
AI-Based Personalization and Consumer Purchase Intention: Examining the Effects of Social Media Engagement and Digital Content Quality

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ABSTRACT

This study examines the influence of AI-Based Personalization (ABP), Social Media Engagement (SME), and Digital Content Quality (DCQ) on students' Purchase Intention (PI) in the context of AI-based digital marketing. The study employed a quantitative approach using explanatory research and Structural Equation Modeling-Partial Least Squares (SEM-PLS) analysis with SmartPLS. A total of 227 students from Universitas Muhammadiyah Palangkaraya were selected through purposive sampling. The measurement model evaluation indicated that all indicators were valid and reliable, with outer loading values above 0.70, Composite Reliability above 0.70, and AVE above 0.50. The structural model showed moderate predictive capability with an R-square value of 0.430 and Q²predict value of 0.384. Hypothesis testing revealed that SME positively and significantly influenced PI ($\beta = 0.329$; $T = 4.610$; $P = 0.000$), while DCQ also had a positive and significant effect on PI ($\beta = 0.323$; $T = 3.931$; $P = 0.000$). However, ABP had no significant effect on PI ($\beta = 0.104$; $T = 1.312$; $P = 0.189$). The findings indicate that social media engagement and digital content quality are more influential in increasing students' purchase intention than AI-based personalization.

Keywords: AI-Based Personalization; Social Media Engagement; Digital Content Quality; Purchase Intention; SEM-PLS

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INTRODUCTION

Recent advancements in digital technology and the internet have significantly altered consumer behaviour, corporate practices, and communication patterns across a range of industries. Businesses are using internet-based technology in their marketing strategies to improve customer communication as a result of digital transformation (Rijali, 2025). The rise of digital platforms, including social media, marketplaces, and mobile apps, has completely changed how customers look for information, evaluate products, and make purchases online. Due to these developments, one of the most popular marketing strategies in the current digital economy is digital marketing (Widyayanti et al., 2024). Additionally, the movement in consumer behaviour from traditional purchasing patterns to digital activities that are more useful, quicker, and engaging has been hastened by the growing usage of smartphones and the internet (Solihin et al., 2025).

Social media and e-commerce have grown significantly in tandem with these advancements, especially among young people and college students, who are regarded as digital natives. In addition to becoming key tools for digital marketing and electronic transactions, platforms like Instagram, TikTok, Shopee, and Tokopedia also function as communication conduits (Kinanding & Nurrohman, 2024). In this regard, artificial intelligence (AI) has started to significantly contribute to improving the efficacy of contemporary digital marketing. Businesses

may analyse user behaviour, offer customised product recommendations, and provide more relevant content based on customer preferences thanks to AI technology (Syaharuddin et al., 2025). It is thought that using AI in digital marketing will enhance user experience, increase customer engagement, and increase purchase intent on digital platforms. Consequently, a crucial and developing topic in the study of information systems and digital consumer behaviour is the incorporation of AI technology into digital marketing techniques (Aliyah & Rizqiana, 2024).

AI-Based Personalisation has emerged in contemporary digital marketing techniques due to advancements in Artificial Intelligence (AI) technology. AI-Based Personalisation is a marketing strategy that uses artificial intelligence to customise ads, product recommendations, and content based on the preferences and actions of specific consumers. Analysing user data, including search history, social media activity, click behaviour, and customer purchase trends, is how this technology operates. Businesses may better identify customer demands and provide pertinent information in real-time by utilising machine learning algorithms (Syamsir & Hakim, 2025). Product recommendation systems and tailored advertising that automatically show products based on users' preferences are examples of how AI-based personalisation is really put into effect. Because it creates a more intimate relationship between businesses and customers, this strategy is thought to be more successful than traditional marketing (Kinanding & Nurrohim, 2024).

These days, a lot of digital platforms, including TikTok, Instagram, Shopee, and Tokopedia, use AI recommendation systems. While e-commerce sites like Shopee and Tokopedia use AI to offer product recommendations based on users' search and purchase histories, TikTok and Instagram use AI algorithms to present content customised to users' tastes through features like the "For You" page and "Explore" (Armada et al., 2025). By improving the relevancy of the content that consumers get, these systems hope to improve the user experience. Customers' comfort, pleasure, and engagement tend to rise when they believe digital platforms can comprehend their requirements and preferences. This can therefore affect consumers' intention to buy the suggested goods. As a result, AI-Based Personalisation has emerged as a crucial tactic in digital marketing since it improves marketing efficacy and fortifies the bond between users and digital platforms (Owusu-Mensah et al., 2025).

Social media's ascent has changed consumer behaviour and engagement patterns in the digital world, especially among college students, a demographic of digital natives who use the internet extensively. Students' everyday lives now revolve around platforms like Instagram, TikTok, YouTube, and X, which fulfil everything from communication and entertainment demands to product research (Nafisah & Jannah, 2024). Due to their frequent use of social media, students are more frequently exposed to several types of digital marketing, including influencer marketing, algorithm-based advertisements, and promotional content. Social media users are now active through a variety of digital interactions, including liking, commenting, sharing, and saving material, rather than passive. The degree of user engagement—or social media engagement—with certain content or companies is reflected in these interactions. The possibility that a consumer and the promoted brand will develop an emotional bond increases with user engagement with digital content (Husain et al., 2025).

Social media engagement is seen from the standpoint of digital marketing as a crucial metric for gauging the success of online consumer behaviour and digital marketing communications. High levels of engagement show that customers are interested, paying attention, and reacting favourably to the information they are exposed to (Aviandita et al., 2026). Modern customers are more likely to trust recommendations and information from social media than from traditional media, according to trends in digital consumer behaviour. Furthermore, modern social media algorithms are made to increase the visibility of highly engaged content, which naturally increases marketing reach. Because of this, engagement can affect consumer views and purchase decisions in addition to acting as a type of digital contact. As a result, the likelihood that students will intend to buy things advertised on digital platforms increases with their level of social media involvement with a certain brand or piece of content (Kharimah & Sudarmaji, 2026).

Digital content is an essential marketing communication tool for businesses and customers in the age of digital marketing. In addition to providing product information, digital content is utilised to develop brand perception, draw in viewers, and encourage customer engagement on digital platforms. Companies are depending more and more on digital content, including photographs, videos, infographics, and interactive content, to improve marketing efficacy as a result of the growth of social media and e-commerce platforms (Vonezyo, 2024). In this regard, the effectiveness of internet marketing tactics now heavily depends on the quality of digital content. Users are more likely to be drawn in by content with excellent visual quality, pertinent information, originality, and a clear message than by boring and uninformative content. As a result, businesses need to be able to create interesting digital content that meets the demands of their target audience (Deomedes, 2025).

When making purchases, consumers' views and actions are also influenced by the quality of digital content. Customers can learn about products more efficiently with the use of pertinent and simple-to-understand content, which will boost their interest in and confidence in the supplied goods. Additionally, creative content and engaging visual presentations can enhance the user experience when interacting with digital platforms (Ambarita & Tunjungsari, 2024). From the perspective of digital consumer behavior, user attention to a piece of content is an initial stage that can influence the emergence of purchase intention. Customers are more likely to be intrigued, have a favourable opinion of the product, and eventually want to buy it if they receive high-quality digital information. Digital content quality is therefore a crucial component in enhancing the efficacy of digital marketing and influencing consumer behaviour in the digital sphere (Minarti et al., 2026).

Purchase intention is a key concept in consumer behavior studies that describes an individual's tendency or desire to purchase a product or service in the future. Purchase intention is frequently utilised as an early indicator that can forecast real consumer purchasing behaviour from a marketing standpoint. The likelihood that someone will actually make a purchase increases with their buying intention. The consumer's assessment of the information, experiences, perceptions, and marketing stimuli they are exposed to results in purchase intention. As a result, this variable is frequently employed in digital marketing research to assess how well marketing tactics affect consumer behaviour. Because online interactions, digital system recommendations, and user experiences on internet-based platforms frequently impact consumers' purchasing decisions, purchase intention has grown in significance in the digital environment (Rohman et al., 2024).

In the context of digital marketing, a number of elements pertaining to the calibre of the customer's digital experience have an impact on purchase intention. Customers' opinions and interest in online products are thought to be greatly influenced by elements like AI-Based Personalisation, Social Media Engagement, and Digital Content Quality. Customers can receive product recommendations based on their preferences thanks to AI-based personalisation, and social media interaction can deepen the emotional bond between customers and the business. Engaging, educational, and creative digital material can also increase consumer interest in and confidence in a product. In these circumstances, customer needs as well as the digital experience obtained from interacting with online platforms have an impact on purchase intention. Because it can show the potential for consumer purchasing behaviour in the current era of digital transformation, purchase intention is a critical variable that is essential to analyse in digital marketing research (Nurfaizal et al., 2026).

In recent years, there has been a significant increase in research on digital marketing and consumer behaviour, especially with relation to social media, the quality of digital content, and technology-driven personalisation. However, the majority of earlier research has tended to concentrate just on one element, such as personalisation, digital content quality, or social media marketing, in isolation. While some studies highlight digital content quality as the main element influencing customer behaviour, others stress the significance of consumer engagement through social media in raising purchase intent. However, studies on AI-based personalisation have already started to appear, although they often simply examine how personalisation affects user experience or satisfaction without fully integrating it with other digital marketing factors. This

circumstance suggests that research models that can concurrently explain the linkages between digital marketing factors within the context of digital customer behaviour are still lacking.

Additionally, there is still a dearth of research that simultaneously integrates social media engagement, AI-based personalisation, and digital content quality to explain purchase intention, especially when considering college students as a group of digital natives in the Indonesian higher education setting. It is important to investigate this further in the context of digital purchasing behaviour because college students have special characteristics as active users of social media and digital platforms who are heavily exposed to AI-based personalisation technology. Additionally, prior studies on the impact of personalisation on purchase intention have produced contradictory outcomes. Personalisation has a strong or negligible impact on consumers' purchasing intentions, according to certain research. These disparate findings point to a research gap that needs to be investigated further by creating a more contextual and integrated research approach. Thus, by concurrently examining the impacts of AI-Based Personalisation, Social Media Engagement, and Digital Content Quality on Purchase Intention among Muhammadiyah University of Palangkaraya students, this study seeks to close this gap in the literature.

The development of a research model that incorporates the variables of AI-Based Personalisation, Social Media Engagement, and Digital Content Quality to explain Purchase Intention in the context of AI-based digital marketing is what makes this study novel. In contrast to other research that often examined the impact of social media, content quality, or personalisation independently, this study integrates all three factors concurrently into a single structural model. In the age of digital transformation, this method is anticipated to offer a more thorough understanding of the digital marketing elements that affect consumer buy intentions. Additionally, by presenting AI-Based Personalisation as a crucial component of contemporary digital marketing strategies—which are becoming more and more important in a business environment driven by data and artificial intelligence technology—this study makes a theoretical contribution to the advancement of information systems and digital marketing research.

The selection of Muhammadiyah University of Palangkaraya students as the research subjects is another aspect of this study's uniqueness, in addition to the integration of variables. Students were selected because they are a group of digital natives who use social media, digital platforms, and internet-based technology on a daily basis. Additionally, students actively use a variety of digital sites, including Shopee, Tokopedia, Instagram, and TikTok, which frequently present tailored recommendations based on AI algorithms. Students are a pertinent group to examine how digital personalisation, social media interaction, and content quality affect purchase intention because of these factors. This study is anticipated to make a more contextual empirical contribution to the growth of digital consumer behaviour literature in developing nations, especially in the areas of digital marketing and management information systems, by utilising the context of students in Indonesian higher education.

In the context of leveraging AI-based digital platforms, this study attempts to examine the digital marketing elements that affect students' purchase inclinations. This study specifically intends to examine the impact of AI-based personalisation, social media engagement, and digital content quality on purchase intentions among Muhammadiyah University of Palangkaraya students. The purpose of this study was to determine how digital consumer behaviour might be influenced by AI-based personalisation technology, social media engagement, and digital content quality, especially among university students who are digital natives and frequently utilise social media and e-commerce platforms. Therefore, it is anticipated that this study will offer an empirical summary of the key variables influencing customer purchase intentions in the current digital landscape.

This project is anticipated to contribute both theoretically and practically to the domains of digital marketing and management information systems in addition to its academic goals. By combining the ideas of AI-Based Personalisation, Social Media Engagement, and Digital Content Quality to explain the purchase intentions of digital consumers, this study theoretically advances the field of digital marketing literature. The analysis of the connection between

consumer behaviour and artificial intelligence (AI) technology in the context of contemporary digital marketing is also strengthened by this study. In the meantime, businesses and digital business professionals are anticipated to use the study's practical findings as a guide when developing AI-based digital marketing strategies, improving social media content quality, and boosting customer engagement on digital platforms. Businesses should be able to enhance the efficacy of digital marketing and more effectively raise consumer purchase intent with more pertinent and data-driven tactics.

METHODOLOGY

Research Design

In order to examine the causal association between AI-Based Personalisation, Social Media Engagement, Digital Content Quality, and Purchase Intention among college students, this study uses a quantitative approach with an explanatory research design. Because this study intends to test hypotheses and objectively evaluate the correlations among variables based on numerical data gathered through a questionnaire survey, the quantitative technique was selected. In order to acquire an empirical snapshot of digital consumer behaviour at the time of the study, this study also uses a cross-sectional survey design, in which data collecting is carried out during a defined time period. In the context of social media and AI-based digital platforms, this method is thought to be suitable for elucidating consumer purchase behaviour and digital marketing phenomena.

Because Muhammadiyah University of Palangkaraya students are a group of digital natives who actively use social media, e-commerce platforms, and digital personalisation technologies in their daily lives, this study focuses on them as research respondents. A five-point Likert scale questionnaire was used to gather research data, and it was distributed online using Google Forms. With the aid of SmartPLS, the data was then examined using a Partial Least Squares-based Structural Equation Modelling (SEM-PLS) method. Because it can simultaneously analyse intricate interactions between latent variables and is appropriate for use in both exploratory and predictive research, the SEM-PLS method was selected. The capacity to thoroughly examine validity, reliability, and structural links among constructs is another benefit of SEM-PLS.

Population and Sample

All current Muhammadiyah University of Palangkaraya students who utilise social media and digital platforms on a daily basis make up the study's demographic. Due to their strong usage of the internet, social media, and e-commerce platforms, students were chosen as the study population since they are considered "digital natives." Students also actively use a variety of digital technologies based on artificial intelligence (AI), including recommendation algorithms on social media platforms and marketplaces, targeted advertising, and personalised recommendations. In the context of contemporary digital marketing, students are deemed a pertinent group for examining the impact of AI-Based Personalisation, Social Media Engagement, and Digital Content Quality on Purchase Intention.

Purposive sampling, which entails choosing respondents based on particular standards in line with the study's goals, was the sampling strategy employed in this investigation. Students who actively use social media, have interacted with digital marketing content on social media or e-commerce sites, and have gotten personalised suggestions on digital platforms were among the respondent criteria. 227 respondents made up the study's sample size. Because it satisfies the minimal sample size requirements for structural model testing, this number is deemed enough for Partial Least Squares-based Structural Equation Modelling (SEM-PLS) analysis. To make it easier to distribute questionnaires and increase the effectiveness of the research data collection procedure, data collection was done online using Google Forms.

Measurement of Variables

A questionnaire instrument created based on indicators modified from earlier research pertinent to the domains of information systems and digital marketing was used to measure the variables in this study. AI-Based Personalisation (ABP), Digital Content Quality (DCQ), Social Media Engagement (SME), and Purchase Intention (PI) are the variables considered in this study. A number of reflecting indicators intended to fully capture the latent construct are used to measure each variable. Respondents' opinions of the degree of content personalisation and AI-based product recommendations they receive via digital platforms are used to measure AI-Based Personalisation. The degree of respondents' participation in social media activities, including liking, commenting, sharing, and interacting with digital material, is used to gauge social media engagement. In the meanwhile, respondents' perceptions of the visual quality, information relevancy, content creativity, and message clarity on digital platforms are used to gauge the quality of digital material. Based on respondents' propensity to buy goods advertised online, purchase intention is calculated.

The research instrument measured respondents' agreement with each statement in the questionnaire using a five-point Likert scale, with 1 denoting strongly disagree and 5 denoting strongly agree. The Likert scale was used because it is thought to be useful for gauging customer attitudes, behaviours, and perceptions about digital marketing phenomena. The research instrument was initially evaluated for validity and reliability using a Partial Least Squares-based Structural Equation Modelling (SEM-PLS) approach with the help of SmartPLS before structural analysis. To make sure that all indicators could measure the research constructs precisely and consistently in compliance with globally accepted scientific research standards, these tests included convergent validity, discriminant validity, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE).

Data Collection Procedure

Students at Muhammadiyah University of Palangkaraya were given an online questionnaire as part of the survey approach used to collect data for this study. Because it was thought to be more effective, efficient, and suitable for responders who regularly use digital technology and social media, an online questionnaire was used. A Google Form with statements on the variables of AI-Based Personalisation, Social Media Engagement, Digital Content Quality, and Purchase Intention was created as the study tool. Prior to delivering the questionnaire, the researcher made sure that every statement item was well-written, simple to comprehend, and in line with the goals of the study. To make it easier for respondents to access the research questionnaire, it was disseminated using a number of digital communication channels, including social media and WhatsApp.

Respondents received guarantees on data confidentiality and an explanation of the study's goals during the data gathering process. In order to respect research ethics and privacy, respondents' identities were kept out of the study results because participation was voluntary and anonymous. Respondents were also asked to attest to their compliance with the study's requirements, which included actively using social media, interacting with digital marketing content, and receiving personalised recommendations on digital platforms. Before moving on to the analysis step utilising SmartPLS, the researchers performed a data screening procedure to make sure that respondents' responses were accurate and consistent. This process was done to make sure the study's data was high-quality and appropriate for additional analysis.

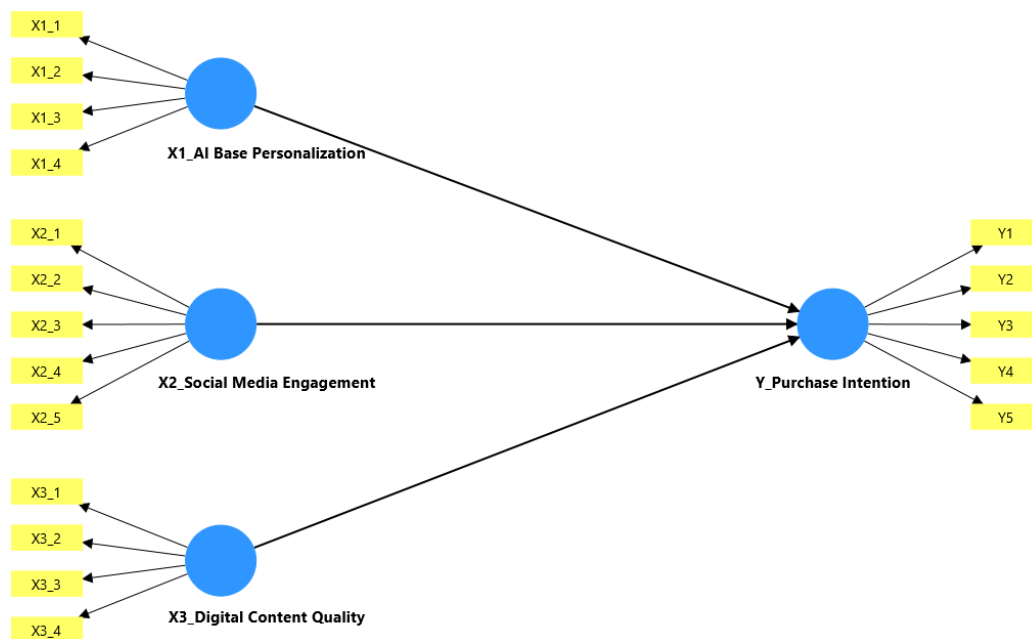
Data Analysis Technique

With the use of SmartPLS, the data analysis method utilised in this work is a Partial Least Squares-based Structural Equation Modelling (SEM-PLS) approach. The SEM-PLS approach was selected because it is appropriate for both exploratory and predictive research and may concurrently analyse intricate interactions among latent variables. Furthermore, SEM-PLS does not require data to be strictly normally distributed and performs exceptionally well when

handling research models with a large number of indicators. In digital marketing and information systems research, this method is also thought to be useful for examining causal relationships between constructs, especially those that involve latent variables like AI-Based Personalisation, Social Media Engagement, Digital Content Quality, and Purchase Intention. Evaluation of the measurement model and evaluation of the structural model are the two primary phases of SEM-PLS analysis.

Convergent validity, discriminant validity, Cronbach's Alpha, composite reliability, and Average Variance Extracted (AVE) tests were used to assess the measurement model and determine the validity and reliability of the study instruments. Additionally, employing path coefficients, T-statistics, and P-values through the bootstrapping process, the structural model evaluation was carried out to test the links among latent variables. To assess the research model's capacity for prediction, this study additionally examined the coefficient of determination (R^2), effect size (f^2), and predictive relevance ($Q^2_{predict}$). The study hypotheses were tested at a 5% significance level using T-statistics > 1.96 and P-values < 0.05 as the criterion for acceptance or rejection. This study is anticipated to generate a thorough and precise analysis in elucidating the impact of digital marketing variables on students' purchase intention by employing the SEM-PLS approach.

Gambar 1. Model Konseptual Penelitian (Conceptual Model)



The structural link between three independent variables—X1_AI-Based Personalisation (ABP), X2_Social Media Engagement (SME), and X3_Digital Content Quality (DCQ)—and the dependent variable Y_Purchase Intention (PI) is depicted in the study model diagram using SmartPLS. The arrows pointing from the constructs to the indicators show that many reflective indicators are used to measure each construct. Four indicators, X1_1 through X1_4, are used to measure the ABP variable. Five indicators, X2_1 through X2_5, are used to measure the SME variable. Additionally, the PI variable is tested using five indicators, namely Y1 through Y5, whereas the DCQ variable is assessed using four indicators, namely X3_1 through X3_4.

The three external variables clearly have a direct relationship with the Purchase Intention variable in the structural model (inner model). This suggests that the study's objective is to examine how students' purchase intentions are impacted by AI-Based Personalisation, Social Media Engagement, and Digital Content Quality. A hypothesis of a positive association between the variables is indicated by the direction of the arrows pointing from each independent

variable toward Purchase Intention. This model assesses the validity and reliability of the indicators utilised while testing the associations between components using the SEM-PLS technique. As a result, this research model can offer an empirical picture of the digital marketing elements that affect Muhammadiyah University of Palangkaraya students' purchase intentions.

Formulation of the Hypothesis

The Effect of AI-Based Personalization (ABP) on Purchase Intention (PI)

Artificial intelligence (AI) technological advancements have prompted businesses to use AI-based personalisation techniques into their digital marketing campaigns. Digital platforms may automatically offer content, ads, and product recommendations based on user behaviour and interests thanks to AI-driven personalisation. In the context of digital marketing, personalisation is thought to improve the user experience by making the content consumers get more relevant. The Technology Acceptance Model (TAM) states that technologies that offer users convenience and advantages will boost favourable reactions to the given goods or services.

AI-based personalisation can affect college students' interest in things suggested by digital platforms because they are digital natives. Purchase intent is more likely when students believe the system can comprehend their requirements and preferences. Technology-based personalisation is positively correlated with consumer behaviour and purchase intent on digital platforms, according to prior research. As a result, the following theory is put forth:

H1: Purchase Intention (PI) is positively impacted by AI-Based Personalisation (ABP).

The Effect of Social Media Engagement (SME) on Purchase Intention (PI)

The degree of user participation in social media activities, such as leaving comments, like material, sharing information, or connecting with a brand's account, is referred to as social media engagement. User interaction on social media has emerged as one of the primary determinants of customer behaviour in the age of digital marketing. Customers are more likely to develop an emotional bond with a brand the more they interact with a piece of marketing content. Social media interactions can operate as stimuli that affect consumer behavioural reactions, including purchase intent, according to the Stimulus-Organism-Response (SOR) theory.

Instagram, TikTok, YouTube, and other digital platforms are often used by college students, who are an extremely active population of social media users. Their high degree of interaction with digital information may boost interest in goods that are advertised. Because extensive social media involvement can boost consumer attention, trust, and interest in a product, prior research has also demonstrated that social media engagement has a major impact on purchase intention. In light of this description, the following theory is put forth:

H2: Purchase Intention (PI) is positively impacted by Social Media Engagement (SME).

The Effect of Digital Content Quality (DCQ) on Purchase Intention (PI)

Users' opinions of the information quality, visual presentation, applicability, and relevance of digital content provided via online platforms are referred to as digital content quality. High-quality digital content increases the efficacy of marketing communications by offering users clear, interesting information that satisfies their needs. From an information systems and digital marketing standpoint, consumers' opinions of a product or brand are greatly influenced by the quality of the material.

Digital information that is creative, educational, and simple to comprehend tends to pique students' interest. High-quality content can capture users' attention and foster interest in the promoted product. Additionally, prior studies have shown that high-quality digital content

enhances consumers' favourable opinions of the given goods or services, which in turn increases purchase intention. As a result, students are more likely to make a purchase if they obtain high-quality digital content. This explanation leads to the formulation of the following hypothesis:

H3: Purchase Intention (PI) is positively impacted by Digital Content Quality (DCQ).

Convergent Validity Analysis

In order to determine the degree to which indicators within a construct show strong correlations and reliably represent the latent construct, convergent validity is an essential step in assessing the measurement model in SEM-PLS. According to Joseph F. Hair Jr., a decent outer loading must be larger than 0.70 and AVE greater than 0.50 for the construct to be deemed valid. This test is typically performed using outer loadings and Average Variance Extracted (AVE). Convergent validity is essential in digital marketing and information systems research since the variables utilised are abstract and cannot be directly assessed, such as in the notions of AI-Based Personalisation, Social Media Engagement, Digital Content Quality, and Purchase Intention. In order to determine whether the research instrument is legitimate and appropriate for additional structural analysis, researchers can thoroughly assess convergent validity with the use of SmartPLS.

Table 1. Loading Factor

	ABP	SME	DCQ	PI	Explanation
X1_1	0,728				Valid
X1_2	0,735				Valid
X1_3	0,733				Valid
X1_4	0,847				Valid
X2_1		0,809			Valid
X2_2		0,816			Valid
X2_3		0,886			Valid
X2_4		0,778			Valid
X2_5		0,832			Valid
X3_1			0,815		Valid
X3_2			0,812		Valid
X3_3			0,821		Valid
X3_4			0,863		Valid
Y1				0,831	Valid
Y2				0,786	Valid
Y3				0,825	Valid
Y4				0,808	Valid
Y5				0,746	Valid
Y4				0,859	Valid
Y5				0,773	Valid

Note(s): ABP = AI Base Personalization (X1), SME = Social Media Engagement (X2), DCQ = Digital Content Quality (X3), PI = Purchase Intention (Y)

All indicators for the variables ABP (AI-Based Personalisation), SME (Social Media Engagement), DCQ (Digital Content Quality), and PI (Purchase Intention) displayed outer loading values above 0.70 based on the outcomes of the outer loading test on the measurement

model using SmartPLS. Outer loading values for the ABP variable varied from 0.728 to 0.847, with indicator X1_4 making the most contribution to the representation of the ABP construct. Additionally, the outer loading values for the SME variable ranged from 0.778 to 0.886, with indicator X2_3 being the most effective in explaining the Social Media Engagement construct. All indicators exhibit robust and consistent representation of the Digital Content Quality construct for the DCQ variable, with values ranging from 0.812 to 0.863.

In contrast, the outside loadings for the PI (Purchase Intention) variable varied from 0.746 to 0.859. Indicator Y4 has the greatest value at 0.859, while indicator Y5 has the lowest value at 0.746. All indicators meet the requirements for convergent validity since their outer loading values are more than 0.70, even though several of them have values around the minimal level. Therefore, it can be said that every signal in this study is reliable and appropriate for additional examination in the structural model (inner model). These findings show that the research tool is capable of measuring the structures being studied with accuracy and consistency.

Construct Reliability and Validity

To make sure that latent constructs show high levels of measurement accuracy and consistency, construct validity and reliability are essential steps in assessing the measurement model in SEM-PLS. Cronbach's Alpha and Composite Reliability (CR) are used to quantify reliability, and Average Variance Extracted (AVE) is used to assess validity. Joseph F. Hair Jr. states that a construct has strong validity if the AVE is greater than 0.50 and is judged dependable if Cronbach's Alpha and Composite Reliability are greater than 0.70. Because the variables utilised in digital marketing and information systems research are abstract, including AI-Based Personalisation, Social Media Engagement, Digital Content Quality, and Purchase Intention, this testing is essential. A thorough assessment of construct validity and reliability may be carried out with SmartPLS, guaranteeing that the measurement model is reliable and solid enough to support structural equation modelling and hypothesis testing.

Table 2. Validity and Reliability

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
ABP	0,764	0,847	0,582
SME	0,882	0,914	0,680
DCQ	0,847	0,897	0,685
PI	0,860	0,899	0,640

Note(s): ABP = AI Base Personalization (X1), SME = Social Media Engagement (X2), DCQ = Digital Content Quality (X3), PI = Purchase Intention (Y)

All of the variables in this study satisfied the requirements for acceptable reliability and validity, according to the findings of construct reliability and validity testing using SmartPLS. The ABP, SME, DCQ, and PI variables had Cronbach's Alpha values of 0.764, 0.882, 0.847, and 0.860, respectively. Each construct has a high degree of internal consistency, as evidenced by the fact that all of these values were above the minimum requirement of 0.70. Furthermore, all variables have Composite Reliability (rho_c) values greater than 0.70: ABP at 0.847, SME at 0.914, DCQ at 0.897, and PI at 0.899. These findings show that all of the study's indicators can accurately and consistently measure the constructs.

Additionally, the Average Variance Extracted (AVE) findings of the convergent validity test show that every concept has an AVE value greater than 0.50. AVE is 0.582, SME is 0.680, DCQ is 0.685, and PI is 0.640 for the ABP variable. These numbers show that each concept satisfies the requirements for convergent validity as it can account for more than 50% of the variance in its indicator. For use in structural equation modelling (SEM), all of the variables in this study are therefore considered valid and reliable. These findings also show that

the study tool accurately and successfully captures the concepts of Digital Content Quality, AI-Based Personalisation, Social Media Engagement, and Purchase Intention.

Discriminant Validity Analysis

To make sure that every construct in the study has distinct qualities and can be differentiated from other constructs, discriminant validity analysis is an essential step in assessing the measurement model in SEM-PLS. In digital marketing and information systems research involving variables with conceptual interrelationships like AI-Based Personalisation, Social Media Engagement, Digital Content Quality, and Purchase Intention, this test attempts to make sure that indicators more strongly represent their own constructs in comparison to other constructs. The Heterotrait-Monotrait Ratio (HTMT) is one widely used technique. Joseph F. Hair Jr. states that a good HTMT result should be less than 0.90 or, more precisely, less than 0.85. A low HTMT score suggests that there is no measurement overlap between variables and that the constructs have strong discriminant validity. To make sure the measurement model is reliable and appropriate for use in structural analysis and research hypothesis testing, discriminant validity testing was carried out in this work utilising SmartPLS.

Table 3. Heterotrait-monotrait ratio (HTMT)

	ABP	SME	DCQ
SME	0,662		
DCQ	0,657	0,719	
PI	0,530	0,659	0,670

Note(s): ABP = AI Base Personalization (X1), SME = Social Media Engagement (X2), DCQ = Digital Content Quality (X3), PI = Purchase Intention (Y)

All of the constructs in this investigation had HTMT values below the suggested maximum threshold of 0.90, according to the findings of the discriminant validity test utilising the Heterotrait-Monotrait Ratio (HTMT) approach in SmartPLS. The HTMT values were 0.719 between SME and DCQ, 0.662 between ABP and SME, and 0.657 between ABP and DCQ. Additionally, the HTMT value was 0.530 between PI and ABP, 0.659 between PI and SME, and 0.670 between PI and DCQ. These values all show that there is no multicollinearity problem amongst the constructs and that each construct has a high degree of discrimination.

The test's findings show that each of the study's variables—AI-Based Personalisation (ABP), Social Media Engagement (SME), Digital Content Quality (DCQ), and Purchase Intention (PI)—is an empirically unique construct that may measure ideas that are different from one another. As a result, the research model satisfies the requirements for discriminant validity, which means that the research tool is thought to be able to reliably differentiate the attributes of each variable. These findings support the measurement model's quality and show that the constructs are appropriate for evaluating the study hypotheses at the structural equation modelling (SEM) stage.

R² Analysis

A critical step in assessing structural models in SEM-PLS is analysing the coefficient of determination (R-squared or R²) to gauge how well independent factors account for the variability of the dependent variable. The R² value shows how much the exogenous variables can account for changes in the endogenous variable; the greater the R² value, the more predictive the model is. This approach is utilised in information systems and digital marketing research to ascertain how factors like AI-Based Personalisation, Social Media Engagement, and Digital Content Quality affect students' purchase intentions. A R² score of 0.75 is considered strong, 0.50 is considered moderate, and 0.25 is considered weak, according to Joseph F. Hair Jr. Additionally, by taking into consideration the amount of independent variables in the model,

the adjusted R-square value is employed to produce a more precise estimate. The purpose of this SmartPLS analysis is to assess how well the structural model predicts purchase intention and to clarify the connections between the various research constructs.

Table 4. R² Estimates

	R-square	R-square adjusted
Y_Purchase Intention	0,430	0,423

The Y_Purchase Intention (PI) variable has an R-squared value of 0.430 and an adjusted R-squared value of 0.423, according to the findings of the coefficient of determination (R-squared) study using SmartPLS. The variables AI-Based Personalisation (ABP), Social Media Engagement (SME), and Digital Content Quality (DCQ) together account for 43.0% of the variability in Purchase Intention, according to the R-square value of 0.430. Other variables outside of this research model that were not examined in the study account for the remaining 57.0%. The model still exhibits comparatively steady explanatory power with regard to the Purchase Intention variable, according to the modified R-square value of 0.423, which accounts for the number of independent variables utilised.

An R-squared value of 0.430 can be classified as a moderate effect according to the SEM-PLS interpretation criteria. This suggests that Muhammadiyah University of Palangkaraya students' purchase intentions can be adequately explained by the research model. As a result, it has been demonstrated that the three exogenous variables included in the study—AI-Based Personalisation, Social Media Engagement, and Digital Content Quality—have a major impact on how students intend to make purchases on digital platforms. These findings also show that the developed research model has enough predictive potential to move on to the structural hypothesis testing phase.

Effect Size (f²) Analysis

An essential stage in assessing structural models in SEM-PLS is effect size analysis (f²), which quantifies the extent to which each exogenous variable contributes to the endogenous variables in the research model. Effect size concentrates on the degree to which each independent variable influences the dependent variable, in contrast to the coefficient of determination (R²), which evaluates the model's overall performance. This technique is utilised in digital marketing and information systems research to ascertain the degree to which students' purchase intentions are influenced by AI-Based Personalisation, Social Media Engagement, and Digital Content Quality. Joseph F. Hair Jr. states that a f² value of 0.02 denotes a little effect, 0.15 a moderate effect, and 0.35 a significant effect. When an exogenous variable is eliminated from the model, the f² value is calculated from the change in the R² value; therefore, the higher the decrease in R², the greater the contribution of that variable. As a result, effect size research can help with strategic decision-making in the area of technology-based digital marketing and offer insight into the most important factors influencing purchase intention.

Table 5. Effect Size (f²)

	PI
ABP	0,012
SME	0,104
DCQ	0,100

Note(s): ABP = AI Base Personalization (X1), SME = Social Media Engagement (X2), DCQ = Digital Content Quality (X3), PI = Purchase Intention (Y)

Based on the results of the Effect Size (f^2) analysis using SmartPLS, it was found that the AI-Based Personalization (ABP) variable had an f^2 value of 0.012 regarding Purchase Intention (PI). Because it is less than the minimum criterion of 0.02, this number suggests that the effect of ABP on PI is very minor or weak. In the meantime, the Digital Content Quality (DCQ) and Social Media Engagement (SME) variables had f^2 values of 0.100 and 0.104, respectively. Due to their range of 0.02 to 0.15, both values are classified as modest effects. As a result, SME and DCQ contribute more to the explanation of shifts in students' purchase intentions than ABP.

These results indicate that Social Media Engagement and Digital Content Quality are relatively more important factors in influencing Purchase Intention than AI-Based Personalization. The quality of the digital information they get and their degree of social media participation typically have a greater impact on students than the AI-based personalisation offered by digital platforms. Even so, though to a lesser degree, AI-Based Personalisation still influences Purchase Intention. The SME and DCQ variables are the main target of digital marketing tactics to raise purchase intention among Muhammadiyah University of Palangkaraya students, according to the overall findings of this effect size analysis.

Predictive Relevance (Q^2 predict) Analysis

When evaluating structural models in SEM-PLS, Predictive Relevance (Q^2 predict) is a crucial metric for determining how well the model predicts endogenous variables and reconstructs observed data. Q^2 predict highlights the model's capacity to forecast empirical data, in contrast to the coefficient of determination (R^2), which concentrates on the model's explanatory power. This study is used in information systems and digital marketing research to make sure the model can both effectively anticipate customer behaviour and conceptually explain links between variables. According to Joseph F. Hair Jr., a model is considered to have predictive relevance if the Q^2 value is larger than zero ($Q^2 > 0$). Q^2 predict testing is carried out using the blindfolding process. The model's ability to forecast endogenous variables, such as the impact of AI-Based Personalisation, Social Media Engagement, and Digital Content Quality on students' Purchase Intention, is greater when the Q^2 predict value is higher. Therefore, a high Q^2 predict value suggests that the structural model is appropriate for use in technology-based digital marketing research and has sufficient predictive quality.

Table 6. Predictive Relevance (Q^2 predict) of the Structural Model

	Q^2predict
Y_Purchase Intention	0,384

According to the findings of the SmartPLS Predictive Relevance (Q^2 predict) analysis, the Y_Purchase Intention (PI) variable's Q^2 predict value was 0.384. Given that the Q^2 predict value is greater than zero ($Q^2 > 0$), this result suggests that the research model has strong predictive ability. The predictive relevance value in SEM-PLS analysis is used to assess how well the structural model predicts observed data. These findings thus show that the developed model has predictive validity for the student Purchase Intention variable.

Additionally, the Q^2 predict value of 0.384 falls into the moderate to strong predictive relevance category. This suggests that students' purchasing intentions at Muhammadiyah University of Palangkaraya can be pretty strongly predicted by the variables AI-Based Personalisation (ABP), Social Media Engagement (SME), and Digital Content Quality (DCQ). In other words, the research model has the capacity to forecast students' buy intention behaviour in the setting of digital marketing in addition to being able to logically explain the correlations between variables. These findings further support the validity and applicability of the structural model utilised to test additional study hypotheses.

Results of Hypothesis Testing

A crucial stage in structural model analysis that uses SEM-PLS to investigate causal links between latent variables in a research model is hypothesis testing. Based on actual data, this testing allows researchers to ascertain if independent variables significantly affect the dependent variable. By analysing the path coefficients, T-statistics, and P-values obtained through the bootstrapping process, hypothesis testing is used in digital marketing and information systems research to show the relationship between AI-Based Personalisation, Social Media Engagement, Digital Content Quality, and Purchase Intention. Joseph F. Hair Jr. states that if the T-statistic is higher than 1.96 and the P-value is less than 0.05 at a 5% significance level, the hypothesis is accepted. The results of hypothesis testing can offer an empirical picture of the factors that most affect students' purchase intention and aid in the creation of technology-based digital marketing strategies because path coefficients show the direction and strength of the relationship between variables.

Table 7. Results of Hypothesis Testing

	Path coefficients	T (O/STDEV)	statistics	P values	Explanation
ABP -> PI	0,104	1,312		0,189	Rejected
SME -> PI	0,329	4,610		0,000	Accepted
DCQ -> PI	0,323	3,931		0,000	Accepted

Note(s): ABP = AI Base Personalization (X1), SME = Social Media Engagement (X2), DCQ = Digital Content Quality (X3), PI = Purchase Intention (Y)

The impact of AI-Based Personalisation (ABP) on Purchase Intention (PI) had a path coefficient of 0.104, a T-statistic of 1.312, and a P-value of 0.189, according to the findings of hypothesis testing using SmartPLS. The hypothesis that ABP affects PI is rejected since the T-statistic is less than 1.96 and the P-value is more than 0.05. These findings suggest that students' buying intentions have not yet been considerably impacted by AI-based personalisation. The reason for this could be because students have not yet completely considered or accepted AI-based personalisation algorithms when making decisions about what to buy on digital platforms.

In the meantime, it was discovered that Purchase Intention was positively and significantly impacted by the variables Social Media Engagement (SME) and Digital Content Quality (DCQ). The DCQ variable has a path coefficient of 0.323, a T-statistic of 3.931, and a P-value of 0.000, whereas the SME variable has a path coefficient of 0.329, a T-statistic of 4.610, and a P-value of 0.000. The hypothesis is accepted since the T-statistics for both variables are greater than 1.96 and the P-values are less than 0.05. These findings show that students at Muhammadiyah University of Palangkaraya are more likely to make a purchase if they are more active on social media and get higher-quality digital content. Therefore, compared to AI-based personalisation, social media interaction and the quality of digital content have a greater influence on purchase intention.

Effect Size

In SEM-PLS, effect size is a statistical metric used to assess how much independent factors affect dependent variables in a structural model. This analysis demonstrates how each external construct contributes to the endogenous construct in addition to highlighting the relevance of the link between variables. Effect size is used in digital marketing and information systems research to gauge how much students' purchase intentions are influenced by AI-Based Personalisation, Social Media Engagement, and Digital Content Quality. The f-square (f^2) value, which is obtained from the change in the coefficient of determination (R^2) when an independent variable is eliminated from the model, is used to calculate effect size. Joseph F. Hair Jr. states that a f^2 value of 0.02 denotes a little effect, 0.15 a moderate effect, and 0.35 a significant effect. The analysis results can offer a more thorough knowledge of the efficacy of digital marketing variables in affecting customer behaviour in the digital environment since the bigger the effect size value, the greater the variable's contribution to influencing the dependent variable.

Tabel 8. Effect Size Results for the Significance Test

	f-square	Explanation
ABP -> PI	0,012	Weak Effect
SME -> PI	0,104	Moderate Effect
DCQ -> PI	0,100	Moderate Effect

Note(s): ABP = AI Base Personalization (X1), SME = Social Media Engagement (X2), DCQ = Digital Content Quality (X3), PI = Purchase Intention (Y)

The AI-Based Personalisation (ABP) variable had an F-square value of 0.012 with respect to Purchase Intention (PI), according to the findings of the effect size (F-square) study using SmartPLS. Because this value is less than the minimum criterion of 0.02, it is classified as a weak effect. These findings suggest that AI-Based Personalisation plays a comparatively minor role in explaining shifts in students' purchase intentions. Therefore, while AI-based personalisation is associated with buy intention, its impact is not yet significant enough to be the main driver of students' purchase intention in a digital setting.

In the meantime, the F-square values for the Digital Content Quality (DCQ) and Social Media Engagement (SME) variables are 0.100 and 0.104, respectively. Both levels are classified as having a modest influence. This suggests that Purchase Intention is more influenced by students' use of social media and the calibre of digital content than by AI-Based Personalisation. When students actively engage with social media content and are exposed to high-quality, interesting, and educational digital content, they are more likely to be interested in making purchases. Thus, at Muhammadiyah University of Palangkaraya, SME and DCQ can be regarded as more important elements influencing students' purchase intentions.

RESEARCH FINDINGS

Respondent Profile

Female students made up 62.7% of the study's respondents, while male students made up 37.3%. This predominance suggests that female students use social media, digital platforms, and digital marketing more frequently. When it comes to digital consumer behaviour, female students are more likely to actively seek out product information, engage with digital content, and receive tailored recommendations about AI-Based Personalisation, Social Media Engagement, and Digital Content Quality—all of which can affect Purchase Intention. The distribution of respondents in this study is deemed sufficiently representative to illustrate the behaviour of students at Muhammadiyah University of Palangkaraya regarding digital marketing strategies based on AI technology and social media, even though the participation of

male respondents still significantly contributes to depicting a more diverse range of digital consumer behaviour.

Measurement Model

Before structural equation modelling, the measurement model in this work was evaluated using SmartPLS to make sure that all constructs and indicators satisfied the requirements for validity and reliability. The constructs of AI-Based Personalisation, Social Media Engagement, Digital Content Quality, and Purchase Intention were considered valid in representing the research variables because the convergent validity test results indicated that all indicators had outer loading values above 0.70 and Average Variance Extracted (AVE) values above 0.50. Furthermore, construct reliability testing revealed that all variables' Cronbach's Alpha and Composite Reliability values were greater than 0.70, suggesting that the constructs have strong internal consistency. The Heterotrait-Monotrait Ratio (HTMT) technique of discriminant validity testing also revealed that all values were below 0.90, showing that there is no overlap between the variables and that each construct has empirically different properties. As a result, the measuring model used in this study is considered valid, trustworthy, and appropriate for evaluating the research hypotheses and for use in the structural analysis stage.

Structural Model

R² analysis, effect size (*f*²), Q²predict, and hypothesis testing were used in this study's structural model evaluation to assess the associations between latent variables and the model's predictive capacity using SmartPLS. AI-Based Personalisation, Social Media Engagement, and Digital Content Quality account for 43.0% of the variability in Purchase Intention, which is categorised as moderate, according to the analysis results, which show that Purchase Intention has an R-square value of 0.430 and an adjusted R-square of 0.423. According to the effect size results, AI-Based Personalisation has a minimal impact on Purchase Intention, whereas Digital Content Quality and Social Media Engagement have a moderate impact. Furthermore, a Q²predict value of 0.384 suggests that the model has strong predictive power. Additionally, hypothesis testing reveals that while AI-Based Personalisation has no discernible impact on Purchase Intention, Social Media Engagement and Digital Content Quality have a favourable and significant impact. Overall, the assessment results show that the study model is sufficient to explain the connection between Muhammadiyah University of Palangkaraya students' purchasing behaviour and digital marketing variables.

Hypothesis Testing

In this study, the impacts of AI-Based Personalisation (ABP), Social Media Engagement (SME), and Digital Content Quality (DCQ) on Purchase Intention (PI) were investigated through hypothesis testing utilising the bootstrapping approach in SmartPLS. With a path coefficient of 0.104, a T-statistic of 1.312, and a P-value of 0.189, the analysis results show that AI-Based Personalisation has a favourable but negligible impact on Purchase Intention; hence, the hypothesis is rejected. On the other hand, it was discovered that Purchase Intention was positively and significantly impacted by Social Media Engagement and Digital Content Quality. Both hypotheses are accepted since Social Media Engagement has a path coefficient of 0.329, a T-statistic of 4.610, and a P-value of 0.000, whilst Digital Content Quality has a path coefficient of 0.323, a T-statistic of 3.931, and a P-value of 0.000. These results show that, in contrast to AI-based personalisation, students' use of social media and the calibre of digital content are more important determinants in raising Purchase Intention among Muhammadiyah University of Palangkaraya students.

Discussion

According to the study's findings, students' purchase intentions are positively and significantly impacted by social media engagement and digital content quality, but not by AI-

based personalisation. These results suggest that digital information that is interesting, pertinent, and educational, together with students' participation in social media activities like liking, commenting, and sharing, are important variables in boosting purchase intention in the digital environment. These findings are consistent with the Stimulus-Organism-Response (SOR) theory, which describes how consumer behavioural reactions can be influenced by digital interactions and marketing content. However, because students still have little faith in AI algorithms and are accustomed to automatic suggestion features on social media and e-commerce platforms, AI-based personalised recommendations have not yet taken center stage. Therefore, this study suggests that social interaction and digital communication quality are more important in influencing Muhammadiyah University of Palangkaraya students' purchase intentions than AI-based personalisation technology. As a result, digital marketing strategies should prioritise enhancing social media content quality and user engagement.

Implications

The study's conclusions have theoretical and practical ramifications for the advancement of information systems and digital marketing, especially with regard to digital consumer behaviour in the age of AI-based technology. The study supports the Stimulus-Organism-Response (SOR) theory, which explains how social media interaction and digital content quality can affect consumer behaviour, by demonstrating that these factors have a greater influence on purchase intention than AI-Based Personalisation. These results also show that college students, who are digital natives used to digital personalisation features, have not yet made AI-based personalised recommendations a major consideration. Practically speaking, businesses and digital enterprises should concentrate more on enhancing the calibre of interesting, pertinent, imaginative, and educational material as well as maximising user engagement through interactive social media activities. AI technology can still be used as a tool to comprehend customer preferences and make more pertinent recommendations, even though AI-Based Personalisation has not yet had a major influence. Therefore, it is anticipated that the integration of AI technology, social media engagement, and high-quality content will improve the efficacy of digital marketing and customers' purchase intention, especially among Muhammadiyah University of Palangkaraya students.

Limitations

One of the study's many drawbacks is that the sample was limited to Muhammadiyah University of Palangkaraya students; as a result, the results cannot yet be widely extrapolated to other demographic groups. Furthermore, the study's cross-sectional methodology, which was carried out during a single time period, prevents it from capturing dynamic long-term shifts in consumer behaviour. Even though other elements like trust, perceived utility, customer satisfaction, e-WOM, and perceived risk may also have an impact on digital consumer behaviour, the research variables are restricted to AI-Based Personalisation, Social Media Engagement, and Digital Content Quality in order to explain Purchase Intention. Because responses are based on individual perspectives, the use of online questionnaires also permits respondent subjectivity bias. However, this study still offers an empirical contribution to the understanding of digital consumer behaviour in the context of AI-based digital marketing and university students. As a result, it is recommended that future research use a larger sample size, incorporate additional pertinent variables, and use a longitudinal design to make the research findings more thorough.

Future Research

In order to explain Purchase Intention in the context of AI-based digital marketing, future research is anticipated to create a more thorough research model by adding variables like trust, perceived usefulness, customer satisfaction, electronic word of mouth (e-WOM), perceived risk, and customer experience. In order to comprehend the relationships between

variables in a more complex way, future research could also test mediating and moderating variables. This is especially important in light of the low impact of AI-Based Personalisation on Purchase Intention, which is probably influenced by factors like perceptions of AI technology, trust in algorithms, and data privacy. To guarantee that the research findings have a higher degree of generalisability, it is also suggested that future studies broaden the scope of respondents to include diverse social groups and geographical areas. In order to analyse shifts in digital consumer behaviour and variations in the efficacy of AI-based digital marketing strategies, longitudinal designs and comparative studies across digital platforms like TikTok, Instagram, Shopee, and Tokopedia are also advised. This will allow future research to make more comprehensive theoretical and practical contributions to the development of digital marketing literature and management information systems.

DISCUSSION

The study's findings show that Muhammadiyah University of Palangkaraya students' Purchase Intention (PI) is not significantly impacted by AI-Based Personalisation (ABP). The proposed hypothesis is rejected since the T-statistics values are below the significance level and the P-values are greater than 0.05. These findings suggest that students' purchasing intentions on digital platforms have not yet been significantly increased by AI-based personalised recommendations. Given that personalisation is already a ubiquitous element on social media and e-commerce platforms, it is likely that students in this study pay little heed to the automated recommendations made by AI algorithms. A saturation effect, in which users receive personalised recommendations so frequently that their psychological impact and attractiveness on purchasing behaviour wane, may result from this circumstance. Additionally, when it comes to product recommendations that are automatically created by AI systems, students are more likely to be interested in content that is interactive, viral, and follows social media trends.

According to the Technology Acceptance Model (TAM), these results theoretically imply that the adoption of personalisation technology has not yet been fully capable of influencing changes in consumer purchasing behaviour. According to TAM, if technology is thought to be very valuable and easy to use, it will have an impact on user behaviour. Students in this survey, however, probably see AI personalisation as a common feature that no longer offers a distinctive experience or appreciable added value when making purchases. Additionally, according to Consumer Behaviour Theory, social and emotional aspects, as well as changing digital trends in the user's surroundings, have an impact on consumer purchase decisions in addition to technology. The findings of this study are consistent with a number of earlier studies that discovered that, especially among younger users who are already used to digital recommendation systems, personalisation does not always have a substantial impact on purchase intention. These results, however, also diverge with other research that suggests AI-based recommendations can boost purchase intention by enhancing user experience and product relevancy. Thus, the study's findings suggest that user characteristics and the always changing landscape of digital consumer behaviour continue to have a significant impact on the efficacy of AI-Based Personalisation.

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