Factors Influencing Perceived Trust in Online Purchasing – Considering Third-Party Endorsement

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Abstract: The popularity of online shopping in electronic commerce is significantly tempered with concern over perceived trust. It is found that lack of trust is likely to discourage online consumers to participate in online purchase activities. This study proposed a conceptual model to evaluate the effects of third party endorsement, information quality and reputation on perceived trust in Malaysia as well as to examine the relationship between perceived trust and online purchase intention.438 questionnaires are answered by Malaysian students in Klang Vally. Structural Equation Modeling was used to evaluate the proposed model. The result shows that perceived trust in online shopping is built on information quality, third party endorsement and reputation. Moreover, it provides evidence that perceived trust has a significant direct effect on online purchase intention.

Keywords: online purchase intention, perceived trust, third party endorsement, information quality, reputation, perceived security.

1. Introduction

The rapid diffusion of Internet technology has facilitated the development and universal application of electronic commerce (e-commerce). It has transformed traditional business and customer practices and provided extensive opportunities in the promotion and sale of products. The use of the Internet as a purchasing tool is one of the common activities in e-commerce, it has demonstrated a high growth rate [1]. The countries of Southeast Asia (including Indonesia, Singapore, Malaysia, Thailand, the Philippines, and Vietnam) are considered as a conductive environment for the growth of e-commerce, it is expected that B2C online retail in this area to rise from 19\$ billion to more than \$53 billion in 2023 [2]. Malaysia with 25 million active internet users (79% of the population) and around 15 million online shoppers (%50 of the population) can be considered as a conductive environment for e-commerce activities [3]. Lack of trust is the most significant long-term barrier for greater realization of e-commerce potential to consumers, and the success or failure of many online shopping revolve around the issue of trust [4]. Numerous studies have illustrated its importance as a major factor in online purchasing or attitudes towards online purchasing [5–9].

The importance of trust on online purchasing, caused that different studies tried to identify factors that affect perceived trust especially from customer point of view. They found factors such as reputation, quality of information, security and risk as factors influencing on perceived trust [7, 8, 10]. There are few studies which considering word of mouth or recommendation from friend and family as influencing factors on perceived trust in online shopping concepts [11–13]. This study intends to examine common antecedents of perceived trust including reputation, information quality and security in Malaysian online purchasing. In addition, the third party endorsement is evaluated as a factor that can generalize the meaning of recommendation of friends, word of mouth or even advertising. A conceptual model is proposed and evaluated for online purchase intentions in terms of perceived trust and its antecedents.

The paper is organized as follows: Section 2 provides a review of related literatures; Section 3 proposes the conceptual model and develops the hypotheses of this study; Section 4 presents research methodology; section 5 reveals the findings and results of study. Finally, Section 6 describes the conclusion and implications of this research.

2. Literature Review

2.1 Online purchase intention

Online Purchase Intention can be defined as a situation where a consumer is willing and intends to make online transactions [14]. This term is used when customers are willing to search, select, and purchase products via the Internet. There have been intensive studies on online purchase intention in recent years. Rodrígue and Fernández found that trust, perceived values and fashion innovation are factors that affect online purchase intention [15]. In another study the role of mediating online purchase intention on online shopping behavior is highlighted [16]. There are other related researches on online purchase intention such as: [5, 17, 18]. These studies mostly attempted to investigate factors influencing online purchase process. Table 1 summarizes night related online purchase intention researches. The majority of related studies tested the influence of perceived trust on online purchase intention. It shows that perceived trust is one of the key factors of online shopping intention.

Table 1. Online purchase intention models

Research by	Identified Factors
Heijden et al. (2003) [19]	Perceived Trust, Perceived Risk
Ha and Stoel (2009) [6]	Trust, , Perceived Risk,
Renny et al. (2013) [18]	Attitude, Self-Efficacy, Normative believe
Hartono et al. (2013) [20]	Security
Shaouf and Kevin (2016) [17]	Advertising, Trust
Rodrígue and Fernández (2018) [15]	Fashion Innovation, Perceived Trust, Perceived Value

Table 2. Factors influencing perceived trust

| Identified Factors	Research By
Reputation	[5, 10, 22–25]
Size	[10, 22–24]
Security	[5, 10, 23–25]
Privacy	[5, 10, 24]
Usefulness	[24]
Information Quality	[5, 25]
Word of mouth/E-word of mouth/Advertising	[11–13]

2.2 Perceived trust

Trust in online shopping is defined as willingness of consumers to accept the possibility of loss during an Internet shopping process, and is based on the expectation that online vendors will be able to deliver on their promises [21]. In the perspective of e-commerce, is identified as an important factor that will determine the success or failure of many companies [11]. A lack of trust is a barrier that deters consumers from online shopping activities. The importance of trust as a factor in the effectiveness on online purchase intentions has been tested in different studies such as [15, 16, 19]. Trust in an online environment is important because online shoppers and retailers cannot physically see each other during their interactions.

Based on a review of the literatures, there are different factors that influence perceived trust as elaborated in this section. In an early study, it is revealed that reputation and size are two factors that affect perceived trust [22], and they are also tested in other studies such as [10, 23]. In addition, in another study by Chen and Barnes, they identified that perceptions of usefulness, security, privacy, are also important antecedents of initial online trust [24]. Consumer issues on privacy and security concerns, information quality, and the company's reputation are evaluated several times and the strong effects on their sense of Internet trust on the Website are proved by these studies [5, 10, 18]. There are some studies identified and proved some factors like word of mouth [12]; or electronic word of mouth [11, 13] or recommendation by others [12] or advertisement [17] can affect perceived trust during online purchasing. In this study we categorize them as third party endorsement factor.

A summary of the antecedents of perceived trust in the online vendor or website is shown in Table 2.

3. Conceptual Model and Hypotheses

Figure 1 illustrates the proposed model of this study in terms of perceived trust. It asserts that online purchase intention is determined by perceived trust and its antecedents including reputation, familiarity/usefulness, third party endorsement, information quality and perceived security. The following section describes the rational for the proposed links.
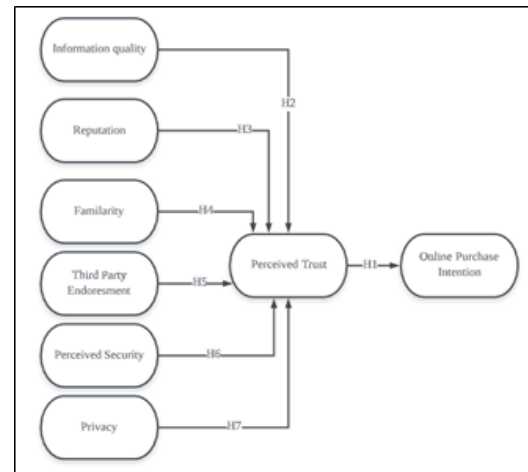
Figure 1. Proposed conceptual model

Intention to purchase online is directly influenced by the perceived trust in the website [25]. Perceived trust is identified as a strong determinant of online purchasing decisions [5]. There are other studies which consider trust as a direct factor affecting online purchase intentions such as [5, 17, 24].

Hence, it is hypothesized that:

H1: Consumer's perceived trust of an online shop has a positive influence on the consumer's intention to online purchasing.

Information quality mostly refers to accuracy and completeness of information that are provided by website [6]. To the extent that consumers perceive that a website presents quality information, they are more likely to have confidence that the vendor is reliable, and therefore will perceive the website as trustworthy [5, 10]. Therefore, this study also hypothesized that:

H2: Information quality has a positive influence on the consumer's perceived trust in online purchase intention.

Reputation is identified as the extent to which buyers believe an online website is honest and concerned about its customers, and is considered a valuable benefit that requires long-term investment of resources, effort, and attention to customer relationships [22]. This influence is sup-

ported by other researchers on online shopping studies such as [10, 24, 25].

H3: The perceived reputation of an online shop has a positive influence on perceived trust.

Familiarity is consumer's degree of association with the online selling, and includes knowledge about online vendor. Online customers will naturally return to websites where they have had a favourable experience, or they felt it is useful for them [24]. It is introduced as a precondition for perceived trust [21]. Therefore, the related hypotheses are defined as:

H4: Customer's familiarity with online purchasing has a positive influence on perceived trust.

A positive impact of third party endorsement on consumer behavior is identified in 2008 [26]. These endorsements can be delivered by experts, independent institutions, or trusted people. The endorsements by friend or family significantly affects perceived trust, especially in the culture of collectivism [12]. In addition, Within the Internet context, when a web merchant is recommended by third parties or is advertised, it implies that the web site follows a number of principles and recommendations agreed to by the third party [13, 17]. Therefore, it is hypothesized that:

H5: Third party endorsements of an online shop have a positive influence on the perceived trust of that online shop.

Once customers feel secure in their online purchase activity, their level of trust in the site will be enhanced. Security can consider as one of the antecedents of trust [10, 25]. Hence, it is hypothesized that:

H6: Perceived security of an online shop has a positive influence on the consumer's perceived trust.

Privacy is the perception of the extent that to which the online vendor will endeavour to protect the consumer's personal information collected during the online purchasing process Conducting an online transaction without revealing some personal data is impossible [27]. Even if that revelation is made to a trusted website privacy still is a necessary concern in e-commerce, and they established a strong relationship between privacy dimensions and trust [5, 10]. The arguments above suggest that:

H7: Consumer's privacy affects consumer perceived trust on that online shop.

4. Methodology

4.1 Sampling

University students represent a significant part of online buying consumers and a long term potential market. They are more likely than older adults to use internet [6]. With the development of educational services in Malaysia, university students have become one of the important consumer in market section in this country [28]. Considering their accessibility to Internet and their knowledge about online shopping they can be potential population for online purchase activity. Based on a cluster sampling, the universities located in Klang Valley are selected. the Information Communication and Technology center in each university helped to determine the sample numbers in each university based on a stratified

sampling method. A link of the online questionnaire was sent to random number of students.

Out of the 1,340 questionnaires distributed 514 were returned giving a response rate of approximately 38%. There were three conditions set for accepting a questionnaire, that is, student nationality should be Malaysian, have online purchase experience, and access to at least one online payment tool. Taking these conditions into account 438 questionnaires (85%) were accepted and used as responses to the research objectives of this study. Among the accepted respondents, 69% were male, 65% were under the age 26, 28% had a master degree, moreover, most respondents (54%) reported not having any as they were still students, In terms of duration of experience in online shopping, 18% had 6 months to one year's experience, Finally, 36% used Internet banking such as CIMB clicks or MayBank 2U, 2 and 48% used more than one payment tool.

4.2 Measurement development

Most of the measures in this study were already established in previous researches. The survey consisted of three parts. Part A relates to demographic information. Part B is on variables that affect online purchase intention, including online purchase intention as a dependent variable and perceived trust as independent variables. Part C relates to antecedents of perceived trust. All of the items were measured on 7-point Likert-type scale. The questionnaire is designed from existing scales and tested for content and face validity by five academic experts. At last, to reduce possible ambiguity a pilot study was conducted by fifty students attending two course classes from the UTM (KL Campus). An acceptable reliability is showed by result of plot study.

4.3 Measurement Model

To test the conceptual proposed model, the collected data is analyzed using structural equation modeling (SEM). The AMOS 25 is used to assess the measurement and structural models. To examine the normal distribution of the data, the normality test is accompanied by using skewness and kurtosis. The Maximum Likelihood Estimation (MLE) is used as the extraction technique in this study. This is one of the most widely-used estimation method that allows testing of individual direct effects and error term correlations [29].

The measurement model and the structural model are two major steps of structural equation modelling (SEM), which are used in this study. The measurement model (CFA) is used to determine the links between manifest or observed and latent or unobserved variables. Generally, after model specification and evaluation of model fit, the validation of measurement model through CFA is done in the SEM process [30]. After validation of the measurement model, including convergent and discriminate validity, the relationships among latent variables is estimated in the structural model [29].

5. Analysis and Results

5.1 Descriptive analysis

A descriptive analysis for measuring means, standard deviation and standard error of the variables are used in this study. Table 3 displays result of this descriptive analysis. On average all variables are above their midpoint value which is four (4). Reputation (M=5.27) has the highest mean, it is followed by Familiarity (M= 5.24). The lowest mean is measured for Privacy with a mean of 4.01.

5.2 Model Assessment

The normal distribution of data is the main assumption in using MLE. The normality test shows that the values for skew and kurtosis for all items is between -2 and +2 [31]. Hence, it can be determined that the data set for all items are modelled well and distributed normally.

As the first stage of SEM a measurement model was made up The results of assessing the standardized loadings of the model's items showed that the factor loadings of four items were below the cut-off 0.5. Hence, these items were deleted from their relative constructs. The Privacy (PR) construct remained with only two measurement items. It is suggested that a minimum of three items must load significantly on each construct [32]. As a result, the decision was made to remove these items and their relative construct from the model. Thus, the Privacy (PR) construct and its relative items were discarded from the model. The updated model was again examined to ensure if the factor structure remained balanced. The result shows that the second standardised factor loading for all items is more than 0.5, ranging from 0.60 to 0.94. The internal consistency of the measurement model was assessed by composite reliability. The three criteria in reliability test including: composite reliability, Cronbach's Alpha and average variance extracted for all constructs for all variables was significantly error-free (Table 3).

To measure how truly a construct distinct from others, a discriminant validity was assessed [29]. The correlations among variables in the measurement model is not exceeded 0.85 as it is suggested by [33]. The correlations between variables compared with the square root of the average variance calculated for each construct. Table 4 presents the discriminant validity of the measurement model of this study. The test of the measurement model containing convergent and discriminant validity was satisfactory.

5.3 Structural Model

After validation of the measurement model, representation of the structural model can be made by specifying the relationships among the constructs. In this study the structural model was estimated using the maximum likelihood estimate (MLE) to examine the research hypothesizes [31, 34]. In this study, absolute fit measures such as Chi-square statistics, Relative Chi-square ($\chi 2$/df), GFI, and RMSEA are used and TLI, IFI, and CFI are used among the incremental fit indices to measure the model fit of this study. Table 5 shows the values for fit indices after some modification on model. as it is showed in the Table 5, all values are acceptable.

After achieving a fitted model, the path coefficients of structural model are examined. As shown in Figure 2 the paths from "Perceived Trust" to "Online Purchase Intention" were statistically supported. The C.R. and p-value in influencing on "Online Purchase Intention" were (CR=4.30, P= 0.00, B=0.47 and CR=4.36, P value= 0.00, Beta= 0.30) correspondingly. It means, when perceived trust increase by 1 standard deviation, "Online Purchase Intention" goes up by 0.47 standard deviations.

As shown in Figure 2 five paths from "Third Party Endorsement", "Familiarity", "Reputation", "Information Quality" and "Perceived Security" to "Perceived Trust" were statistically significant. Thus, H2, H3, H4, H5 and H6 were supported. The values for CR, P value and Beta are presented consequently: Third party endorsement (CR=2.16; P =0.03; B=0.35), Familiarity (CR=2.40; P =0.01; B=0.15), Reputation (CR=3.64; P =0.00; B=0.24), Information quality (CR=2.16; P =0.03; B=0.67), Perceived security (CR=7.05; P =0.00; B=0.30). This result shows that Information quality is the most important antecedent of trust, and when it goes up by 1 standard deviation, perceived trust enhance by 0.67 standard deviations.
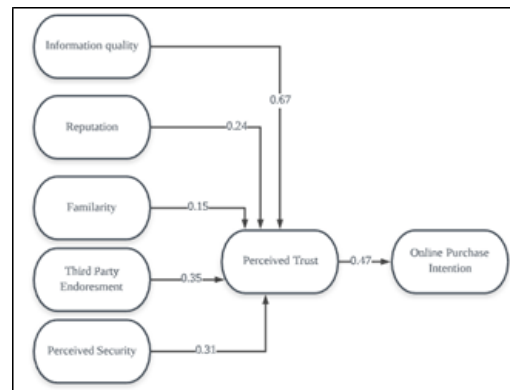

Figure 2. Results of structural model

6. Discussion and Conclusion

This study proposed a conceptual model for online purchase intention in terms of perceived trust. The impact of perceived trust on online purchase intention is approved significantly. It means that when online customers perceive a website as a trustable they will intent more to shop from that website. In addition, this study provides list of antecedents for perceived trust.

A significant relationship between reputation and perceived trust was established in this study. Hence, it can be concluded that customers' perception of trust is enhanced when the online shop has a good reputation. Familiarity with the website or previous usefulness has a significant effect on perceived trust. It is assumed that the customers trust websites that they are familiar with or have had a positive useful experience when using them. The results show a significant impact of third party endorsement on perceived trust too. Therefore, when a website is endorsed by third-parties which can be a company, friend or general feedback, will be

Table 3. Statistics Cronbach alpha, composite reliability and variance extracted (AVE)

Construct	Cronbach Alpha	Composite Reliability	AVE
Third Party Endorsement (TPE)	0.870	0.873	0.780
Familiarity (FAM)	0.915	0.914	0.780
Reputation (RP)	0.918	0.920	0.793
Information Quality (IQ)	0.945	0.954	0.840
Perceived Security (PS)	0.905	0.906	0.699
Perceived Trust (PT)	0.902	0.903	0.699
Online Purchase Intention (OPI)	0.872	0.85	0.638
Third Party Endorsement (TPE)	0.870	0.873	0.780
Familiarity (FAM)	0.915	0.914	0.780

Table 4. Discriminant validity of Measurement Model

	TPE	FAM	RP	IQ	PS	PT	OPI
TPE	0.834						
FAM	.36	0.883					
RP	.5	.64	0.891				
IQ	.16	.13	.01	0.917			
PS	.14	.46	.22	-0.2	0.841		
PT	.29	.70	.56	-0.19	.63	0.836	
OPI	.26	.65	.48	-0.33	0.6	0.63	0.799

Table 5. Goodness of Fit Indices

Fit index	Modified Model	Cut-off Point
Df	868	
CMIN ($\chi2$)	1616.475	
p-value	0.00	> 0.05
$\chi2$/df	1.862	≤ 3.00
GFI	0.862	≥ 0.80
AGFI	0.836	≥ 0.80
CFI	0.953	≥ 0.90
TLI	0.946	≥ 0.90
IFI	0.953	≥ 0.90
RMSEA	0.044	≤ 0.10 (.03 to .08)

perceived as trustworthy. After information quality the most important factor is third party endorsement which really can boost trust in online purchasing process. Online vendors may provide an option to recommend to friends and award incentives for the invitation. Or motivate the customers for writing feedbacks. The analysis on quality of information is proven as the most influential antecedent of perceived trust. The strong presence of this factor shows that it is a good indicator for perceived trust. As online users feel that website provides sufficient and correct information about products and transactions, they will perceive that website as trustworthy.

Privacy relates to the misuse and sharing of personal information. Surprisingly, this factor is removed as an antecedent of trust. A possible reason for the removal of this factor from the proposed model can be culture-based. Asian countries are commonly categorized in terms of a "collectivism" dimension where people belonging to an "in-group" in such societies take care of each other in exchange for loyalty [35]. People from these countries have lower levels of overall concerns about information privacy and unauthorized access. Similarly, it is mentioned by Milberg that Asian people have a lack of concern over the privacy of their personal information [36]. This is applicable to Malaysians, as citizens of an Asian country and having a collectivism culture, who are comfortable in sharing their personal information.

This study provides a validated model for Malaysian researchers who need to know more about the theoretical foundations of the constructs being studied and their applications in the Malaysian context. Particularly, this study can serve as a sample study for Malaysian researchers studying empirical methods in online purchasing context and e-commerce research. It has practical implications for online vendor managers and website designers especially those in Malaysia. By identifying the effects of perceived trust on online purchase intention for Malaysian online users, online vendors and website designers may be able to assess the strengths and weaknesses of their websites and to develop appropriate strategies to improve their effectiveness.

As with all researches this study has some limitations, first and foremost, factors which have an influence on online purchase intention other than perceived trust are not considered in this study. Secondly, limitation of access to all online users and lack of collaboration with popular online shops in Malaysia for data collection for example Groupon, Mudah and Lazada hindered this study in terms of covering the general Malaysian public. While the unit of analysis was confined to Malaysian students, their age range and their accessibility to internet and current literatures had indicated them as useful proxy for online customers. Future studies may attempt non-students viewpoint which may result in some variation to the findings.

References

[1] Statista, "Internet World Stats; Ecommerce Foundation," https://www.statista.com/statistics/617136/digital-population-worldwide/, 2018.

[2] F. Analytics, "Forrester Analytics," 2018, [Online Retail Forecast (Southeast Asia).].

[3] Malaysia–e-Commerce, https://www.export.gov/article?id=Malaysia-E-Commerce, 2019.

[4] S. Grabner-Kraeuter, "The role of consumers' trust in online-shopping," *Journal of business ethics*, vol. 39, no. 1, pp. 43–50, 2002.

[5] D. J. Kim, D. L. Ferrin, and H. R. Rao, "A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents," *Decision support systems*, vol. 44, no. 2, pp. 544–564, 2008.

[6] S. Ha and L. Stoel, "Consumer e-shopping acceptance: Antecedents in a technology acceptance model," *Journal of business research*, vol. 62, no. 5, pp. 565–571, 2009.

[7] J. B. Kim, "An empirical study on consumer first purchase intention in online shopping: integrating initial trust and tam," *Electronic Commerce Research*, vol. 12, no. 2, pp. 125–150, 2012.

[8] K. B. Mansour, K. Kooli, and R. Utama, "Online trust antecedents and their consequences on purchase intention: An integrative approach," *Journal of Customer Behaviour*, vol. 13, no. 1, pp. 25–42, 2014.

[9] J. C. Athapaththu and K. Kulathunga, "Factors affecting online purchase intention: Effects of technology and social commerce," 2018.

[10] M.-H. Hsu, L.-W. Chuang, and C.-S. Hsu, "Understanding online shopping intention: the roles of four types of trust and their antecedents," *Internet Research*, 2014.

[11] C. M. Cheung, M. K. Lee, and D. R. Thadani, "The impact of positive electronic word-of-mouth on consumer online purchasing decision," in *World Summit on Knowledge Society*. Springer, 2009, pp. 501–510.

[12] F. Meskaran, R. Abdullah, and M. Ghazali, "A conceptual framework of iranian consumer trust in b2c electronic commerce," *Computer and information science*, vol. 3, no. 2, p. 126, 2010.

[13] H. Kim and J. Song, "The quality of word-of-mouth in the online shopping mall," *Journal of Research in Interactive Marketing*, 2010.

[14] P. A. Pavlou, "Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model," *International journal of electronic commerce*, vol. 7, no. 3, pp. 101–134, 2003.

[15] T. Escobar-Rodríguez and R. Bonsón-Fernández, "Analysing online purchase intention in spain: fashion e-commerce," *Information Systems and e-Business Management*, vol. 15, no. 3, pp. 599–622, 2017.

[16] Y. J. Lim, A. Osman, S. N. Salahuddin, A. R. Romle, and S. Abdullah, "Factors influencing online shopping behavior: the mediating role of purchase intention," *Procedia economics and finance*, vol. 35, pp. 401–410, 2016.

[17] A. Shaouf, K. Lü, and X. Li, "The effect of web advertising visual design on online purchase intention: An examination across gender," *Computers in Human Behavior*, vol. 60, pp. 622–634, 2016.

[18] S. Guritno, H. Siringoringo *et al.*, "Perceived usefulness, ease of use, and attitude towards online shopping usefulness towards online airlines ticket purchase,"

[19] H. Van der Heijden, T. Verhagen, and M. Creemers, *Procedia-Social and Behavioral Sciences*, vol. 81, pp. 212–216, 2013. "Understanding online purchase intentions: contributions from technology and trust perspectives," *European journal of information systems*, vol. 12, no. 1, pp. 41–48, 2003.

[20] E. Hartono, K.-Y. Kim, K.-S. Na, J. T. Simpson, and D. Berkowitz, "Perceived site security as a second order construct and its relationship to e-commerce site usage," *Advances in Information Systems and Technologies*, pp. 1075–1085, 2013.

[21] D. Gefen and D. W. Straub, "The relative importance of perceived ease of use in is adoption: A study of e-commerce adoption," *Journal of the association for Information Systems*, vol. 1, no. 1, p. 8, 2000.

[22] S. L. Jarvenpaa, N. Tractinsky, and L. Saarinen, "Consumer trust in an internet store: A cross-cultural validation," *Journal of Computer-Mediated Communication*, vol. 5, no. 2, p. JCMC526, 1999.

[23] T. S. Teo and J. Liu, "Consumer trust in e-commerce in the united states, singapore and china," *Omega*, vol. 35, no. 1, pp. 22–38, 2007.

[24] Y.-H. Chen and S. Barnes, "Initial trust and online buyer behaviour," *Industrial management & data systems*, 2007.

[25] K.-L. Hsiao, J. C.-C. Lin, X.-Y. Wang, H.-P. Lu, and H. Yu, "Antecedents and consequences of trust in online product recommendations: An empirical study in social shopping," *Online Information Review*, 2010.

[26] J. Feng, K.-Y. Wang, and L. Peracchio, "How third-party organization (tpo) endorsement advertising works: do consumers perceive tpo endorsement as signals of quality?" *ACR North American Advances*, 2008.

[27] K.-W. Wu, S. Y. Huang, D. C. Yen, and I. Popova, "The effect of online privacy policy on consumer privacy concern and trust," *Computers in human behavior*, vol. 28, no. 3, pp. 889–897, 2012.

[28] M. F. Sabri, M. MacDonald, T. K. Hira, and J. Masud, "Childhood consumer experience and the financial literacy of college students in malaysia," *Family and Consumer Sciences Research Journal*, vol. 38, no. 4, pp. 455–467, 2010.

[29] D. Kaplan, *Structural equation modeling: Foundations and extensions*. Sage Publications, 2008, vol. 10.

[30] J. C. Anderson and D. W. Gerbing, "Structural equation modeling in practice: A review and recommended two-step approach." *Psychological bulletin*, vol. 103, no. 3, p. 411, 1988.

[31] B. M. Byrne, *Structural equation modeling with EQS: Basic concepts, applications, and programming*. Routledge, 2013.

[32] J. Raubenheimer, "An item selection procedure to maximize scale reliability and validity," *SA Journal of Industrial Psychology*, vol. 30, no. 4, pp. 59–64, 2004.

[33] R. B. Kline, *Principles and practice of structural equation modeling*. Guilford publications, 2015.

[34] J. Hair, W. Black, B. Babin, R. Anderson, and R. Tatham, "Multivariate data analysis (book style)," 2006.

[35] S. Bellman, E. J. Johnson, S. J. Kobrin, and G. L. Lohse, "International differences in information privacy concerns: A global survey of consumers," *The Information Society*, vol. 20, no. 5, pp. 313–324, 2004.

[36] J. F. Hair Jr, W. C. Black, B. J. Babin, and R. E. Anderson, "Multivariate data analysis a global perspective.. new jersey: Person education," 2010.