A TAM Approach of Studying the Factors in Social Media and Consumer Purchase Intention in Hong Kong

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Author’s contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

In order to do all these commercial activities in an effective and efficient way, using the online social media platform is a suitable choice. This research studies that perceived risk, perceived usefulness, trust, and electronic word-of-mouth are the four predictors of consumer purchase intention. It is noteworthy that the results of this study show that perceived usefulness, perceived risk and electronic word-of-mouth are the key factors affecting customers’ decision in purchasing. The results show that the consumers’ relationship between their trust in the social media network platform information and the use of the product is not significant.

Keywords: Hong Kong; TAM; perceived risk; perceived usefulness; trust; electronic word-of-mouth; purchase intention.

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1. INTRODUCTION

Nowadays, businesses use the Internet to carry out their commercial activities around the world to reach a huge number of potential market and consumers. They are using the Internet to do the advertisement to promote their brand, to collect consumers’ feedback or opinion on some products or services, and to analyse the potential market and the consumers’ preference. In order to do all these commercial activities in an effective and efficient way, using the online social media platform is a suitable choice. As people nowadays are widely using the online social media platform to communicate with friends or other people, to build up or to maintain the relationship with others, and to share their opinion through the platform, it provides a chance for businesses to reach a huge number of potential consumers. The platforms that people mostly used are Facebook, YouTube, blogs and virtual game worlds, etc. These social media platforms are now used as communication and advertising tools by marketers [1] for the purpose of listening to what consumers are saying about the products and also for interacting with them [2]. Consumers seek advice on social media before making their purchase decisions [3] and they usually rely on user-generated content in their decisions [4]. Many researchers surveyed the impact of different social media platforms on consumers purchase behaviour from different perspectives [1,2,3,5,6].

Nevertheless, most of these previous studies did not focus on how social media influences the purchase intention of the consumer. Therefore, it is essential for marketers to determine which factors in social media affect consumers’ purchase intentions. The aim of this study is to contribute to the literature on consumer behaviour by examining the impact of social media as an internet platform on consumers’ purchase intentions and its factors that influence purchase intention.

This research offers a literature review of relevant studies and hypothesis development, then explains the methodology used, the sample, data collection method and data analysis approaches. After then are the findings of analytical analysis, discussion and finally, the recommendations and conclusion.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Social Media

Social media has significantly attracted market attention, as scholars and practitioners are eager to explore their potential in supporting brands [7], marketing, customer service, and product development [8]. Because of the popularity of social media and their perceived trustworthiness, more and more organisations have a social media presence in order to attract customers with their products and brand [9]. In social media, there are a lot of social networking tools that are available for the businesses and individuals to use as a medium for them to participate. Facebook, Twitter, YouTube and Bloggers are the four popular social media tools worldwide. Each of the tools has its own function in conducting e-commerce.

2.2 The Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was developed by [10] to predict users’ adoption of new technology and has since received great attention in academic literature. A great number of previous studies applied several theoretical perspectives to explain and understand consumers’ acceptance and the use of new technology. The TAM is considered as the most effective approach to investigate consumer acceptance and use of technology related application [11]. The TAM was developed based on the theory of reasoned action (TRA) [12]. However, TAM didn’t explain variance in user behaviour and provided limited implications for new technology adoption because of its parsimony [13]. Moreover, TAM did not provide a unifying model of all the user acceptance factors, and ignored institutional or external influences [14]. Because of these limitations, this study only brings about part of the constructs from TAM.

2.3 Purchase Intention

The purchase intention is to determine why consumers bought a particular brand [15]. The studies by Zeithaml [16] found that the decision to purchase a product largely depends on the value consumers recommended in products and other social media. According to Zwass [17], a purchase intention is that a customer intends to establish an exchange relationship with a retailer,
such as sharing business information, maintaining a business relationship, or conducting a business transaction. In addition, according to the theory of reasoned action (TRA), purchase intention is defined as the subjective probability of a person participating in a specific intention, the purpose of which is to define the most important factors in purchase intention [18].

As the rapid development of electronic media as a powerful and reliable source of information, research shows that consumers’ attitudes toward user-generated contents on YouTube and their intention to use user-generated contents in purchase decisions are positive [6]. Consumers’ positive attitude towards online user-generated contents increases their willingness to trust such content [19], and it also significantly increases the impact of human interaction on purchase decisions [20].

A study by [21] has found that if consumers have a positive attitude towards the brand, this will significantly affect their purchase goals and they are willing to pay a high price for them. Since purchasers intend to engage in online transactions may be an important predictor of consumers’ actual participation in e-commerce transactions [22], it has attracted great interest from researchers [5] to study these predictors.

Based on the previous studies examined various determinants of online store transactions [6,23,24,25] and the application of TAM model, this study aims to study the determinants of transaction intention that usually mentioned in a shopping environment, they are perceived usefulness, trust, perceived risk and electronic word-of-mouth in the social media.

### 2.4 Perceived Usefulness

Perceived usefulness has been regarded as one of the most influential predictors of information technology adoption [10,18,22,26,27,28] and is defined as the degree of which an individual believes that using a system would improve his or her job performance [18]. In the context of social media, current studies treat usefulness as perceived usefulness of social media information, therefore, Mir and Rehman [6] redefined the usefulness as the degree to which a blog reader perceives and believes that adopting social media information would enhance their online shopping behaviour and performance.

In the original technology acceptance model (TAM), Davis [18] suggested that the perceived usefulness affects attitudes. A recent study by Wong [29] further explores this relationship between perceived usefulness and attitude to use a service. This supports the postulation that perceived usefulness affects the consumer attitudes toward product related information available on social media [29]. Also, the theory of reasoned action (TRA) also suggests that an individual may develop beliefs by referring to information from or normative practices of a group and peers. Consequently, these beliefs will influence individual behavioural intention.

Consumers usually seek out other consumers’ comments, views and recommendations on the web to lessen the risks involved in a purchase [30]. Today consumers use social media (e.g., social network sites, blogs, YouTube) to find user-generated product information to support their purchase decisions because they perceive user-generated product information on social media. Users generate and share useful information on social media (e.g. YouTube) based on their personal product and purchase experiences and they believe to share both negative and positive product experiences which make user-generated comments not only credible but also useful [31]. Previous studies on consumer behaviour have indicated that reference groups influence consumers’ purchasing behaviour [32,33,34]. Recommendations from such groups play an important role in consumers’ decisions, particularly when purchasing expensive and new products and services are concerned.

Perceived usefulness is defined in this study as the degree to which a person believes that using social media would enhance his or her shopping performance. Social media makes individuals productive by allowing them to find information of the products, access the user-generated comments on the product, and communicate through social media at any time and any place. Some research [28,35] found that the perceived usefulness of using social media will positively affect individuals’ purchase intention.

Based on the review of the above studies, perceived usefulness positively affects an individual’s purchase intention. Thus, this study proposes a hypothesis as below.

Hypothesis H1: Perceived usefulness of information has a positive effect on consumer purchase intention.
2.5 Perceived Risk

Perceived risk is defined as the extent to which a potential buyer is uncertain about the consequences of buying, using, or disposing of an offering [36]. This definition highlights two relevant dimensions of perceived risk: uncertainty and consequence. Perceived risk can take many forms, depending on the characteristics of social media. The degree of risk that consumers perceived and their own tolerance of risk taking are influenced by the risk that they perceived, whether or not such risks actually exist. This has led many people to view using social media as a risk.

For social media users, increased level of perceived risk is likely to reduce purchase intention. Social media users are reluctant to provide information on the Internet because they fear their private information may be misused by some unauthorized person. In general, an increased uncertainty about the outcome of making a purchase will lead to increase reluctance to engage in purchase activities [37].

A study by Liu and Wei [38] of product differences in consumers’ e-commerce adoption behaviour found a strong relationship between the purchasing intention and consumers’ perceived risk, so the review of the above studies proposes the second hypothesis.

Hypothesis H2: Perceived risk has a negative effect on consumer purchase intention.

2.6 Trust

Trust is defined as the perceived credibility and benevolence of a target of trust which means the other parties [39]. This definition of trust is also relevant in an online buying context. The trust in this research primarily targets the information on social media rather than products. Information on social media includes advertising content, user-generated contents, and user reviews. A consumer’s belief in the ability, integrity, and benevolence of the online store gives rise to an interpersonal trust in it [40,41]. Trust in an online store may be conceptualised as a general mechanism through which the focal independent variables under consideration are able to positively influence purchase intention [42]. In online transactions, the salesperson is either absent or peripheral in the selling and buying process [43], the customer is generally at a huge distance from the seller, and the customer cannot physically check the products [44]. In such cases, online information becomes the primary target of consumer’s trust.

Trust is an important factor in successful online trading [45], which is also the key issue to attract and retain customers and gain the competitive advantage on the electronic commerce [46]. In recent years, many studies have explored the relationship between trust and shopping behaviour in the online context. On the basis of the TAM, researchers have incorporated trust to develop a comprehensive model and have empirically verified that trust has a significant effect on perceived usefulness and online shopping intention [41,47,48]. Similarly, previous studies have confirmed that trust significantly affects the attitude [49,50]. Purchase intention has been considered among the most commonly identified consequences of trust [42]. Because the online transaction is characterised by information sharing and purchase action, purchase intention will depend on many different factors [51]. Being one of them, trust acts as a lubricant to facilitate an online purchase decision. The consumer is motivated by their subjective belief that the selling party or entity will fulfil its transactional obligations as the consumers’ understanding [22].

Research has also found that trust beliefs may become important factors predicting purchase intention [44,52,53,54,55,56], and lack of trust acts as a main reason for not shopping online [57]. Wong [58] further explores the effect of trust in repurchase intention as trust might be built up in the previous purchase. Researchers have found that higher trust in online environment will result in higher customer online purchase intention [59,60,61]. Moreover, studies such as [59] and [62] also noted that trust positively influences attitude and shopping intention, the results of those studies being consistent with those obtained in an earlier study by Jarvenpaa et al. [63]. Therefore, it is proposed in this study that trust will positively affect customers’ attitudes toward online shopping and behavioural intention to shop online.

Consumers depend on the information on a social media platform in making purchase decision. The information includes brand images, reputation of the store apparent from feedback of existing customers, awareness level about the store as well as perceived risk accompanying transactions made with the store. It is quite obvious that while the first three components
positively affect the trust-building process, the last one has a negative effect [64]. Moreover, a relationship between trust and perceived usefulness as well as trust and perceived risk were studied and defined by Gefen et al. [41], Amaro and Duarte [65], so the following hypotheses are proposed.

**Hypothesis H3:** Trust will positively affect consumer perceived usefulness.

**Hypothesis H4:** Trust will negatively affect consumer perceived risk.

**Hypothesis H5:** Trust will positively affect consumer purchase intention.

### 2.7 Electronic Word of Mouth

Electronic word-of-mouth (eWOM) was defined by Ismagilova et al. [52] that it is the information exchange process between consumers regarding the product, service, brand, or company via the Internet. Consumers giving comments or reading other comments on social networks is for opinion seeking, giving and passing [66]. They perceived that social media is being a more reliable source of information about the brand. It is because, in traditional ways of knowing the information about the brand product or service, consumers are only receiving the information that given or provided by the company themselves, which might have been filtered out the things that bring negative impact on the brand name or the company products or services. People also rely on argument quality of the reviews in the social media, for example the whether the source of the reviews are credible, or the reviews are consistent [67]. Cheung et al. [68] have more detailed in argument quality. They commented there are four issues inside argument quality in which relevance and comprehensiveness are significant whilst timeliness and accuracy are not significant to the usefulness of information found in the social media. Because of the different perception by consumers, consumers may have a chance of buying the unsuitable products or services because of reading the filtered information. However, nowadays consumers are able to share their opinion or experience of the product or service through the social media platform. Each consumer can comment on others’ comments. Therefore, the information of the product or service posted on the social media platform is more comprehensive and without filtering by any parties. Consumers tend to believe those comment on the social media is trustworthy than traditional ways of seeking information made by marketers [9]. As the eWOM can be positive or negative comment, a research done by [69] found that the positive eWOM may influence the consumers’ purchase intention among university students. In addition, the research by [58] found that eWOM is related to trust. More than that, a research done by Yaylı and Bayram [70] found that positive eWOM not only affecting consumers’ purchase intention but also can influence the purchase frequency. From the literature review above on

![Fig. 1. Research model](image-url)
eWOM, this study proposed the following two hypotheses.

**Hypothesis H6:** Positive electronic word-of-mouth has a positive effect on consumer trust.

**Hypothesis H7:** Positive electronic word-of-mouth has a positive effect on consumer purchase intention.

### 2.8 Research Model

Fig. 1 shows a conceptual model that describes the relationship of the constructs in this research and how the constructs are related. The main purpose of this research is to investigate the factors that are expected to be more prominent in the online environment, especially in social networking sites.

### 3. METHODOLOGY

The following descriptions provide a summary of methodology of this research.

#### 3.1 Sampling

The study population consists of social media users in Hong Kong. According to Norman [71], YouTube is widely used by younger users, 82% of 18 to 29 year-old people used YouTube in 2010. Therefore, in response to our research, Hong Kong people who are with age between 18 and 30 were selected as the survey target. The sample shares the similar characteristic, economic ability, and consumption. The expected sample size is 400.

##### 3.1.1 Convenience sampling

To ensure that the online survey is accurately sent to the people in our target respondents, a web-based online questionnaire was delivered to the email address of the researchers’ friends who are studying in a university elsewhere. They were asked to forward the emails to their friends as well. Additionally, the web link of the online questionnaires was sent through WhatsApp or WeChat of their friends, then they can forward the link to their WhatsApp groups or WeChat groups so that more young people can participate in filling the questionnaires. Moreover, researchers work at Ocean Park and the skating rink at Tai Koo City Plaza respectively helped to invite their staff members who meet the age requirement of this study to fill the questionnaire.

The data were collected through quantitative research in which the questionnaires were created in an online survey in Google Form. This link of survey was uploaded to the social website: Facebook, which is a simpler and easier way to understand [72]. The respondents in this survey are anonymous. This is also useful for data collection and is more likely that the respondents will give honest answers [72].

#### 3.2 Data Collection Method

The questions shown in Table 1 below are derived from different researches that measure the five constructs: purchase intention, perceived usefulness, trust, perceived risk and electronic word of mouth. It is proposed to use three questions of [3] to measure perceived usefulness. Perceived risk and electronic word of mouth are measured by four questions derived from [53] and [73] respectively. The constructs, trust and purchase intention are measured by the questions from [6]. Five-point scale was used for the questionnaires. Those questions from these previous studies were used because of their proven satisfactory level of reliability and validity. They contribute to the significance of this research.

#### 3.3 Questionnaire Design

Pearson product moment correlation was used to test the relationship between each construct, structural equation modelling was used to study the significance of the whole whilst multiple linear
regression were used to test the model that link the four independent factors, which are perceived usefulness, perceived risk, trust and electronic word-of-mouth, and dependent factor which is purchase intention in testing the seven hypotheses with 95% confidence interval. Statistical software SPSS and LISREL were used for correlation, multiple linear regression and structural equation modelling respectively.

4. RESULTS AND ANALYSIS

The statistical analysis includes sample characteristics, validity and reliability tests and hypotheses testing.

### 4.1 Demographic Analysis

After the data collection, 187 questionnaires were adopted from 400 respondents by screening out the abnormal data. The demographic variables of the research are shown in Table 2. There is almost equal proportion of male and female. Majority of respondents are between 18 and 25 years old and spend 1 to 3 hours per day on the social media.

### 4.2 Validity Test

Validity test was carried out using exploratory factor analysis (EFA). Table 3 shows the results
of EFA. For perceived usefulness, electronic word-of-mouth, and purchase intention, all items loaded into a single component with relatively high factor loading, which are greater than 0.7 [74]. The results show that all items in each construct are fall into their component respectively and have factor loading greater than 0.70.

4.3 Reliability Test

A reliable analysis with Cronbach’s Alpha test was undertaken. The result of reliability test in Table 4 shows that all constructs scoring Cronbach’s Alpha coefficient of 0.88 and above, the remaining items are said to be sufficiently reliable for significant testing, thereby meeting requirement for academic and management studies [75].

4.4 Hypotheses Testing

Pearson correlation coefficient was used to test the relationship between two constructs. Table 5 below shows a summary of the results of correlation test. The results show the relationships between the five constructs: intention (PI) and each others of perceived usefulness (PU), perceived risk (PR), trust (Trust) and electronic word of mouth (eWOM) according to the hypotheses.

H1: Perceived usefulness of information has a positive effect on consumer purchase intention

The correlation test result in Table 5 shows that the p-value is less than 0.05, which means perceived usefulness affect purchase intention

### Table 2. Demographics of respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>99</td>
<td>52.90%</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>47.10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18</td>
<td>13</td>
<td>7.17%</td>
</tr>
<tr>
<td>Between 18-21</td>
<td>91</td>
<td>48.46%</td>
</tr>
<tr>
<td>Between 22-25</td>
<td>60</td>
<td>32.08%</td>
</tr>
<tr>
<td>Between 26-30</td>
<td>23</td>
<td>12.29%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average hours spent on social media</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 1 hour</td>
<td>17</td>
<td>9.22%</td>
</tr>
<tr>
<td>1-3 hours</td>
<td>75</td>
<td>40.27%</td>
</tr>
<tr>
<td>4-6 hours</td>
<td>47</td>
<td>24.91%</td>
</tr>
<tr>
<td>More than 6 hours</td>
<td>48</td>
<td>25.60%</td>
</tr>
</tbody>
</table>

### Table 3. Factor Loading

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Component</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived usefulness</td>
<td>PU1</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>PU2</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td>PU3</td>
<td>0.71</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>PR1</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td>PR2</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>PR3</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>PR4</td>
<td>0.95</td>
</tr>
<tr>
<td>Trust</td>
<td>T1</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>T5</td>
<td>0.75</td>
</tr>
<tr>
<td>Electronic word-of-mouth</td>
<td>eWOM1</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>eWOM2</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>eWOM3</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>eWOM4</td>
<td>0.87</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>PI1</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td>PI2</td>
<td>0.71</td>
</tr>
</tbody>
</table>
significantly. The Beta value of 0.74 confirms the positive relationship between two constructs. Therefore, the hypothesis H1 is supported.

H2: Perceived risk has a negative effect on consumer purchase intention.

The correlation test results in Table 5, with p-value less than 0.05, confirm that the perceived risk of consumer affects their purchase intention on social media in Hong Kong. Moreover, with the standardized Beta value of −0.55, this relationship is resulting in negative number, which means the influence is negative related, hence giving support to hypothesis H2.

H3: Trust will positively affect consumer perceived usefulness.

The test results in Table 5 shows that the p-value is less than 0.05, which means that trust has significant effects on consumer’s perceived usefulness. However, the Beta value (−0.31), which is a negative number indicates that trust has negative effects on consumer’s perceived usefulness, hence the hypothesis H3 is not supported.

H4: Trust will negatively affect consumer perceived risk.

Although, the correlation test results in Table 5, with a p-value less than 0.05, indicating that the trust is significantly affecting the consumer’s purchase intention of teenagers in Hong Kong, the negative Beta value (0.72) shows that the relationship is positive, hence it is not supporting hypothesis H4.

H5: Trust will positively affect consumer purchase intentions.

The correlation test results in Table 5, with p-value less than 0.05, confirm that the trust to online social media affects the purchase intention of teenagers in Hong Kong. However, the standardised Beta value (−0.42) of this relationship is resulting in negative number, which means the influence is negative related. Thus, the hypothesis H5 is not supported.

H6: Positive electronic word-of-mouth has a positive effect on consumer trust.

As shown in Table 5, with the p-value less than 0.05, a significant relationship is found between electronic word-of-mouth and trust. However, the Beta value (−0.37) is a negative number, which means the relationship found is negative. Therefore the hypothesis H6 is not supported.

H7: Positive electronic word-of-mouth has a positive effect on consumer purchase intention.

The correlation test results in Table 5, with a standardised Beta value of 0.78 (p <0.05), confirm that the electronic word-of-mouth has a positive effect on consumer purchase intention on social media in Hong Kong, hence giving support to hypothesis H7.

4.5 Model Analysis

Besides studying the relationships between two constructs, this research also did further testing by using LISREL software for structural equation modelling (SEM) in studying the whole research model. Structural equation modelling (SEM) has numerous applications, ranging from measurement analysis to verification of relationships. SEM is most suitable for latent variables and therefore for social behavioural studies using higher-level statistical analyses [76,77]. The proposed research structural model is drawn in SEM to relate to the relationships that are theoretically sound and the latent variables and their respective measuring items for the study are outlined. Table 6 presents the most
common statistics in SEM used to make decisions on model fit. Although these statistics provide a guideline for making decisions on model fit, as this study was to test the relationship developed between two constructs, other relevant statistics such as regression weights were used to verify the relationships.

Table 6. SEM Statistics and Decision Rule for Model Fit

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Decision rule for model fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square ($\chi^2$)</td>
<td>p-value &gt; 0.05</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.03 &lt; RMSEA &lt; 0.08</td>
</tr>
<tr>
<td>CFI</td>
<td>CFI &gt; 0.9</td>
</tr>
<tr>
<td>PCFI</td>
<td>PCFI &gt; 0.9</td>
</tr>
<tr>
<td>GFI</td>
<td>GFI ≥ 0.9</td>
</tr>
<tr>
<td>AGFI</td>
<td>AGFI ≥ 0.9</td>
</tr>
</tbody>
</table>

Table 7 shows the results of SEM analysis. Although CMIN = 227.394, df = 96, p-value = 0.0001, Cmin/df = 2.321, indicating a significant reduction Cmin/df, the measurement model is to be a satisfactory model as p-value of this $X^2$ test is less than 0.05. Also, GFI = 0.918, CFI = 0.942, AGFI = 0.702 and RMSEA = 0.062 satisfy the rule for a satisfactory model [76,77].

4.6 Regression Analysis

Besides studying the relationships between two constructs and structural equation model, this research also did further testing by using multiple regression analysis on how the four independent constructs, perceived usefulness, perceived risk, electronic word-of-mouth, and trust affect the dependent construct, purchase intention at the same time. As indicated in the model shown in Table 8, there is a significant total effect of perceived usefulness, perceived risk, trust and electronic word-of-mouth on purchase intention (adjusted $R^2=0.7, p<0.05$) in the model. In Table 9, where p-value less than 0.05 shows that there is at least one construct in the four independent constructs that have an effect on dependent construct which is purchase intention.

Table 7. Measurement Model by SEM

<table>
<thead>
<tr>
<th>Model</th>
<th>CMIN</th>
<th>DF</th>
<th>P</th>
<th>CMIN/DF</th>
<th>GFI</th>
<th>AGFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>227.394</td>
<td>96</td>
<td>0.000</td>
<td>2.321</td>
<td>0.918</td>
<td>0.702</td>
<td>0.942</td>
<td>0.062</td>
</tr>
<tr>
<td>Saturated model</td>
<td>0.000</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>1.000</td>
<td>-</td>
<td>1.000</td>
<td>-</td>
</tr>
<tr>
<td>Independence model</td>
<td>2451.329</td>
<td>116</td>
<td>0.000</td>
<td>23.718</td>
<td>0.409</td>
<td>0.316</td>
<td>0.000</td>
<td>0.219</td>
</tr>
</tbody>
</table>

*CMIN: Chi square; DF: degree of freedom; P: p-value; GFI: Goodness-of-fit; AGFI: Adjusted goodness-of-fit; CFI: Comparative Fit Index; RMSEA: Root Mean Square Error of Approximation

Table 8. Model summary

<table>
<thead>
<tr>
<th>R</th>
<th>R square</th>
<th>Adjusted R square</th>
<th>Std. error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.84</td>
<td>0.71</td>
<td>0.70</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Table 9. ANOVA of the model

<table>
<thead>
<tr>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>607.24</td>
<td>4</td>
<td>151.81</td>
<td>109.74</td>
</tr>
<tr>
<td>Residual</td>
<td>253.16</td>
<td>183</td>
<td>1.38</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>860.40</td>
<td>187</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10. Coefficients of model (dependent variable: purchase intention)

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>Std. error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td></td>
<td>0.63</td>
<td>0.00</td>
<td>3.14</td>
<td>0.002</td>
</tr>
<tr>
<td>Perceived usefulness</td>
<td>0.25</td>
<td>0.04</td>
<td>0.83</td>
<td>0.38</td>
<td>6.74</td>
<td>0.000</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>-0.07</td>
<td>0.04</td>
<td>-0.10</td>
<td>-1.62</td>
<td>0.108</td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>-0.04</td>
<td>0.04</td>
<td>-0.06</td>
<td>-1.08</td>
<td>0.283</td>
<td></td>
</tr>
<tr>
<td>Electronic word-of-mouth</td>
<td>0.24</td>
<td>0.03</td>
<td>0.44</td>
<td>7.70</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
In the coefficient analysis, the relationships between each independent construct and dependent construct are shown in Table 10. The relationship between perceived risk and purchase intention (p > 0.05) shows that perceived risk dose not significantly affect purchase intention in this model. The relationship between trust and purchase intention (p > 0.05) also indicates that the assumption that trust affects purchase intention in this model is not supported.

Besides the relationships mentioned above, the other relationships (p < 0.05) show that two independent variables: perceived usefulness and electronic word-of-mouth significantly affect purchase intention. Compared to the relationship between perceived usefulness and purchase intention in correlation analysis, where the beta value is 0.74, and the beta value of the relationship found in this model is 0.38, which is much lower. The reason for the decrease of the beta value is that the extent to which the perceived usefulness affects purchase intention is influenced by other independent variables. The result also is similar in electronic word-of-mouth affecting purchase intention in this model (0.78 to 0.44).

5. DISCUSSION

Recent development of the Internet and social media has facilitated the connection of consumers. Consumers have social interactions through social media such as online forums, communities, ratings, reviews and recommendations. These developments have introduced a new stream in e-commerce that empowers consumers to generate content and influence others. This study borrows constructs from the technology acceptance model (TAM), and integrates them with trust and social media concepts to propose a model to examine the role of social media in consumers’ purchase intention. This study postulated seven hypotheses to address main research questions.

According to the analytical results by structural equation model, the findings show that the proposed research model is significance in relating the various independent variables to their corresponding dependent variables. The findings also show that the significance and contribution of this research in applying a TAM approach.

Specifically, perceived usefulness, in line with previous research undertaken in other contexts and concerning other technologies [18,35], was found to be the most important driver of purchase intention. Consumers’ purchase intention will be increased when they experience high levels of system quality or information quality though social media. The positive influence of perceived usefulness on online purchase intention through social media among the respondents seems to suggest that the more the respondents perceived online social media is useful in helping them to buy online, the more likely they will have the intention to purchase. This might be due to the special characteristic of the Internet that makes social media available everywhere at any time for the consumers who want to purchase online through social media compared to the off-line shops. When the social media is not so useful to enhance their purchasing, the customers will just stick back to the previous way of how they purchase products. Hence, improving the quality of social media can enhance perceived usefulness in their consumers. The finding also supports previous studies [35,78] in claiming that perceived usefulness and purchase intention as the hypothesis.

Perceived risk was found to have a significant influence on users’ purchase intention. Cho et al. [79] stated that for online shopping, it is necessary to decrease perceived risk that will affect users’ purchase intention. Perceived risk may appear in the purchase environment once consumers believe that they cannot control purchase outcome. The results of data analysis show that perceived risk negatively affect consumers’ purchase intention, which supports results of previous studies such as [80], who postulates a negative relationship between customers’ perceived risk and purchase intention. In other words, it is important to decrease the customers’ perceived risk to increase their purchase intention since risk is a key issue in social media users’ decision-making. The lower the perceived risk, the higher the purchase intention will be. There are many uncertain factors that affect consumers’ purchase intention, which is often accompanied by negative effects. As the Internet is virtual and perceived risk can be expressed in a variety of ways. For example, a customer wants to make a decision to buy a pair of shoes. If he is afraid that personal information is misused in the use of the media, the customer will not want to find the information through the media to determine whether he needs to buy it. Therefore, reducing privacy and security issues will increase the reliability and credibility of the media, and help
customers decide their purchase intention through the media.

The results show that there is no positive influence relationship between trust and perceived usefulness. This finding is similar to the result by Cheung et al. [68] but is inconsistent with the finding by Agag and El-Masry [24]. Based on the findings, the result indicates that the relationship between user trust in the information on the social media platform and the usefulness of the product is not significant. The usefulness of a product is mainly directed at the product itself and is not directly related to the user’s trust in social media information. Therefore, according to the survey results, although according to many research papers, there is a positive relationship between trust and perceived usefulness. However, the survey found that they can also have no positive relationship. It also shows the complication of trust issue in the online virtual environment.

Base on the study, there is no negative relationship between trust and perceived risk. However, this is inconsistent with the findings of previous research [65,81]. Users have high trust in information on social media platforms on the Internet, but according to the current social environment in Hong Kong, online shopping is still not popular, people still have great doubts about online shopping, and some security measure that protects consumers’ online shopping are imperfect. Therefore, although the respondents’ trust in the information of the online platform has increased, it does not mean that their perceived risk is reduced.

The results this study do not match with the finding by Nirankush and Anil [82]; and Fu et al. [23]. The reasons for the discrepancy of the survey results might be the information provided in social media platforms is both positive and negative. People have a higher level of trust for information on social media does not mean that their purchase intention is higher. The positive information on the social media platform can improve the consumer’s purchase intention. On the contrary, the negative information will reduce the intention. On the other hand, nowadays, there are a variety of choices in online shopping and many stores are selling similar products. The main difference is only the price and quality and it doesn’t matter about the information on the social media platform. Base on the price and quality, customers can search for different products and choose to buy from different online stores when they make their purchase. Despite the fact that customers trust the information of the products on the Internet, they will still look for cheaper stores to buy. By comparison, people’s trust in online information cannot directly affect consumer’s purchase intention but perhaps the price level and product quality might be. People may look for stores that provide a better quality of products or cheaper prices in the next purchase, even they think the previous purchased online store is trustworthy.

In addition, there is no positive relationship between trust and consumers’ purchase intention in this research. Consumer’s trust in social media platform information increases does not mean that people will increase their purchase intention. Though many studies [23,24] show that trust is an important factor in the study of purchase intention, based on this study, trust can also be a factor that does not directly affect the purchase intention.

For the hypothesis that positive eWOM has a positive effect on consumer trust, it was not supported by the result of this study. It may be because of many fake consumers’ reviews on the Internet which give inaccurate information to mislead or influence consumers’ buying decision. According to research done by Mukherjee and Mukherjee [83], consumers will be very likely to buy a product if they find that most of the reviews are positive, on the other hand, they will seek for another product if they find that most of the reviews are negative. As many merchants know that the review seriously influences the consumers’ purchase decision, they try to give a reward to or even pay the consumer if they give a positive review on their product, and that is reason explaining why the positive online consumers’ reviews are not reliable. Nowadays, writing fake reviews has become a business, more fake reviews on the net, and this problem had been reported on the news in 2012 on New York Times. Many fake reviews were written by people who employed by some agents. When this situation becomes more and more frequent, some consumers may not believe what others’ comment since the comment might be not reliable and not reflect the truth. Although the result shows that some consumers do not believe on what others’ comment of the products or services, the positive eWOM still influences the consumers’ purchase intention. According to the research of [84], when consumers need to buy a new product and they have no idea on which brand or which model to buy, in order to
seek for information, by reading the reviews of other consumers is really helpful. It gives information about the products or services, how others’ feeling about it. In reading others’ reviews, consumers may lower the risk of making a wrong purchase decision. In some cases, some of the consumers may read the positive reviews to support their purchase decision. They firstly have the idea of which brand or which model to buy the product. However, they will try to read the positive reviews of other consumers' as a reference of supporting them before they make their purchase decision. In other words, this behaviour is seeking for strengthening consumers’ satisfaction.

Because of the importance of studying consumer’s purchase intention, the research also applied the multiple linear regression analytical approach to study the effects of the four constructs on purchase intention simultaneously. However, the findings by regression analysis show that perceived risk and trust are not significant in affect purchasing when consider four independent variables together. It might be the reason that when consumers considering four variables together, they will think usefulness and word-of-mouth found in the Internet more important than other issues.

6. LIMITATION AND RECOMMENDATION

Although the results of the survey analyse that trust does not directly affect the purchase intention, the study is subject to two restrictions. First, the sample is self-selected because the respondents are mainly young people with age 18 to 30. Therefore, the scope of the survey cannot cover people in other age groups. There might be a bias in the survey results. Second, the information provided on social media platforms can be either positive or negative comments. Due to time constraints, it is difficult to study positive and negative comments, which may be an important factor for users. This study suggests that future researches can do further investigation on the impact of these issues.

7. CONCLUSION

The objective of this research is to study the main factors that influence consumer decisions in social media. These factors are eWOM, perceived usefulness, perceived risk and trust, and how they affect purchase intention. A total of 187 respondents participated in the structured questionnaire and the findings show that perceived usefulness of information has a positive effect but perceived risk has a negative effect on consumers’ purchase intention. Trust will positively affect consumers’ perceived usefulness and purchase intention but negatively affect consumers’ perceived risk. Positive electronic word-of-mouth has a positive effect on consumer trust and consumers purchase intention.

The results show that there is no correlation between trust and perceived risk. These findings support the view that the usefulness of a product is primarily directed at the product itself and not directly related to the user’s trust in social media information. More importantly, increased trust level in social media platform information does not mean that people will increase their willingness to buy.

The results of the study support who believe that more consumers perceived online social media is useful in helping them to buy online, the more likely they will have the intention to purchase which further supports previous studies [30]. Last but not least, perceived risk is considered to have a significant impact on the consumer’s purchase intention. As Cho et al. [79] pointed out, for online shopping, the degree of consumer product involvement affects the perceived risk level of online shopping, and this risk regulates the perceived willingness to buy risk.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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