

# Investigating the Impact of AI-powered Technologies on Instagrammers' Purchase Decisions in Digitalization Era: A Study of the Fashion and Apparel Industry

## Abstract

Over the last couple of decades, technological advancements have accelerated exponentially, especially in the realm of online social networking networks. The artificial intelligence (AI)-powered digital technologies applications continue to emerge to enhance and improve novel ways of communication on social media platforms, particularly Instagram. Indeed, this has caused a change in the behavioural and social customer journey, where customers need to embrace a digital experience adoption. The AI applications primarily aim to study the shoppers browsing trend to draw new clients and expand businesses. Even the fashion industry has tapped into Instagram's business benefits in this fast-paced and competitive industry. With this quick and compelling way to capture shoppers' attention towards fashion products, the purchase decision may differ between e-shoppers and conventional shoppers. AI seems to be extremely promising and has the potential to be a game changer for Instagram users, advertisers, and influencers. This study applies the Engel-Kollat-Blackwell (EKB) theory to investigate the effects of AI-based digital technology experiences on Instagrammers' fashion apparel purchase decisions - perceived eWOM, perceived emotional value, perceived quality, perceived risk and perceived price. Based on data collected from Instagram users, the framework of this study was evaluated using structural equation modelling (SEM). Semi-structured in-depth interviews were also conducted as part of the research to get a more in-depth understanding of the profiles and behaviours of Instagram users. Our findings from both methodologies confirm that perceived emotional value, perceived quality, and perceived eWOM revealed a statistically significant and positive influence on Instagrammers' purchase decisions for fashion apparel. Meanwhile, the importance performance matrix analysis (IPMA) identified perceived emotional value as the most important factor for Instagrammers, but the highest performance was perceived quality. This research has important implications for Malaysian online retailers and shoppers to adapt to the fast-changing digital transformation. Assuredly, this study makes a noteworthy contribution to attitudinal research on social media commerce within the fashion industry.

*Keywords:* AI, Instagram, Purchase decision, Fashion, Digital transformation

## 1. Introduction

The rise of the Internet and technology from when it was first introduced has changed the world drastically and has brought about a global shift in how one would go about their daily lives (Kian, Loong & Fong, 2018). Needless to say, this shift has impacted many sectors and

industries, especially in the brick-and-mortar businesses and has since created a new norm to how consumers purchase their products and services. Aside from that, the advancement of internet technology has led in an increased usage and acceptance of social media as an integral part of society's everyday life. The rapid development of internet technology and social media has enabled consumers to fulfil their wishes and needs via virtual means, which has enabled an acceleration in electronic commerce (Zhou, Chong & Ngai, 2015). Consumers are now welcomed to a borderless world whereby geographical locations and limitations cease to exist in selecting products and services that fulfil their needs and wants.

With the increased uses of social media presence in the daily lives of society, electronic commerce has begun to redirect and take on the adoption of social media in its marketing strategies and sales. In present times, Wu and Li (2018) mentioned that “many virtual business opportunities have gradually transformed from Internet-based trading platforms into social commerce (SC) platform”. SC is a business concept that uses social media networks for business-to-consumer (B2C) and consumer-to-consumer (C2C) electronic-commerce transactions (Wu & Li, 2018). A few prime examples of social media platforms that consumers have vastly used to shop are Instagram, Facebook and even Twitter.

Customers use the Internet to research on merchants and their goods by visiting their websites and prominent third-party sites. This behaviour and social customer journey represent an entirely different experience to consumers who were only given the options to view and select from what was only available in the physical stores before the internet age. Moreover, in the past year, social media platforms have noticed the adoption and the integration of social media into their business functions, primarily in the marketing segment to attract consumers, especially in the retail industry. Balakrishnan and Dwivedi (2021) stated that “conversational commerce involves messaging consumers and allowing them to make purchases over platforms like WhatsApp and Facebook Messenger”. Social media is one of the most transformational effects of ICT on companies (Zhan, Han, Tse, Ali & Hu, (2021).

Major social media platforms such as Instagram have since seized the opportunity to broaden its functionality and have since included a shop function in their application. Besides that, the inclusions of other specifications like the ability to tag brands and embed links towards the particular brand of clothing line or products seen in the social media postings have also led towards an increase in the use of social media in the e-commerce industry which results in the emergence of social-commerce.

Haller, Lee and Cheung (2020) reported that COVID-19 has expedited the transition from in-store to online transactions by about 5 years. As a result of the pandemic, this has

hampered brick-and-mortar businesses, and there is an increasing demand for artificial intelligence in online social retailing (Meticulous Market Research, 2020). Social commerce blends e-commerce and social media strategies as an exciting, lucrative evolution in retail marketing. In line with its popularity, Malaysians are increasingly buying online through social media platforms (79%) claiming to make at least one purchase a year via SNS platforms (Talib & Rusly, 2018). Global social commerce is expected to grow at a blistering pace of 31.4% in the aftermath of the COVID-19 crisis. In Malaysia, online shopping via SNS platforms has increased during the pandemic. Due to social distance and a desire to spend less time outside the house, Malaysians have increased their online purchases as of May 2020 (Müller, 2021).

Artificial intelligence (AI) has been more widely used in online and social business in recent years, since it is a powerful tool in meeting the rapid change in consumer demand and improving sales efficiency. AI-powered website developers will create interactive websites based on user data, significantly reducing the expense and time associated with developing an interactive website from scratch. Smidt and Power (2020) asserted that online product research has risen considerably in recent years. Amazon, the biggest internet store in the United States, is a superb example of successfully bringing AI into online shopping. Asling (2017) affirms that incorporating AI into online and social commerce shopping enables customer-centric search and a new degree of personalisation, culminating in a more effective purchasing operation. Artificial intelligence has been used extensively to improve the efficiency of marketing strategies as well as to marketing automation.

As AI has emerged as an important edge of technological innovation, several apparel and design companies have adopted this new application in recent years (Wong & Liu, 2018). The fashion industry has been identified as one of the most vital industries as it contributes a large portion of the worldwide economy (McKinsey&Company, 2020). One of the pivotal elements that contribute to the fashion industry's placement is that the apparel and the clothes that one wears carries a statement of one's placement in society and is a symbol of status. Clothes and apparels are a known necessity and are needed on a day-to-day basis worldwide. One of the main ways people source for fashionable looks and new styles are through the content posted on Instagram (Aragoncillo & Orus, 2018). Thus, it is very advantageous to use an image-sharing social media platform as a site for online purchasing (Mull & Lee, 2014).

Taking a closer look at the fashion industry, many fashion marketers have noticed the surge in social media users and have begun to increase their focus on attracting its consumers (Nelson, Moore & Swanson, 2019). Utilising data gathered from social media may assist businesses in developing a collection of accurate attributes that encompass social, economic,

and environmental considerations throughout the decision-making phase (Dwivedi, Ismagilova, Rana & Raman, 2021). According to the Malaysian Communications and Multimedia Commission's Internet User Survey (2020), despite Facebook remaining as the biggest social media platform for Malaysians, the number of users saw a decline while Instagram saw a climb from 57% in 2018 to 63.1% in 2020 in the number of users in Malaysia.

Instagram is a social media platform developed initially as a platform for users to edit and upload photos. Instagram was officially released in the year 2010 and has since gained much popularity amongst the younger generation. To date, NapoleonCat (2021) reported that approximately 4 900 000 Malaysians aged 25 to 34 were the largest user group who are in favour of using Instagram. the 'Insta-Gran' is gaining popularity in Malaysia. Correspondingly, according to the Internet User Survey 2020, 'Insta-Gran' is gaining popularity in Malaysia with 64 percent shopping through this social media platform (Ministry of Communication and Multimedia, 2020). It enables them to connect and keep up with the lives of the people deemed relevant to them. Casalo, Flavian, and Ibanez-Sanchez (2020) explain that Instagram is the prime example of what social media can bring to the fashion industry on a daily basis as users can see the brand-related content that is embedded within the stories and posts of the people that are relevant in their lives such as certain popular influencers. In conjunction with this, Zhou (2020) adds that social shopping is the act of shopping using social media and is a form of user behaviour in social commerce.

In 2020, Instagram introduced a new shop feature on its application to cater for the rising trend of using social media as a platform for online shopping. According to Instagram (2020), the new feature was introduced to help businesses sell online and enable consumers to shop in the comfort of their own homes online. This new feature included special functions such as product tags, whereby businesses can highlight the products seen in their stories and posts and even tag brands to enable other Instagram users to find and purchase them (Instagram, 2021). Besides that, Instagram also introduced a product detail page that showcases all relevant information of the said apparel or fashion item, which includes pricing, product description and even a media display of the product that has been tag to enable Instagrammers to view the items in different ways (Instagram, 2021).

Despite the advantages and the rise of using Instagram to shop for fashion apparel, limited research exists compared to other social media platforms such as Facebook and Twitter (Hajli, 2014; Mikalef, Giannakos & Pateli, 2013; Park & Kim, 2014; Zhan et al., 2021; Kazancoglu et al., 2021; Kumar et al., 2022). This study applies the Engel-Kollat-Blackwell (EKB) theory (Engel, Blackwell & Miniard, 2001) to investigate the characteristics of social

commerce sites that influence e-shoppers' purchase decisions. The EKB model is divided into five stages: problem recognition, external search, alternative evaluation, purchasing process, and post-purchase evaluation. The five stages of the Engel-Kollat-Blackwell model serve as a framework for this study, which will investigate the role that Instagram, a popular social media platform, plays in the consumer decision-making process of 21st-century Malaysian young adults as they shop for apparel. This store choice is made by Instagram consumers throughout the information search and alternative assessment stages of their decision-making process. In the internet environment, it is suggested that this decision-making process has undoubtedly altered over time. In the online environment, the consumer's age group is critical, since the decision-making process might change in the online world. However, the designers of the clothing retail model included other components that garment firms should consider at various phases of the customer decision-making process (Xu & Chen, 2017). Thus, this study acknowledges the gaps in past literature due to the changing trends in social media usage of the younger generation and aims to examine the factors that impact the purchasing decision of Instagrammers for fashion apparel. The study results of this study will help retailers better understand their e-shoppers' behaviour and how to optimise their sales via e-shoppers' purchasing decisions.

## **2. Literature review and hypotheses development**

### *2.1 The effect of Artificial intelligence (AI) on Instagrammers Purchase Decision*

Consumer purchasing decisions is the physical activity and decision-making processes that consumers participate in to acquire, utilise, and dispose of products and services that meet their needs and desires. Analysing such a process may assist in forecasting future behaviour (Qazzafi, 2019). The consumer purchase decision-making process consists of five stages representing the phases that customers go through before deciding to purchase a product. Consumer purchase behaviour is difficult to comprehend since it is connected to the human mind, but, in the context of a digital platform, it is feasible via AI-based digital technology, which can assist in evaluating and forecasting consumer purchase behaviour. Consumers express their needs, desires, and opinions on the digital platform in many ways, such as search, comments, blogs, Tweets, likes, videos, and discussions through various channels such as website, mobile, or face-to-face (Court, et al., 2009). As a result, the supply of consumer data is always increasing in volume, speed, variety, and accuracy. AI can help transform such a flood of data into useful consumer insights. All in all, AI relies on such insights to advise merchants on product presentations and cataloguing. As a result, understanding the consumer

journey is very vital. Based on a vast body of current research on AI marketing, this study finds that AI experiences on Instagram shopping may provide customers with intuitive experiences through intelligent recognition and search, intelligent suggestion, and virtual customer care agents. As a result, this research adopts a unique approach to the aforementioned possible effects of AI-based digital technology experiences on Instagrammers purchase decisions—perceived eWOM, perceived emotional value, perceived quality, perceived risk and perceived price.

## *2.2 Perceived eWOM and Purchase Decision*

Based on Ismagilova, Dwivedi, Slade, and Williams (2017), eWOM refers to the process of exchanging information relevant to a product, service brand, or a company between consumers regardless of how to whether they are potential, actual or former consumers. The positive or negative aspect of a WOM message (valence) is regarded as one of the most critical eWOM characteristics and has been extensively investigated (Park, Lee & Borle, 2018). Past literature dictates the significance of eWOM on the purchasing decisions of consumers (Lee, Keeling & Urbaczewski, 2019; Lin, Featherman, Brooks & Hajli, 2019; Tsao, Hsieh, Shih & Lin, 2015; Kumar et al., 2020; Gupta et al., 2021; Sengupta et al., 2021). Unlike in the past with the traditional word-of-mouth where consumers were limited to their social contacts, consumers of present times are now able to obtain and share their experience and views to a wider range of audiences via social networks (Zhang, Abound Omran & Cobanoglu, 2017).

In general, electronic word-of-mouth provides consumers with information about said products/services (Attar, Shanmugam & Hajli, 2020). Before the digital era, when businesses were still operating physically, and consumers were still subjected to purchasing items based on geographical limitations, word-of-mouth was established as one of the predominant factors of consumers purchasing decisions. Zhao, Wang, Tang, and Zhang (2020) state that “consumers cognitive trust in information communicated by eWOM mainly relates to the utility and relevance of the information they receive”. Additionally, as the world shifts towards e-commerce and consumers are presented with an array of products and services, the reliance on reviews and feedback on products and services has become more vital in the purchasing decision process of a consumer. This is due to the fact that consumers are not able to physically be present to judge the quality of the product or services for themselves. These reviews and feedback found on the Internet are also known as eWOM (Liu, Jayawardhena, Osburg & Mohiuddin Babu, 2019). A study in 2020 found that e-commerce sites play a less vital role in the customer buying decision-making process as consumers rely more on the interaction from

other consumers and their experience sharing through product reviews and feedback (Li, 2019). The impact of eWOM has been widely examined to establish its role in the purchasing intention of consumers in various industries (Erkan & Evans, 2016; Prasad, Garg & Prasad, 2019). However, the direct impact of it on consumers purchasing decisions towards fashion apparel remains untouched. Thus, this study hypothesises the following:

*H1. Perceived eWOM positively affects Instagrammers' purchase decision.*

### *2.3 Perceived price and Purchase Decision*

One of the primary considerations of consumers when making a purchase decision is often the price value of a product or service. Consumers are subjected to various price ranges in the fashion industry, with clothes depending on the brand. According to Soni and Dawra (2019), consumers are often seen to base their purchase decision based on two values. The two values consist of perceived acquisition value and perceived transactional value (Grewal, Monroe & Krishnan, 1998). In essence, the perceived acquisition value is the consumer's benefits from purchasing the said product or service relative to the sacrifice made to obtain it. Such benefits are often important in today's society, especially when it comes to apparel, as the clothes individuals wear are often seen as a symbol of status in society (Grewal et al., 1998).

On the other hand, transactional value is a deal or discount that is offered in the purchase. In today's e-commerce, much importance is often placed on lowering the transactional value, which can be seen with the vast amounts of sales and initiatives towards free shipping and special promotional codes. Based on a study by Nitin, Rajiv, and Srinivasan (2003), it was found that one of the factors that made consumers hesitate in proceeding with purchasing an item was due to frequent price promotions. Due to the nature of online shopping through social media platforms such as Instagram, elements of feeling for the apparel quality are removed, thus increasing the inclination of the consumers to pay higher attention to the prices of the product (Wadera & Sharma, 2018). Consumers browse through several fashion shops or online links attached to the apparel of interest to determine the best-perceived purchase value (Khan, Fatima & Matloob, 2019).

Most of the time, consumers often correlate the perceived quality with the pricing of a product or service. Chi and Kilduff (2011) mentioned that "some consumers perceive value when they pay a low price, while others perceive value when balancing quality and price". A study conducted on the purchasing of fashion apparel online in India by Wadera and Sharma (2018) provided findings that the perceived price or value were found to be an attraction towards the consumer, which led to browsing through the store, creating the urge to purchase

the apparel which eventually led to making the purchase. Husic and Gregurec (2015) discovered that price positively affects consumer purchasing decisions towards shopping products, especially clothing and footwear. Hastuti et al. (2018) investigated and found that perceived price had a positive and significant impact on purchasing through electronic platforms. Perceived price has a significant impact on consumers' purchase decisions, whereby consumers tend to put off buying the product until the product's perceived value is of value to them (Anwar & Andrean, 2021). Based on these past findings, this study hypothesises the following:

*H2. Perceived price positively affects Instagrammers' purchase decision.*

#### *2.4 Perceived Quality and Purchase Decision*

Perceived quality adds value to customers by giving them a cause to purchase and distinguishing the brand from competitors (Asshidin, Abidin & Borhan, 2016). A study on the French Apparel Industry that involved over 400 respondents displayed findings that when it comes to fashion, consumers are mostly concerned with the quality of the fashion clothing (Jo, Kim & Choi, 2020). In reality, no one scheme fits it all. According to Jo et al. (2020), there are two kinds of consumers in the fashion apparel industry. The first type is consumers value of product quality, while the second value the perceived price of the product. Traditional shoppers often rely on their sense of touch to determine if fashion apparel is of good quality. However, with the emergence of e-commerce and online shopping, the sense of touch is no longer a viable method in determining quality.

Asshidin et al. (2016) defined "perceived quality as the evaluation of a brand's overall excellence based on intrinsic (performance and durability) and extrinsic cues (brand name)". One of the main ways consumers identify the perceived quality of the apparel is through product recommendations from famous social media influencers, the overall physical appearance of the apparel and how exquisite the fashion apparel looks. With that in mind, Instagram serves as one of the most important platforms in determining fashion apparel quality. A report published by LYFE (2018) stated that "Instagram offers brands the opportunity to post aesthetically pleasing, creative and charming content (photos, videos, stories, life stories, etc.), focusing exclusively on visuals, and to showcase their products appealingly". This is often attributed to the perceived quality of fashion apparel since online shoppers rely heavily on the physical image of fashion apparel.

A study conducted in the year 2019 in China had found that perceived product quality positively influenced the purchasing decision of consumers (Wang, Guo, Wu & Liu, 2019).



Following Hendra (2017), perceived quality positively and significantly affected purchasing decisions. Hoseinian & Asadollahi's (2017) research on reviewing the consumers' behavioural characteristics also demonstrates that perceived quality has a positive and significant effect on purchasing decisions. Similarly, another study by Asshidin et al. (2016) displayed similar findings whereby data collected from 236 respondents in Malaysia showed that perceived quality was a good determinant in consumers' purchasing decision process. Thus, the following hypothesis is put forth:

*H3. Perceived quality positively affects Instagrammers' purchase decision.*

### *2.5 Perceived Emotional Value and Purchase Decision*

Perceived emotional value is defined as the emotional aspects derived from the decisions that we make. Thus, in this study, the perceived emotional value will be the consumers feel or experience when purchasing fashion apparel via Instagram. Similarly, Sheth (1991) implores that when a purchasing choice evokes sentiments and emotions in customers, emotional value is achieved. A prime example of perceived emotional value is the feeling of excitement and joy a consumer would feel upon purchasing the same apparel seen on a post of a particular famous Instagram influencer such as Kim Kardashian or Siti Nurhaliza. When positive emotions are perceived to be experienced, consumers often push through to purchase the product. Emotions shared in online feedback provide insight into how people's experience the whole situation (Ismagilova, Dwivedi & Slade, 2020; Eachempati et al., 2022). However, certain apparel that might seem relatively cheap but often carry a dubious feeling due to certain factors of uncertainty such as poor online reviews or from unknown brands are being promoted by unscrupulous people. These negative feelings that arise often affect the purchasing decision of consumers as well.

Besides that, a study was carried out to determine the drivers of consumer behaviour in social commerce. The shoppers' cognitive and emotional states were vital drivers in online shopping (Xu, Wu & Li, 2020). The study was conducted in China and was centred around live streaming elements using Instagram and had collected data from 300 respondents (Xu et al., 2020). Similarly, Sanchez, Callarisa, Rodriguez, and Moliner (2006) had investigated the role of perceived emotional value in purchasing a product in the tourism industry. In this study, it was established that the emotional value of the purchase is perceived as an overall valuation at the emotional level of the whole act of purchase and not just at one stage of the purchasing process. It was also established that the perceived emotional value of a product is significantly important in deciding to purchase a product. Moreover, in the study (He & Qu, 2018), perceived

emotional value has a significant relationship with customer satisfaction and is provoked to purchase the product with a higher decision. Besides that, another study in recent years found that the emotions experienced by the consumer can also be derived from the other elements involved in the online shopping process. A prime example is the emotions felt by consumers after reading online reviews and other eWOM of the product or service (Serra-Cantallops, Ramon-Cardona & Salvi, 2018). Companies often do not believe their product has anything unique to offer over competitors frequently use emotional appeal to persuade people to buy their products. Sriram *et al.* (2021) emotional value significantly affect the purchase decision. Incorporating emotional content into social media platforms can often successfully create a good connection with an individual. Hence, the following hypothesis was formulated:

*H4. Perceived emotional value positively affects Instagrammers' purchase decision.*

## 2.6 Perceived Risk and Purchase Decision

Creating trust and a risk-free shopping experience especially in the e-commerce sector is crucial in ensuring recurring purchases of consumers. The rise of the Internet has brought about convenience in the lives of society and brought about higher risks throughout the entire online shopping experience. Traditionally, these risks were uncommon as consumers would receive the goods or services almost immediately upon purchase. Chances of consumers getting scammed were not common, as sales assistants and store owners would receive payments physically, and the consumers could gauge the quality of the items before purchasing. However, with social media shopping, the perceived risks are often seen as high. In present times there is a severe rise in cases of scammers offering “genuine high quality” products at extremely low prices, cases of no-delivery despite payments being made and products that are not true towards the product description. When it comes to connected devices, perceived dangers are likely to affect decision-making and, ultimately, a person's behavioural intentions (Saridakis, Benson, Ezingard & Tennakoon, 2016). Accordingly, consumers' perceived risk towards online shopping has become a critical issue as it directly impacts the purchasing decision (Ariff, Sylvester, Zakuan, Ismail & Ali, 2014; Liu *et al.*, 2021; Chatterjee *et al.*, 2021).

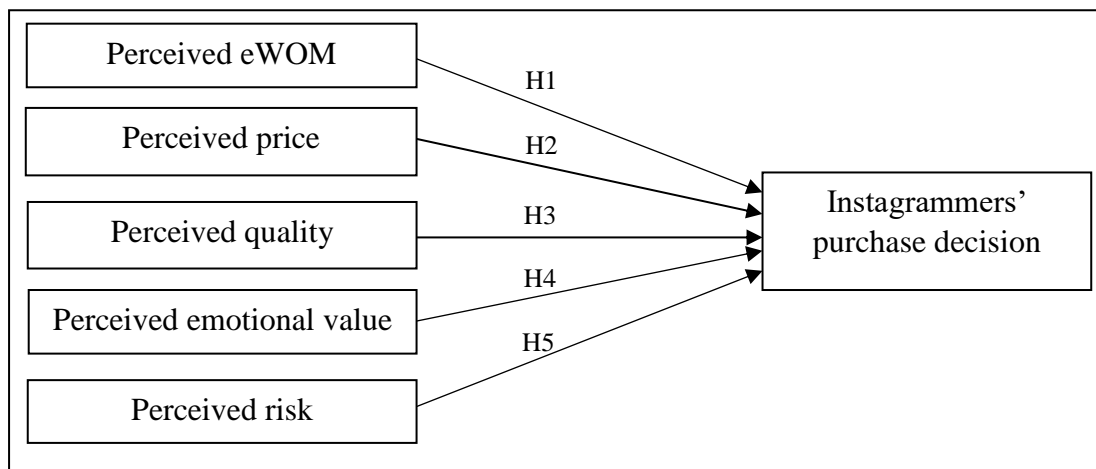
The purchasing of sensory items such as fashion apparel online often carries a bigger perceived risk of purchasing other products such as books (Shim, Eastlick & Lotz, 2000). Several past researchers have examined the various elements that form the perceived risks in the minds of consumers while online shopping (Akhlq & Ahmed, 2015; Han & Kim, 2017; Zhao, Deng & Zhou, 2017). In 2018, Kamalul Ariffin, Mohan, and Goh (2018) examined the impact of perceived risk on online shopping in Malaysia. In his study, consumers' perceived

risk was made up of several dimensions: financial risk, product risk and security risk, time risk, and psychological risk (Kamalul Ariffin et al., 2018). Additionally, his study also proved that consumers' perceived risk had a negative impact on the online purchasing of consumers. Further, another study by Yeo, Tan, Teo and Tan (2021) found that perceived risk does not strongly influence the intention to repurchase through Foodpanda apps.

According to Sun, Shao, Li, Guo, and Nie (2019), online shoppers often require more product information during the decision-making process to reduce the perceived risk. One of the main ways to obtain this information is through live streaming of the product, allowing consumers to view the items more directly than through pictures. Live streaming is often seen on Instagram, where social media influencers usually start an Insta Live in which they carry out product reviews while answering questions of the product for the viewers live. Where risks are involved, businesses must ensure that these risks are mitigated to ensure a trusting relationship between their consumers. Past literature has already established that consumers have shown less interest and motivation to purchase when the perceived risk is high. A recent study on social commerce shopping found that trust mitigates privacy risk and significantly impacts consumers purchasing behaviour (Zhou, 2020). Thus, it is evident that perceived risk plays an important factor in making a purchase decision for fashion apparel on Instagram. Therefore, this study hypothesises the following:

*H5. Perceived risk positively affects Instagrammers' purchase decision.*

Fig. 1 presents the research model used in this study based on the literature review and hypotheses developed.



**Fig. 1.** Research model

### **3. Methodology**

This study used a mixed-method research, which involves the gathering and analysis of both qualitative and quantitative data. The combination of two research designs minimises the weaknesses and enhances the strengths of data (Panda & Gupta, 2013) and provides rationalisation within a single study (Creswell & Plano Clark, 2006). Additionally the combination of quantitative and qualitative research design is used in this study to examine both broad and deep relationships between variables, as well as the meanings of specific social phenomena. Furthermore, it gives more rigorous findings than collecting and analysing data using just qualitative or quantitative methodologies. This is because the majority of social problems cannot be quantified directly or precisely by the use of direct variables or through the use of either a quantitative or qualitative research technique. In this research, non-probability purposive sampling was employed. Sekaran and Bougie (2011) stated that “purposive sampling is confined to a specified category of people who can provide information that is sought after”. Purposive sampling was determined to be the most appropriate method for this study because users of Instagram who reside in Malaysia and are actively browsing available fashion stores were in a better position to provide the necessary information.

#### *3.1 Quantitative research*

The questionnaire was developed based on existing scales from previous literature with minor modifications to fit the setting of this study. A total of twenty-one items were adapted from Apiraksattayakul (2017) for this study. Three indicators assess the perceived eWOM of online remarks, whether favourable or negative, made by Instagram users in connection to certain products and services. Perceived price has four indicators that measure the Instagram shoppers’ opinions on the price charged by the retailers, while perceived quality has four items to measure the ability of a product to fulfil the expectations of the Instagram shoppers. Perceived emotional value and perceived risk have three items each. The items for perceived emotional value measures the emotional value as the power of a product to provoke and affect an Instagram shopper’s sentiments. On the other hand, perceived risk measures the Instagram shoppers’ perceptions of the uncertainty and adverse consequences of buying a product through the Instagram platform. The items for purchase decision was adapted from Dang and Pham (2018). Pre-testing was conducted on the questionnaire to determine the content validity of the measurement scales used in the study. As part of the pre-testing process, an expert review may reveal and address inadequacies in the measurement scales used in this study. Three experts were chosen for this study based on their expertise in marketing and knowledge.

Therefore, responses to item measurement were based on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The measuring items used in this research are listed in Table 1.

Table 1. Survey items of the study.

| <b>Constructs</b>                | <b>Indicators</b>  | <b>Sources</b>          |
|----------------------------------|--|-------------------------|
| <b>Perceived eWOM</b>            | PeWOM1 - The reviews/comments on Instagram are credible.<br>PeWOM2 - The quantity of reviews/comments on Instagram suggest that the product has good sales.<br>PeWOM3 - I think that the customers who provided reviews/comments on Instagram are experienced.   | Apiraksattayakul (2017) |
| <b>Perceived Price</b>           | PP1 - The lower price of the fashion apparel at solid shops is an advantage when I shop on Instagram.<br>PP2 - I am willing to pay a higher price for fashion apparel that is limited edition.<br>PP3 - Discounts is an advantage when I shop on Instagram.<br>PP4 - I will not purchase fashion apparel when the price is not acceptable to me when I shop on Instagram.                        | Apiraksattayakul (2017) |
| <b>Perceived Quality</b>         | PQ1 - Fashion apparel quality is important to me when I shop on Instagram.<br>PQ2 - Higher credibility of the online sellers indicates better quality of fashion apparel.<br>PQ3 - When I shop on Instagram, more positive feedback indicates better quality of fashion apparel.<br>PQ4 - I will consider all comprehensive factors to choose the best fashion apparel when I shop on Instagram. | Apiraksattayakul (2017) |
| <b>Perceived Emotional Value</b> | PE1 - The clothes on Instagram give me pleasure.<br>PE2 - I am comfortable purchasing clothes on Instagram.<br>PE3 - The clothes on Instagram make me feel good.   | Apiraksattayakul (2017) |
| <b>Perceived Risk</b>            | PR1 - Purchasing clothes on Instagram is risky because the delivered products may fail to meet my expectations.<br>PR2 - Purchasing clothes on Instagram is risky because the delivered products may be of inferior quality.<br>PR3 - Purchasing clothes on Instagram is risky because the delivered products may be unusable.   | Apiraksattayakul (2017) |
| <b>Purchase Decision</b>         | PD1 - I will buy fashion apparel via Instagram.<br>PD2 - The probability that I would consider buying any fashion products via Instagram.<br>PD3 - My willingness to buy from the Instagram stores<br>PD4 - I expect to purchase through the Instagram stores in the near future.  | Dang and Pham (2018)    |

An online invitation message with a link to the questionnaire, created using a 'Google form,' was sent out through email and made available on several platforms, including WhatsApp and Facebook groups, from January 2020 and April 2020. A screening question was asked to ensure that the respondents had prior experience in visiting Instagram stores. The target audience of this study consists of all Instagram users living in Malaysia. The minimal sample size needed was 138 based on G-power with 0.15 effect size, 0.05 alpha, and 0.8 power.

### *3.2 Qualitative research*

The second step is qualitative data collection via in-depth focus group interviews. Five Instagram users were recruited to participate in a virtual interview via Webex. Webex interview is the most effective way to comply with lockdown limitations, physical distance regulations, and travel restrictions by the government of Malaysia. Interviews were gathered through purposive sampling, attempting to choose the most suitable sample for answering the questions. Four females and one male Instagram residing in different Malaysian states, aged 22 to 24 years, were interviewed based on their propensity to purchase fashion apparel. The interview questions were as follows: 'How often do you browse on Instagram?', 'Do you have any experience browsing the Instagram fashion stores/seller's page?', 'Have you purchased any fashion items through the Instagram platform before?', 'Can you share your thoughts on the AI-based digital technology used in Instagram?', 'How does the effect of AI-based digital technology used in the Instagram fashion page make you feel good and create the curiosity to buy?'. The Interview lasted for about forty-eight minutes. The interviews were recorded digitally and later transcribed to a word file. Following that, the researchers synthesised plotted data across transcripts to generate synthesis findings for analysis.

## **4. Results**

### *4.1 Quantitative results*

After 202 out of 250 Instagram users completed the questionnaire with the following screening question: "have you ever purchased fashion items through the Instagram application", a response rate of 80.8 percent was obtained. Males made up 47.5 percent of the 202 data collected, while females made up 52.5 percent. More than two-thirds of these respondents were between the ages of 22 and 25, with monthly earnings ranging from RM1000 to RM1500 (18.3 percent). Most of the respondents (36.1%) actively connected to Instagram more than 8 times per day to browse the available fashion stores.

Table 2. Respondent's demographic profile (N = 202)

| Demographic variable                                   | Category           | Frequency | (%)  |
|--|--------------------|-----------|------|
| Gender   | Male               | 96        | 47.5 |
|  | Female             | 106       | 52.5 |
| Age  | Below 18 years old | 20        | 9.9  |
|  | 18 to 21 years old | 74        | 36.6 |
|  | 22 to 25 years old | 94        | 46.5 |
|  | Above 25 years old | 14        | 6.9  |
| Ethnic   | Malay              | 14        | 6.9  |
|  | Chinese            | 165       | 81.7 |
|  | Indian             | 17        | 8.4  |
|  | Others             | 6         | 3.0  |
| Monthly Salary   | Below RM100        | 93        | 46.0 |
|  | RM1000 – RM1500    | 37        | 18.3 |
|  | RM1500 – RM2000    | 22        | 10.9 |
|  | RM2000 – RM2500    | 14        | 6.9  |
|  | Above RM2500       | 36        | 17.8 |
| How often do you connect to Instagram per day?         | 0 to 2 Times       | 10        | 5.0  |
|  | 3 to 5 Times       | 49        | 24.3 |
|  | 5 to 8 Times       | 70        | 34.7 |
|  | More Than 8 Times  | 73        | 36.1 |
| Have you ever bought a fashion product from Instagram? | Yes                | 104       | 51.5 |
|  | No                 | 98        | 48.5 |
| How many Instagram User are you following?             | Below 100          | 12        | 5.9  |
|  | 100 to 150         | 18        | 8.9  |
|  | 150 to 200         | 34        | 16.8 |
|  | Above 200          | 138       | 68.3 |

#### 4.1.1 Assessment of the measurement model

The findings indicate that the composite reliability surpassed the 0.70 threshold, showing construct reliability (Table 2). Of the twenty-one items, twenty had loadings that surpassed the ideal level of 0.70, whereas PP2 was higher than the acceptable level of 0.50 (Hair et al., 2017). The findings indicated that the measurement model constructs were reasonably convergent in their validity. Dijkstra and Henseler (2015) proposed using the rho\_A coefficient to test the reliability of PLS construct scores, with a value of 0.7 or greater being the threshold. Convergent validity was demonstrated for all of the constructs since the average variance extracted (AVE) above the 0.50 level, which was the suggested cut-off. Following that, the discriminant validity based on heterotrait-monotrait (HTMT) was investigated.

Henseler, Ringle, and Sarstedt (2015) recommended the acceptable HTMT levels to be less than 0.85 or 0.90 (Table 3). As a result, the more stringent HTMT 0.85 was used in this research. As a result, the measurement model's discriminant validity is acceptable. As for this study, for the endogenous components of purchase decisions, the R2 in this model was 0.421, suggesting that 42.1% of the variance in the purchase decision for fashion through Instagram can be explained by perceived eWOM, perceived price, perceived quality, perceived emotional value and perceived risk.

Table 3. Measurement items of the study.

| <b>Variables</b>          | <b>Items</b> | <b>Loadings</b> | <b>Cronbach's Alpha</b> | <b>rho_A</b> | <b>Composite Reliability</b> | <b>AVE</b> |
|---------------------------|--------------|-----------------|-------------------------|--------------|------------------------------|------------|
| Perceived eWOM            | PeWOM1       | 0.858           | 0.786                   | 0.802        | 0.874                        | 0.698      |
|                           | PeWOM2       | 0.846           |                         |              |                              |            |
|                           | PeWOM3       | 0.802           |                         |              |                              |            |
| Perceived Priced          | PP1          | 0.816           | 0.776                   | 0.832        | 0.849                        | 0.585      |
|                           | PP2          | 0.696           |                         |              |                              |            |
|                           | PP3          | 0.730           |                         |              |                              |            |
|                           | PP4          | 0.810           |                         |              |                              |            |
| Perceived Quality         | PQ1          | 0.746           | 0.725                   | 0.730        | 0.828                        | 0.545      |
|                           | PQ2          | 0.710           |                         |              |                              |            |
|                           | PQ3          | 0.755           |                         |              |                              |            |
|                           | PQ4          | 0.742           |                         |              |                              |            |
| Perceived Emotional Value | PE1          | 0.847           | 0.824                   | 0.837        | 0.894                        | 0.738      |
|                           | PE2          | 0.876           |                         |              |                              |            |
|                           | PE3          | 0.853           |                         |              |                              |            |
| Perceived Risk            | PR1          | 0.869           | 0.779                   | 0.819        | 0.869                        | 0.688      |
|                           | PR2          | 0.838           |                         |              |                              |            |
|                           | PR3          | 0.779           |                         |              |                              |            |
| Purchase Decision         | PD1          | 0.832           | 0.889                   | 0.896        | 0.923                        | 0.750      |
|                           | PD2          | 0.864           |                         |              |                              |            |
|                           | PD3          | 0.880           |                         |              |                              |            |
|                           | PD4          | 0.887           |                         |              |                              |            |



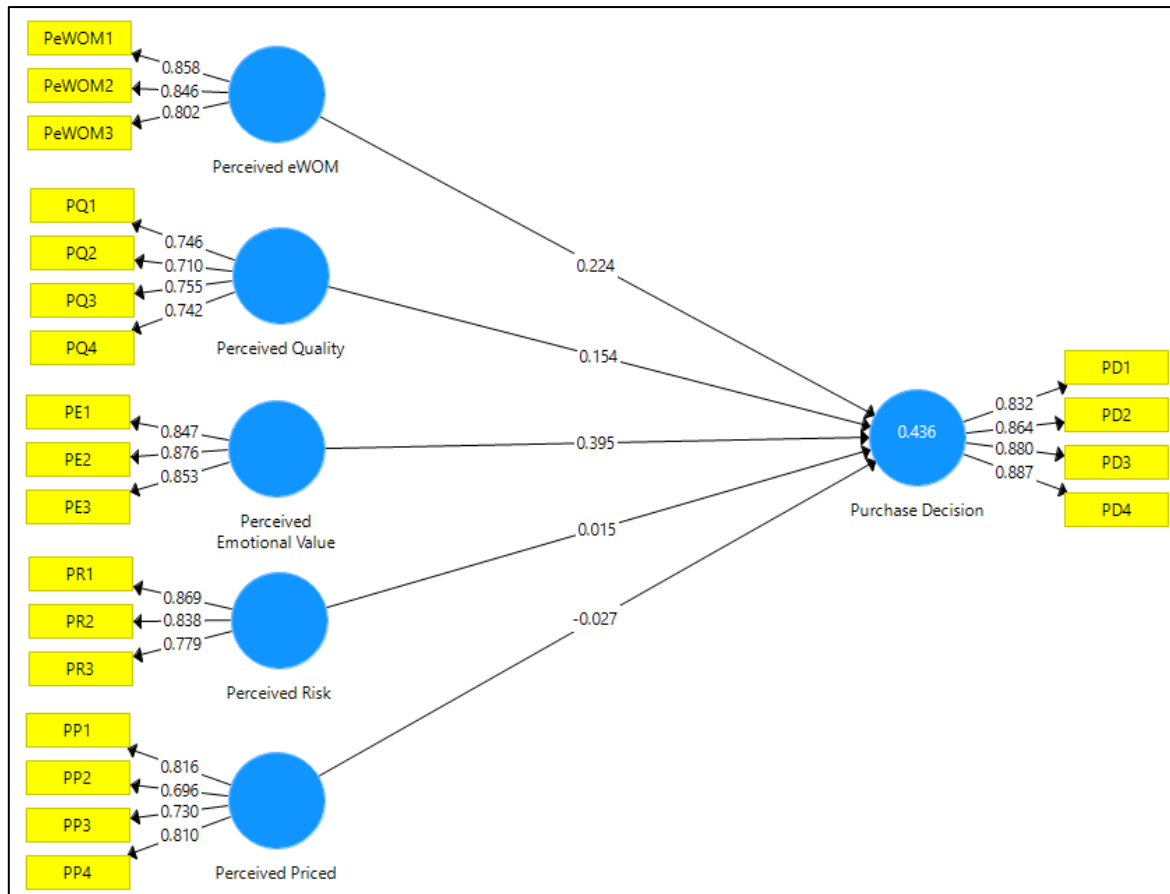


Fig. 2. Measurement model.

Table 4. Discriminant Validity: HMTM.

|                                | PE    | PP    | PQ    | PR    | PWOM  | PD    |
|--------------------------------|-------|-------|-------|-------|-------|-------|
| Perceived Emotional Value (PE) | 0.853 |       |       |       |       |       |
| Perceived Price (PP)           | 0.164 | 0.816 |       |       |       |       |
| Perceived Quality (PQ)         | 0.651 | 0.104 | 0.876 |       |       |       |
| Perceived Risk (PR)            | 0.305 | 0.374 | 0.558 | 0.869 |       |       |
| Perceived eWOM (PWOM)          | 0.687 | 0.108 | 0.797 | 0.366 | 0.880 |       |
| Purchase Decision (PD)         | 0.686 | 0.058 | 0.596 | 0.271 | 0.635 | 0.887 |

#### 4.1.2 Assessment of the structural model

The structural model represents the relationships between the constructs hypothesised in the research model. The bootstrapping analysis was conducted on 5000 subsamples to assess the significance of the regression coefficients, which may be used to establish whether or not the suggested hypotheses were significant. From the results, one path was found as significant at the 0.01 level, two at 0.05 level and the rest were insignificant (Table 4). Perceived eWOM (H1:  $\beta = 0.224$  and  $t = 2.364^*$ ) had a positive effect on purchase decision. Perceived quality (H3:  $\beta = 0.154$  and  $t = 2.084^*$ ) positively affected the purchase decision. Perceived emotional

value ( $H3: \beta = 0.395$  and  $t = 6.175^{**}$ ) had a strong correlation with purchase decision.. As such,  $H2$  was not supported. The results show no relationship between perceived risk Nevertheless, constructs perceived price and perceived risk did not affect the purchase decision. The relationship between perceived price and purchase decision ( $\beta = -0.027$ ,  $p > 0.1$ ) was negative and purchase decision ( $\beta = 0.015$ ,  $p > 0.1$ ). This indicates that perceived risk will not positively influence Instagrammers' purchase decision;  $H6$  was not supported.

Henseler et al. (2015) mentioned that “to assess the overall model fitness, the standardised root means square residual (SRMR) had been determined based on the root mean square discrepancy between the observed correlations and the model-implied correlations”. As recommended by Hu and Bentler (1999), the values for SRMR should be less or equal to 0.08. As a result, the model estimation revealed that the value for the model was 0.067, indicating that the model provided a reasonable fit (Browne & Cudeck 1993).

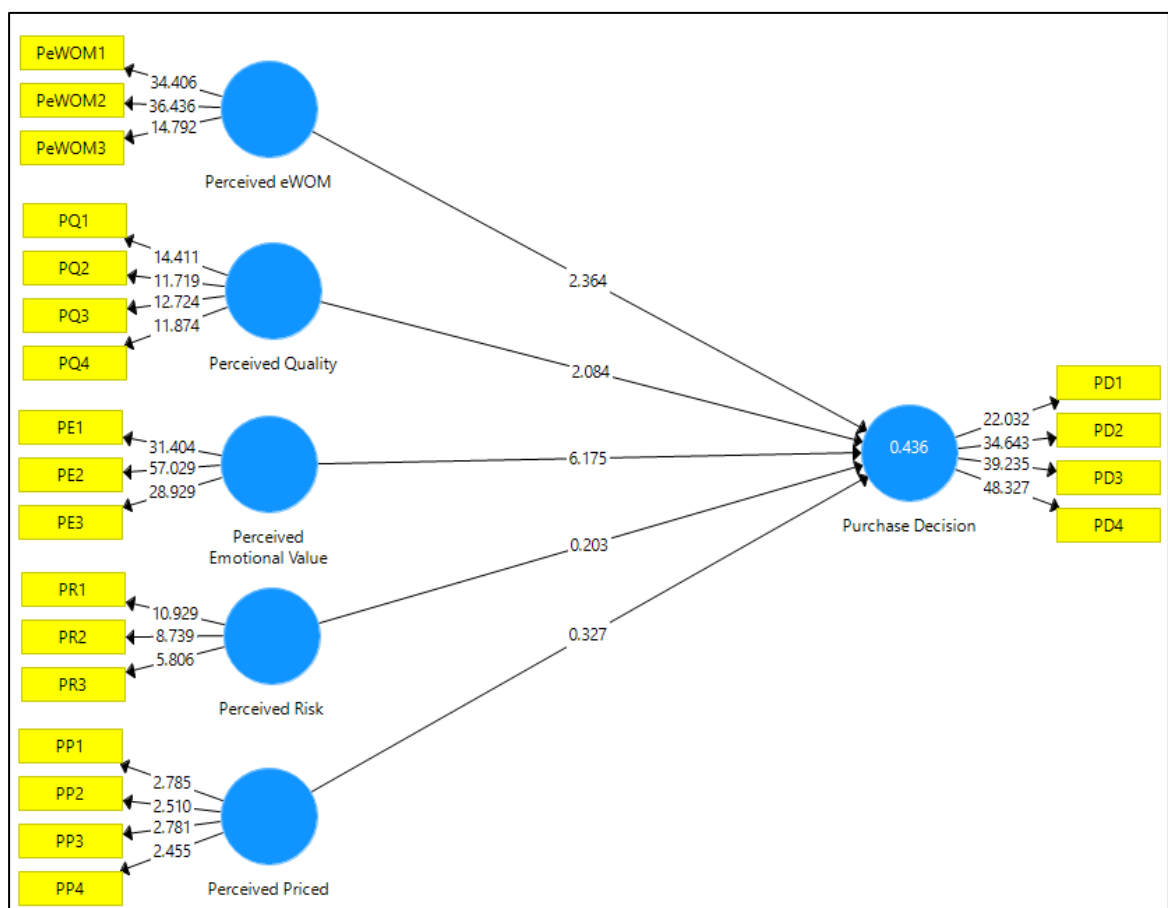


Fig. 3. Results of structural modelling analysis.

Table 5. Results of Hypotheses Testing.

| Hypotheses | Path   | Std Beta | Std Error | t-value | 95% confidence intervals | Remarks       |
|------------|--|----------|-----------|---------|--------------------------|---------------|
| H1         | Perceived Ewom -> Purchase Decision            | 0.224    | 0.095     | 2.364*  | [0.075, 0.379]           | Supported     |
| H2         | Perceived Priced -> Purchase Decision          | -0.027   | 0.084     | 0.327   | [-0.234, 0.062]          | Not Supported |
| H3         | Perceived Quality -> Purchase Decision         | 0.154    | 0.074     | 2.084*  | [0.041, 0.285]           | Supported     |
| H4         | Perceived Emotional Value -> Purchase Decision | 0.395    | 0.064     | 6.175** | [0.276, 0.493]           | Supported     |
| H5         | Perceived Risk -> Purchase Decision            | 0.015    | 0.074     | 0.203   | [-0.099, 0.148]          | Not Supported |

Notes: \*\* $p < 0.01$ ; \* $p < 0.05$

#### 4.1.3 Importance-Performance Matrix Analysis (IPMA)

The IPMA of path modelling for Instagrammers' purchase decision was performed to extend the structural model results by considering the performance of each variable. Hair et al. (2017) mentioned that the areas that need management attention are high importance and poor performance on a specific endogenous latent variable. In this research, the impact of latent exogenous factors on the endogenous variable (purchase decision) was assessed in terms of their significance and performance. Table 5 shows the outcomes of the study.

Table 6. IPMA results for purchase decision.

| Latent variable           | Patient Loyalty            |                           |
|---------------------------|----------------------------|---------------------------|
|                           | Direct effect (importance) | Index value (performance) |
| Perceived eWOM            | 0.243                      | 77.483                    |
| Perceived Priced          | -0.037                     | 76.007                    |
| Perceived Quality         | 0.219                      | 80.437                    |
| Perceived Emotional Value | 0.378                      | 67.557                    |
| Perceived Risk            | 0.018                      | 79.603                    |

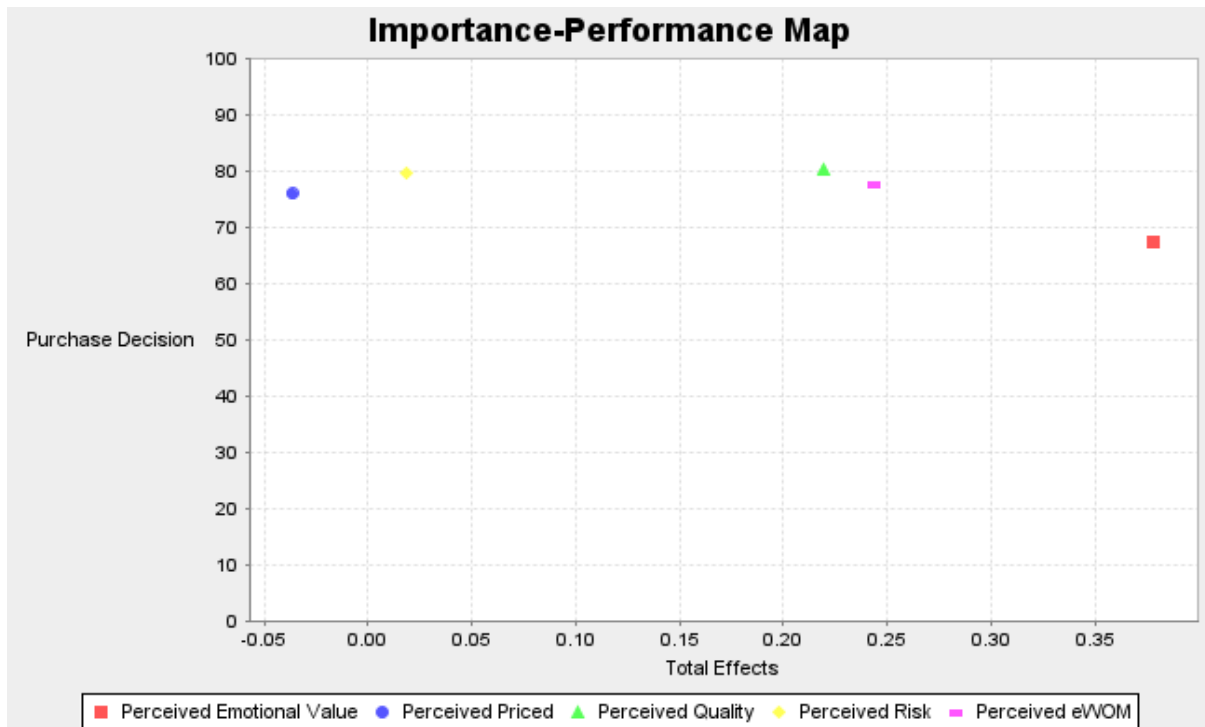


Fig. 4. Importance-Performance Map by constructs

The IPMA results for the endogenous variable of purchase decision are presented in Fig. 1. The perceived price showed high performance based on the IPMA map, but it is not important in predicting purchase decisions. The IPMA findings also revealed that perceived emotional value was the most important factor in Instagram shoppers' purchase decisions. A one-point increase of perceived eWOM performance leads to an increase in the performance of Instagram shoppers' purchase decisions by a value of 0.243, while perceived quality will increase the performance of Instagram shoppers' purchase decision with the value of 0.219, the perceived emotional value will increase the performance of Instagram shoppers' purchase decision with the value of 0.378, and perceived risk will increase the performance of Instagram shoppers' purchase decision with the value of 0.018. The results from the IPMA analysis describe the areas that require improvement regarding the factors that influence shoppers' purchase decisions via Instagram within the context of Malaysia.

Moreover, this study used an IPMA analysis to determine the relative importance of perceived eWOM, perceived price, perceived quality, perceived emotional value and perceived risk items to achieve higher Instagram shoppers' purchase decisions (refer to Figure 2). The results indicate that PE2 was more important than the other purchase decision indicators. A one-point increase in PE2 performance will increase the shoppers' purchase decision by a value of 0.142. However, the performance of PE2 (66.089) was the lowest among the other less

important indicators. Therefore, the results highlight that retailers need to focus on enhancing the emotional value of the shoppers with their power of a product to provoke and affect an Instagram shopper's sentiments to achieve higher chances of purchase decision. Conversely, PP1 seems to be the least important compared to the other purchase decision indicators with the performance indicator of 77.723.

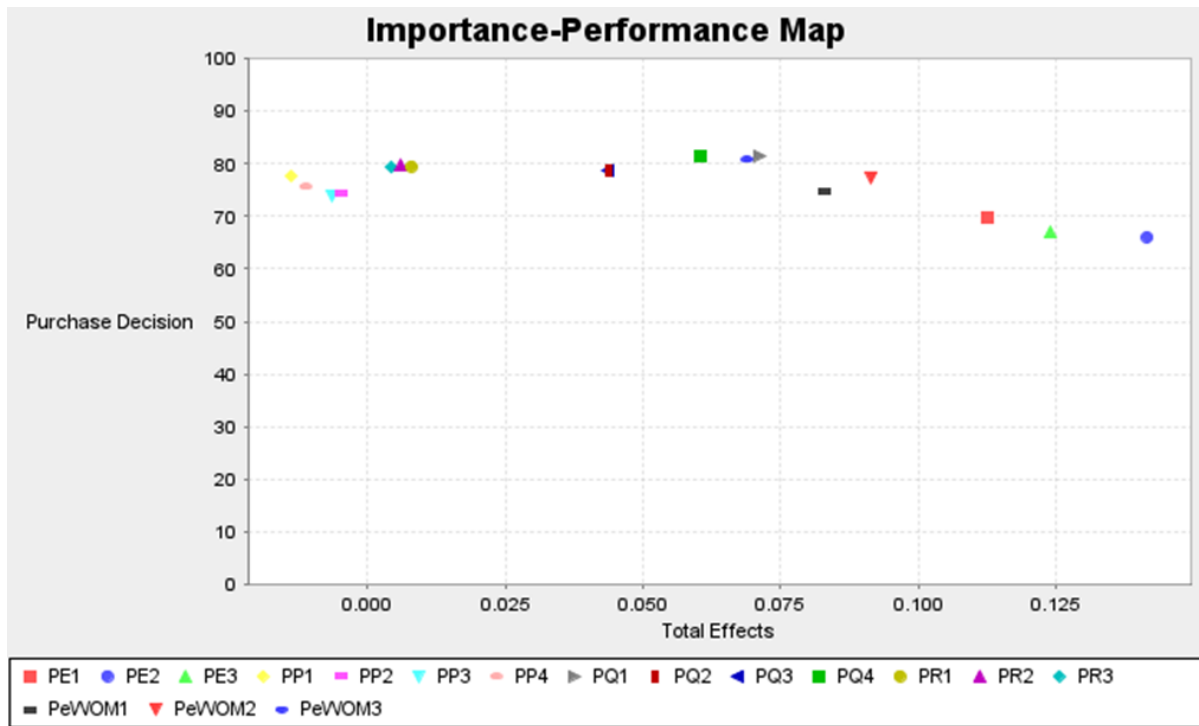


Fig. 5. Importance-Performance Map by indicators

#### 4.2 Qualitative results

The results provided here are based on the qualitative research participants' perspectives. As far as the results are concerned, all the five interviewees aged 22 to 24 years were familiar with Instagram as a social commerce platform. In terms of frequency of usage, overwhelmingly, all five respondents surfed Instagram daily. In total, 40% of them were heavy Instagram users (more than ten times a day); 40% were regular Instagram users (two to three times a day), and 20% were light Instagram users (once a day).

Regarding their experience browsing the Instagram fashion stores or seller's page, all the samples reported and elaborated on their browsing experiences from one seller to another to search for more product information. At times, they ended up just doing some online window shopping. The majority of participants affirmed purchasing fashion items on impulse as users of Instagram. They indicated that they had the experience of purchasing shirts and preloved

shoes. Further to that, they also share their thoughts on the AI-based digital technology used in Instagram. The male participant shares:

“My friend recommended me to the fashion store on Instagram. After browsing through the various designs, I finally bought a branded shirt. The visual content of the products has somehow led me to the immediate purchase on this platform. With the existence of AI-based digital technology, the visual quality of the image posted increases my likelihood to view the goods offered as being of high quality and leading me towards my purchase decision which eventually meets my post-purchase satisfaction”.

Additionally, another participant discussed a recent purchase she had made as a result of seeing a pair of preloved shoes advertised on the Instagram page:

“It is difficult to find preloved fashion items with the design I very much wanted, and I immediately purchased

it. The text within the post on sellers’ Instagram has always caught my attention whenever I was browsing for fashion items. I was influenced by the content conveyed by the other Instagrammers, and the fashion store content created positive emotions in me. The AI-enabled in this platform has enhanced my perceived emotional value towards my decisions”.

Results from our interviews show that eWoM is very important for people to start using s-commerce. Instagram is becoming a very important tool for s-commerce in Malaysia because it can be used in many ways to spread eWoM. Here are a few quotes from survey participants on how eWoM influenced their decision to buy through Instagram. “It enables customers to view the opinions of others in a clear, simple, and highly influential manner when making a purchasing decision”; “Because of the additional information it provides, including images and customer reviews, I feel more confident about making a purchase because of this site”; It enables me to view and read the recommendations of other customers (both positive and negative), which can either encourage or dissuade me from making a purchase. It enables me to view and read the recommendations of other customers (both positive and negative), which can either encourage or dissuade me from making a purchase”.

When asked to assess whether AI-based digital technologies had a part in their Instagram buying choice, perceived risk (security), convenience, and price were cited more than once as motivators for the purchase decisions. Some have shown concern about the security of making payments directly to the seller’s account and the authenticity of the products sold on the Instagram store. According to one female participant, “To me, I am concerned about the payment method, especially on the security of money transfers to the retailers’ account. I might risk not getting the product I paid for. This concept used in Instagram is different from

the ones used by Shopee or Lazada”. Consumers decide to purchase goods through Instagram based on their ability to pay or the suitability of the prices for the goods. As one aspect of product knowledge, the male participant's said the price has a partial and positive influence on his purchasing decisions through the Instagram platform.

To some extent, the visual material on this platform evokes certain emotions in consumers, which may not always result in an instant purchase or a sense of confidence in the content they are seeing or receiving. Some interviewed users stressed that they often wonder whether the product sold on Instagram is genuine. In this quote, a participant expresses her thoughts: “As the saying goes, I don't believe everything I read. There are accounts selling what appears to be authentic branded products, but they are knockoffs or imitations of the real thing”. Besides, the purchase transactions have created another concern among them. Among all, one participant agreed that there is a risk in every purchase let it be online or offline, but only it depends on whether it is done on a large scale.

## **5. Discussion**

The variables in the current model may explain 42.1 percent of the variation in a purchasing decision, according to the R-square value of 0.421. As a result, the study model demonstrated significant explanatory power and may serve as a solid foundation for future research into purchasing choices. The following discusses the implications of the study.

This research indicates that perceived eWOM positively impacts purchase decisions, with a small effect size ( $f^2 = 0.049$ ). It was discovered that perceived usefulness was an important factor in determining purchase decisions, which is consistent with the findings of Erkan and Evans (2016) and Prasad, Garg, and Prasad (2019). Li (2019) reported that customer buying decision-making process rely more on the eWOM. On the contrary, perceived eWOM was only mentioned as one of their concerns towards purchase decisions via Instagram by the interviewees during the interview. The most important difference between the two studies is that respondents in the quantitative study are prompted to consider the perceived eWOM, while this is not the case in the qualitative study. In addition, participants in the quantitative research easily grasp the description for the perceived eWOM, allowing them to evaluate the perceived eWOM-level options readily. Overall, our results show that information conveyed via eWOM relating to the usefulness and relevance of information is critical in establishing retailer credibility and improving brand image, since Instagram consumers obviously make purchase

choices based on authoritative assertions. Incomplete information provided by eWOM, on the other side, may lead to consumer confusion.

Next, this research discovered that perceived quality is an important element in influencing consumers' purchasing decisions. Research evidence from Wang et al. (2019) and Asshidin et al. (2016) supported the significant relationship between perceived quality and purchase decision. Therefore, perceived quality is a significant factor that can increase shoppers' purchase decisions via Instagram. Admittedly, perceived quality is one of the aspects of brand equity, and it has a major effect on brand recognition. The outcomes of the study were verified by the IPMA, which exemplified that the importance and performance of perceived quality had highly contributed to shoppers' purchase decision for fashion artificial intelligence products via Instagram. Qalati et. al. (2021) found quality to be the most essential factor for purchase decision given the emphasis on attractiveness, real-time services, and provided all necessary information to eliminate ambiguity. Based on the results of the qualitative study of this research, the five respondents are optimistic about the effects of AI on the perceived quality of the fashion apparel sold through Instagram. The usage of AI on Instagram provides better and higher quality pictures of fashion items in larger image sizes, resulting in higher perceived quality and purchase decisions. Eventually, this will lead to the sale of high-quality goods that offer substantial value to customers by allowing new capabilities that enhance their quality of life.

More importantly, the perceived emotional value was shown to have a positive effect on purchase decision. The findings indicate a positive and significant influence with a medium effect size ( $f^2 = 0.174$ ). It suggests that when positive emotions are perceived through the fashion AI-powered on Instagram, the higher the chances that shoppers will push through to purchase the product. Similar results were obtained by Xu et al. (2020) and Serra-Cantalops et al. (2018), who found that emotional value positively affected the purchase decision of fashion artificial intelligence Instagram store. They stressed that these emotions value the shoppers' feelings after reading online reviews and other eWOM of the product. In a similar vein, Handarkho (2020) is the most important predictor in a purchase decision, and the most important construct discovered was the system's ability to provide an enjoyable experience. Furthermore, the perceived emotional value factor can be increased by leveraging the platform's ability to deliver high-quality content.

Interestingly, perceived price and perceived risk were not significantly related to purchase decisions. This finding contradicts Wadera and Sharma's (2018) study that found perceived price or value as an attraction towards the consumer, which led to browsing through



the store, creating appeal to the apparel, and positively leading towards decisions. The effects of artificial intelligence on perceived price does not strongly influence shoppers' purchase decisions for fashion. The reason could be the lack of physical access to the items, and the perceived depth of information offered online will help lessen price sensitivity. Furthermore, it is surprising that this study confirms perceived risk as having no direct effect on the shoppers' purchase decisions. They indicate that it is not a big deal for customers to disclose their personal information while buying their favourite fashion items on Instagram. The findings of this study vary from earlier research (Sun et al., 2019; Zhou, 2020), which indicated that Instagram shoppers' had shown less interest and motivation to purchase when the perceived risk is high. On the same note, when interviewed, perceived risk was mentioned as one of their concerns towards purchase decisions via Instagram. They feel insecure about the payment method on Instagram. Instagrammers will lose confidence in the legitimacy of Instagram or online merchants as the perceived risk of buying through Instagram increases.

## **5. Theoretical and managerial implications**

### *5.1 Theoretical implications*

This research extends our knowledge of consumer purchase decisions using artificial intelligence in the fashion industry in social commerce platforms, particularly, Instagram in many aspects. Furthermore, this research looked at the relationships between the effects of artificial intelligence that drive shoppers purchase decisions in fashion via Instagram within the context of Malaysia. Through this study, several theoretical and practical implications may be derived from this research.

Interestingly, the results of this study may benefit academics and researchers interested in adapting the Engel-Kollat-Blackwell (EKB) theory in online shopping. The EKB model has been widely used and has established the model's validity by examining customer decision-making in various fields. Hence, it has contributed to the EKB theory by expanding the model to consumers' purchase decisions based on the effects of artificial intelligence in Instagram for fashion retailers. Likewise, this research has also proven the validity of the model in studying fashion purchasing decisions by investigating the effects of artificial intelligence via Instagram. The study has also contributed to the sparse literature on social commerce use in the decision-making process, specifically the EKB model. It has shifted the literature discourse, posited that social commerce influences shoppers' purchase decisions for information search and need recognition.

Last but not least, it was discovered that certain variables from consumer behaviour theories are more significantly associated with the purchase phase of the consumer decision-making process than with other stages. Others, on the other hand, are more closely associated with the post-purchase phase. In various ways, depending on where a consumer is in the purchasing decision process, numerous variables may influence their behaviour. According to this model, perceived emotional value is more significant in the pre-purchase phase than it is in the post-purchase phase.

### *5.2 Managerial implications*

The digital transformation of retail operations has become a must for remaining competitive in changing marketplaces. It is advantageous for marketers and other entrepreneurs to consider how shoppers respond to emerging technologies, specifically the use of artificial intelligence in online shopping via Instagram. Artificial intelligence radically changes the nature of marketing, resulting in major changes in how customers interact with retailers. First, the IPMA revealed that perceived emotional value is the most important factor influencing shoppers' purchase decision of fashion artificial intelligence Instagram store. It implied that the one-point increase in perceived emotional value would increase Instagram shoppers' purchase decisions performance with the value of 0.378. Therefore, this study suggests that fashion retailers have provided Instagram shoppers with a very positive affective experience, a pleasing, exciting, and intuitive interaction with a simple but straightforward yet appealing interface in achieving shoppers' perceived emotional value.

In addition, increasing consumer assurance is a driver of purchase decisions, which retailers may address by providing one-on-one discussions, guaranteed satisfaction promises, and return policies. Besides, retailers must also pay attention to the service quality it delivers. In these competitive online businesses, perceived quality plays a crucial role in making a purchase decision. Marketing techniques can be structured to highlight the product characteristics and cues that contribute to customers' perceived quality of the products and services. According to the findings of this research, merchants should concentrate on the issue they are facing while simultaneously addressing their shortcomings. As a result of this development, merchants will be better able to comprehend the requirements of their customers and therefore enhance their shopping experience. As a result, this assists a business in raising its profile, gaining a bigger market share, and increasing sales volume.

## **6. Conclusion, limitations and future research directions**

This research extends our knowledge of shoppers' purchase decision of fashion artificial intelligence in Instagram shopping in many facets. The commonly used Engel-Kollat-Blackwell (EKB) theory was proved to be suitable for examining shoppers' purchase decisions of fashion artificial intelligence in Instagram shopping. Furthermore, this study has investigated the influence of a few factors, namely perceived eWOM, perceived emotional value, perceived quality, perceived risk and perceived price, to determine e-shoppers' purchase decisions among Instagrammers in Malaysia. The proposed model was evaluated using the PLS-SEM technique, and it adequately explained the purchase decision to shop on the Instagram platform (42.1%). Additionally, current research reveals that perceived eWOM, perceived quality, and perceived emotional value positively influence e-shoppers' purchase decision among Instagrammers, but not for the perceived price and perceived risk. Finally, this study suggests the pressing need for further studies of the purchase decision at s-commerce platforms and the utilisation of new technologies to enhance services in the retail sector.

Because of the significant beneficial effect of the recent COVID-19 crisis on s-commerce, it is expected that the role of artificial intelligence in Instagram buying will grow in the future. Pandemic lockdowns have an impact on consumer behaviour and the development of artificial intelligence. Nowadays, creating a personalised consumer experience is more essential than ever, meet shoppers' demands, and provide a more fabulous Instagram shopping experience. In these efforts, artificial intelligence used in the fashion industry can be a very effective tool in overcoming consumer behavioural and social change towards digital transformation, as shown by the results of this paper's study.

Despite meeting its objectives, the current research had several limitations that might have resulted in a different conclusion. First, this research only looked at Instagram users in Malaysia, obscuring whether cultural principles play a part. Possibly, future research may look at shopper experiences in different countries. Collecting data from different s-commerce consumers from diverse nations may enhance the study model's validity. Second, the insignificant relationship between perceived price and purchase decision, perceived risk and purchase decision, suggests an intriguing avenue for further research. As Steinhoff, Arli, Weaven, and Kozlenkova (2019) point out, risk and privacy concerns have arisen as major concerns in the ever-changing digital environment. Third, this research is focused only on the fashion industry. Future studies could consider other types of industries or perhaps focus on a specific product. Lastly, information was gathered from respondents who utilised the Instagram

site. As a result, future research may include data from Facebook and WeChat, to evaluate various fashion social commerce platforms.

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