personal ability, the beliefs on the availability of resources to adopt e-commerce AI which shall be accommodated with the e-commerce platform, AI software and e-commerce AI experts, and the presence of attempts by the social media natives to adopt e-commerce AI. According to Ajzen (2006), listed control beliefs when integrated with the perceived power will result in perceived behavioural control.

H3: Perceived behavioural control significantly influences the adoption of e-commerce AI among social media natives.

Perceived Usefulness (PU) & Intention to Adopt E-commerce AI.

According to Bou-Ghanem (2020), the determinant of usefulness is applicable in smartphones as the integration of artificial intelligence (AI) seems to be useful when it has been adopted by Android and iOS. This has led to a larger pool of users starting to adopt AI tools when using applications including e-commerce apps. When one perceives a technology to be useful, the individual will portray a positive attitude when acquiring it. This will eventually boost the users' fulfilment and develop efficiency when adopting the use of the technology. According to Floridi et al. (2018) and Bryson & Winfield (2017), referring to the context of AI, AI experts developed this system in favour of social goods. If it is proven that the technological adoption of e-commerce AI does not result in any complex complications in its usage, therefore, social media natives will find it convenient to acquire the AI technology while transacting using e-commerce.

According to Haenlein et al. (2020), the intention to adopt technology is partly drifted by the factor of perceived usefulness. As mentioned by Cha (2010), the perceived usefulness as a determinant to drift the intention to adopt technology happens to be more convincing driver compared to perceived ease of use. Along with the evolving technological industry, human portrays the need to use AI, making AI functionalities keep on expanding (Kim et al, 2021). According to Venkatesh, V. & Davis

(2000), perceived usefulness judgment shall be interpreted in a way by comparing the technological system capabilities in achieving their intended purpose of using the specified technology. Therefore, as mentioned by Ajzen (1991), perceived usefulness drives users to have the intention to utilize new technology.

H4: Perceived usefulness significantly influences the adoption of e-commerce AI among social media natives.

Perceived Ease of Use (PEoU) & Intention to Adopt E-commerce AI.

Another factor included in the Technology Acceptance Model is the perceived ease of use. This factor is used to evaluate a person's acceptance of using new technology attributable to the ease of adoption. As mentioned by Bou-Ghanem (2020), perceived ease of use refers to the ease of how one would perceive using a particular technology without contributing plenty of effort. According to Ho et al. (2022), when users discovered an ease in a technology usage without facing any difficulties in acquiring it, users tend to adopt the technology to be used in a regular basis. In this technological context, this determinant may apply to current technologies such as smartphones and applications (Bou-Ghanem, 2020). This includes the existence of artificial intelligence which is known for its role in enriching the ease of use when it is being adopted by e-commerce platforms to predict users' preferences.

As mentioned by Wilson et al. (2021), the perceived ease of use is defined from the perception of individuals based on the efforts acquired to master the way of using the technology. This perceived ease of use as a driver to acquire a technology is supported by the research done by Na et al. (2023) on the adoption of Artificial Intelligence in construction industry and the research done by Wang et al. (2021) on the adoption of AI applications in higher education. To sum up, perceived ease of use is expected to drive users to have the intention to adopt new technology such as the e-commerce AI.

H5: Perceived ease of use significantly influences the adoption of e-commerce AI among social media natives.

Research Framework

Following Figure 1 portrays the research framework based on the hypothesized relationships.

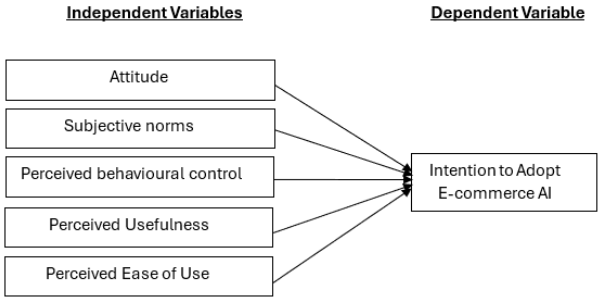

Figure 1. Research Framework

RESEARCH METHODOLOGY

This research is to explore the determinants that influence the adoption of e-commerce AI by social media natives. Therefore, this study limits the research's target audience specifically Malaysia's e-commerce users who are the natives of social media also called digital natives. As mentioned previously in the background study, social media natives consist of Generation Y, Generation Z, and Generation Alpha. These generations are those who were born from the year of 1981 until the current year, 2024. Subsequently, the study on the variables generated in the research framework will be

conducted and the acceptance of hypotheses will be assessed. This research will use quantitative measurement to assess the developed hypotheses. A survey in the form of a questionnaire will be distributed to analyse the numerical results of quantitative data. The data will be conveyed into tables and charts with detailed interpretation of the research findings.

Clarifying the target population of this study, this research purposely focuses on the social media natives in Malaysia. Social media natives consist of three different generations which are Generation Y, which refers to those who were born between 1981 and 1996, Generation Z, w which refers to those who were born between 1997 and 2010 and Generation Alpha, which refers to those who were born in 2010 until the present year, 2024 (Supratman, 2018; Prasetya et al., 2022). In the manner that Generation Y is those born in 1981 which is equivalent to 43 years old in the year 2024, therefore we can conclude that the social media natives are those who are at the age of 43 years old and below. According to the Worldometer (2024, January 24), Malaysia's population has a total of 34,513,520 citizens as recorded in the data of the United Nations. According to Tjiptono et al. (2020), Gen Y consists of 26% in Malaysia, Gen Z consists of 29%, and Generation Alpha represents 23.2% of Malaysia's total population. The estimated total population of social media natives in Malaysia is 26,989,572 people.

To ensure the statistical validity of an empirical survey, it is crucial to determine the appropriate sample size. In this study, G*Power software was used to calculate the minimum number of respondents that is required for survey analyses. The results from the G*Power analysis indicated that a minimum of 138 respondents would be required for this study.

Purposive sampling, also known as judgments or selective sampling, was used with the following criteria for inclusion:

The respondents must be born between the year of 1981 to 2024 which represents the citizens who are at the age of 43 and below. This is to fulfill the criteria of social media natives consisting of Generation Y, Z, and Alpha.

The respondents must be Malaysian as the research geographical scope is limited to the Malaysian context of e-commerce AI only.

The respondents should indicate the social media natives' behaviour of being tech-savvy person such as owning smart devices, having social media accounts, having experienced using e-commerce platforms, and participating in online transactions

Although the calculated minimum sample size is 138 respondents, the researcher managed to gather a total of 153. After performing data cleaning, 8 respondents were eliminated from the results as they did not fulfil the criteria. Therefore, only 145 questionnaires are qualified. A pilot test was conducted to verify the reliability and validity of the measurement instruments (Creswell & Creswell, 2017). Following table presents the results.

Table 1: Instrument Design and Reliability Analysis

Variables	Adapted Items	Sources	Cronbach's Alpha	Sample (n)
Attitude	5	Wang et al. (2023) Chatterjee & Bhattacharjee (2020)	0.873	35
Subjective Norms	5	Sohn & Kwon (2020) AlGerafi et al. (2023)	0.939	
Perceived Behavioural Control	5	Sohn & Kwon (2020) Ye et al. (2019)	0.955	
Perceived Usefulness	5	Wang et al. (2023) Li (2023)	0.886	

Perceived Ease of Use	5	Wang et al., (2023)	0.881	
Intention to Adopt E-commerce AI	5	Chatterjee & Bhattacharjee (2020) Trang (2021)	0.873	

According to Asthana & Bhushan (2016), there are numerous statistical packages that offer extensive computerized statistical analysis such as SPSS, Statistica, and Sigma STAT. This research used the Statistical Package for Social Sciences (SPSS) offered by IBM. Specifically, for descriptive analysis, reliability analysis, correlation analysis, and multiple linear regression analysis to determine the acceptance of the tested hypothesis.

Informed consent was obtained from all subjects involved in this study. Specifically, written informed consent was obtained from all subjects at the beginning of the survey form. Subjects unable to proceed to the survey section without completing the informed consent section first.

RESULTS

A descriptive analysis was conducted to study the 145 respondents' demographic profiles and verify the inclusion criteria. Table 2 presents respondents' profiles.

Table 2: Respondents Profile

Items		Frequency	%	Sample (n)
Gender	Male	50	34.5	145
	Female	95	65.5	
Nationality	Malaysian	145	100	
	Others	0	0	
Social Media Natives	Generation Y	38	26.2	
	Generation Z	92	63.4	
	Generation Alpha	15	10.3	
Employment Status	Employed	41	28.3	
	Unemployed	3	2.1	
	Self-employed	10	6.9	
	Student	91	62.8	
Place of Residence	Urban City	83	57.2	
	Suburb	32	22.1	
	Small City	28	19.3	
	Rural Area	2	1.4	
Own Smart Devices	Yes	145	100	
	No	0	0	
Social Media Account	WhatsApp	145	100	
	Facebook	136	93.8	
	X (Twitter)	74	51	
	Instagram	136	93.8	
	TikTok	111	76,6	
	YouTube	77	53.1	
E-Commerce Account	Shopee	144	99.3	
	Lazada	101	69.7	
	PG Mall	3	2	
	Zalora	50	34.5	
	eBay	5	3	
	GoShop	45	31	
	Lelong	13	9	

	Sephora	26	17.9	
Frequency of E-Commerce Transactions	Once in a year	1	0.7	
	Once in several months	36	24.8	
	Monthly	62	42.8	
	Weekly	31	21.4	
	Daily	15	10.3	
Familiarity with AI	Slightly familiar	10	6.9	
	Moderately familiar	29	20.0	
	Very familiar	62	42.8	
	Extremely familiar	44	30.3	
Frequency of AI Usage	Almost never	1	0.7	
	Occasionally	27	18.6	
	Almost all the time	117	80.7	

Next, Table 3 shows the results of the descriptive statistics of the constructs and the level of intention to adopt E-commerce AI among Malaysian social media natives as well as the Cronbach alpha values for the main sample.

Table 3: Descriptive and Reliability Analysis

Variables	Mean	Standard Deviation	Cronbach's Alpha	Sample (n)
Attitude (AveAtt)	4.6014	0.51017	0.888	145
Subjective Norms (AveSN)	4.4055	0.68066	0.898	
Perceived Behavioural Control (AvePBC)	4.3186	0.65849	0.912	
Perceived Usefulness (AvePU)	4.6621	0.50581	0.901	
Perceived Ease of Use (AvePEoU)	4.6152	0.53597	0.902	
Intention to Adopt E-commerce AI (AveInt)	4.6138	0.56058	0.905	

According to the retrieved result in Table 4, there is generally a significant interaction between the variables. The Pearson correlation between all the independent variables AveAtt, AveSN, AvePBC, AvePU, AvePEoU and the dependent variable AveInt was found to be positive. This is a good indication of the adapted model for this study, where antecedents from TAM were combined with Ajzen's TPB model.

Table 4: Correlation Analysis

		AveAtt	AveSN	AvePBC	AvePU	AvePEoU	AveInt
AveAtt	Pearson Correlation	1	0.750**	0.639**	0.844**	0.768**	0.808**
	Sig. (2-tailed)	-	<0.001	<0.001	<0.001	<0.001	<0.001
	N	145	145	145	145	145	145
AveSN	Pearson Correlation	0.760**	1	0.717**	0.789**	0.728**	0.795**
	Sig. (2-tailed)	<0.001	-	<0.001	<0.001	<0.001	<0.001
	N	145	145	145	145	145	145

AvePBC	Pearson Correlation	0.639**	0.717**	1	0.655**	0.720**	0.708**
	Sig. (2-tailed)	<0.001	<0.001	-	<0.001	<0.001	<0.001
	N	145	145	145	145	145	145
AvePU	Pearson Correlation	0.844**	0.789**	0.655**	1	0.799**	0.873**
	Sig. (2-tailed)	<0.001	<0.001	<0.001	-	<0.001	<0.001
	N	145	145	145	145	145	145
AvePEoU	Pearson Correlation	0.768**	0.728**	0.720**	0.799**	1	0.843**
	Sig. (2-tailed)	<0.001	<0.001	<0.001	<0.001	-	<0.001
	N	145	145	145	145	145	145
AveInt	Pearson Correlation	0.808**	0.795**	0.708**	0.873**	0.843**	1
	Sig. (2-tailed)	<0.001	<0.001	<0.001	<0.001	<0.001	-
	N	145	145	145	145	145	145

Next, regression analysis was performed, the R-squared value (R2) is the determinant of the coefficient. It is an indicator of the fit of the model. The R2 value indicates the proportion of the dependent variable's variance explained by the model's independent variables. The result in Table 5 shows that 83.7% of the variance for AveInt is explained by AvePEoU, AvePBC, AveAtt, AveSN, and AvePU, which means that the model explains 83.7% of the variance of the intention to adopt e-commerce AI among social media natives in Malaysia.

As seen from Table 6, the results obtained from the ANOVA test to measure the significance of the relationship between the dependent variable and independent variables by observing the F-value and significance value (p-value) shows that the F-value is 143.158 and the significance value is less than 0.001. The high F-value signifies that there are high variations and differences in means while the significance value is lesser than 0.05. These indications proved that the regression model is significant. The p-value below 0.05 supports the rejection of ANOVA's null hypothesis and concludes that there is a statistically significant effect between group means. To conclude, all the independent variables (predictor) significantly explain the variance in the dependent variable which signifies that this model has model fit.

Table 5: Multiple Regression Analysis

Model Summary					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the estimate**	**Durbin Watson**
1	0.915[a]	0.837	0.832	0.23009	2.036

a. Predictors: (Constant), AvePEoU, AvePBC, AveAtt, AveSN, AvePU.
b. Dependent Variable: AveInt

Table 6: ANOVA and F-Test

ANOVA[a]						
Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	37.894	5	7.579	143.158	<0.001[b]
	Residual	7.359	139	0.053		
	Total	45.252	144			

a. Dependent Variable: AveInt
b. Predictors: (Constant), AvePEoU, AvePBC, AveAtt, AveSN, AvePU

Lastly, for the hypotheses testing, Table 7 presents that there are 3 independent variables that show a significant relationship with the dependent variable as their p-value is below 0.05 which includes Subjective Norms (0.022), Perceived Usefulness (<0.001) and Perceived Ease of Use (<0.001). These variables with a significance value of less than 0.05 signify that there is sufficient evidence with a 95% confidence level on the existence of a linear relationship between the independent variables and dependent variables. However, as for Attitude (0.243) and Perceived Behavioral Control (0.193), the p-value (significance value) has exceeded 0.05. Consequently, these two variables suggest that there is no significant relationship between independent variables towards the dependent variable. As a result, we can conclude that only the independent variables of Subjective Norms, Perceived Usefulness and Perceived Ease of Use, affect and have a significant influence towards the dependent variable which makes their hypothesis to be accepted (see Table 8).

Table 7: Coefficients

Coefficients[a]						
Model		**Unstandardized B**	**Coefficients Std. Error**	**Standardized Coefficients Beta**	**t**	**Sig.**
1	(Constant)	-0.012	0.191		-0.629	0.531
	AveAtt	0.088	0.075	0.080	1.172	0.243
	AveSN	0.121	0.052	0.146	2.313	0.022
	AvePBC	0.060	0.046	0.071	1.309	0.193
	AvePU	0.443	0.083	0.400	5.338	<0.001
	AvePEoU	0.319	0.068	4.708	4.708	<0.001

a. Dependent Variable: Average Int

Table 8: Hypotheses Testing

No.	Hypothesis	Sig.	Result
H1	Attitude significantly influences the adoption of e-commerce AI among social media natives.	0.243	Not supported
H2	Subjective norms significantly influence the adoption of e-commerce AI among social media natives.	0.022	Supported
H3	Perceived behavioural control significantly influences the adoption of e-commerce AI among social media natives.	0.193	Not supported
H4	Perceived usefulness significantly influences the adoption of e-commerce AI among social media natives.	<0.001	Supported
H5	Perceived ease of use significantly influences the adoption of e-commerce AI among social media natives.	<0.001	Supported

DISCUSSIONS

The results summarized in Table 8 indicate that the hypothesis (H1) regarding the influence of attitude on the intention to adopt e-commerce AI is not supported, as the p-value of 0.243 exceeds the significance threshold of 0.05. This suggests that social media natives' attitudes are not a strong influencing factor for adopting e-commerce AI. Supporting this, a study by Wang et al. (2023) found similar results, indicating that negative personal attitudes towards AI due to trust issues can lead to decreased acceptance and online engagement with e-commerce AI technologies.

The next hypothesis (H2) regarding the influence of subjective norms on the intention to adopt e-commerce AI is supported, with a p-value of 0.022, which is below the significance threshold of 0.05. This indicates a significant relationship, affirming Research Objective 2, which sought to determine whether subjective norms affect social media natives' intentions to adopt e-commerce AI. The strong influence of subjective norms among social media natives can be attributed to their tendency to align with the behaviors and opinions of peers and significant others, highlighting the impact of peer pressure on their adoption decisions. This aligns with findings from Bano & Siddiqui (2022), which demonstrated that subjective norms are key predictors in the adoption of smart technologies, emphasizing how the endorsement of technology by important others can enhance consumer loyalty and future usage intentions.

The hypothesis (H3) regarding the influence of perceived behavioral control on the intention to adopt e-commerce AI is not supported, with a p-value of 0.193 exceeding the significance level of 0.05. This suggests a non-significant influence of perceived behavioral control among social media natives, although Research Objective 3, which aimed to assess this relationship, has been achieved. The lack of significance for perceived behavioral control may be attributed to the stronger influences of perceived ease of use (H5) and perceived usefulness (H4), which are more specific and actionable factors that effectively shape social media natives' intentions to adopt e-commerce AI. In contrast, perceived behavioral control is broader and relies on an individual's overall sense of control, making it less impactful. This finding is consistent with Teo & Beng Lee (2010), who found that perceived behavioral control did not significantly predict teachers' intentions to adopt technology, as other factors played a more dominant role in influencing their decisions.

The significant relationship is attributed to the interplay between perceived ease of use and perceived usefulness within the Technology Acceptance Model (TAM). When social media natives find e-commerce AI easy to use, they are more likely to perceive it as beneficial for their daily activities. They prefer straightforward, user-friendly technologies that enhance their shopping experience, as evidenced by their strong agreement that e-commerce AI simplifies product offerings. The strong connection between perceived usefulness and adoption intentions reflects social media natives' openness to new technologies, particularly when AI demonstrates clear benefits, such as enhanced convenience and efficiency in e-commerce. For instance, respondents noted that e-commerce AI saves time by streamlining processes, aligning with their desire for effective solutions. This finding is consistent with previous research by Fagan et al. (2012), which highlighted the importance of perceived usefulness in adopting virtual reality simulations for educational purposes, and Suki & Suki (2011), who found that perceived efficiency and convenience significantly influenced the intention to use 3G mobile services. For supported H5, this finding aligns with research by Sudaryanto et al. (2023), which demonstrated a significant relationship between perceived ease of use and AI technology adoption among accounting students, who reported being able to effortlessly master and utilize AI for educational purposes. Similarly, Pillai et al. (2020) found that AI-powered automated retail stores significantly improved shopping experiences by making them quicker and more convenient.

CONCLUSION

Based on the findings about adopting e-commerce AI, businesses should focus on a few key strategies. First, they can leverage social influence by encouraging satisfied customers to share their positive experiences on social media and using influencers to promote their AI technologies. Creating online communities where users can discuss and recommend these technologies can also help build acceptance.

Additionally, companies should make their e-commerce platforms easy to use by designing simple and intuitive interfaces. Providing clear information and personalized recommendations can enhance the shopping experience. It's also important to build trust by being transparent about how AI works and addressing any customer concerns. Educational campaigns that explain the benefits of e-commerce AI can help consumers feel more comfortable with these technologies. By focusing on these areas, businesses can encourage more people to adopt e-commerce AI and improve customer satisfaction.

This study has several limitations. First, it uses a cross-sectional approach, meaning the findings reflect only a specific time period and may not be valid for long-term trends. Additionally, the questionnaire lacked open-ended questions, restricting respondents to pre-determined answers and limiting the depth of their feedback. The research focused solely on social media natives, which may not represent other demographic groups. The sample size suggested by the G-power software might also be inadequate for comprehensive results, indicating that future studies should involve a larger

sample. Lastly, this study only examined specific factors related to e-commerce AI adoption, leaving out other potentially influential variables that could be explored in future research.

AUTHORS' CONTRIBUTION

Conceptualization, W.N.S.W.R. and K.A.A.; methodology, W.N.S.W.R. and K.A.A.; software, W.N.S.W.R.; validation, K.A.A.; formal analysis, W.N.S.W.R.; investigation, W.N.S.W.R.; resources, W.N.S.W.R. and K.A.A.; data curation, W.N.S.W.R.; writing—original draft preparation, W.N.S.W.R.; writing—review and editing, K.A.A.; visualization, W.N.S.W.R.; supervision, K.A.A.. All authors have read and agreed to the published version of the manuscript.

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