

Consumer-to-Consumer Online Purchasing Behavior

Ahmed Alqarni, PhD

Associate Professor

Head of Business Department

Arab East Colleges

Riyadh - Saudi Arabia

Abstract

This study aimed to investigate consumer-to-consumer online purchasing behavior. Data from a total of 476 participants were analyzed using Factor Analysis and Structural Equation Modeling. A model was proposed based on the Theory of Planned Behavior with additional factors added. Eight of the 11 hypotheses proposed were significantly supported. Trust, attitude, and perceived behavior significantly influence consumer purchasing intention. Lower price significantly influences attitude and subjective norms. Seller's reputation has no influence on trust and subjective norms has no influence on consumer-to-consumer online purchasing intention.

Key words: consumer-to-consumer, online purchasing, e-commerce, C2C

1. Introduction

Consumer-to-consumer (C2C) e-commerce is any transaction that occurs between two or more consumers. It is primarily initiated via the internet but is not necessarily completed using it (Leonard & Jones, 2017). To expand, any deal begun via any type of web application (e.g., social media application, website), either by the consumer themselves or via a third party service (e.g., third-party listing service, third party website), and that ends within the web application or outside the web (i.e., face-to-face) is considered C2C e-commerce. In C2C e-commerce, an online platform (website) works as an intermediary, in which buyers are connected with sellers who can provide different items or services. Different sellers will have varying availability and richness of information and appealing images for their products and services. In this research, the terms platform and website will be used interchangeably.

Both new and used items can be sold in C2C online websites. The C2C selling of an item online takes different shapes: resale of extra purchase, resale after temporary ownership, unintentional resale, and disposition (Azad, Islam & Hoque, 2014). The price, payment, and delivery can be negotiated between both the buyer and the seller. The huge growth of e-commerce in recent years has been rooted mainly in its convenience, saving time and providing better prices (Bhagat, 2015), but has also created fears about privacy and security, discrepancies in product quality and grade (Hong and Cha 2013). C2C online resale gives the sellers the psychological benefits of fun, enjoyment, and a sense of success from mastering the online resale system or successfully reselling a product, and these hedonic motivations could outweigh the financial motivations (Chu, 2013).

In Saudi Arabia there are tens of websites that provide this service. The most popular one is Haraj.com.sa. In this website, individuals can offer any type of new or used goods or services. This website works in a simple way. Individuals can register by providing an email only and choosing any name and location. The other information is optional such as mobile number. The website depends on the trust between all parties. For example, the commission of 1 % (if it is more than US\$ 5) of the total price is taken from the seller and it is paid any time after completing the deal via bank transfer. The website does not have any process to ensure this payment. The website also does not involve any type of payment between sellers and buyers and all payments should be completed outside the website by any method that both sides agree on (e.g., cash, bank transfer, bartering). The description and photos of the product are made by the seller and any needed information from the buyer can be given upon request. Brand new and secondhand products are sold in this website.

The aim of this study is to examine the consumer-to-consumer online purchasing behaviors by applying the Theory of Planned Behaviour model (TPB: Ajzen, 1991) with the additional factors of trust (Delafrooz, Paim and Khatibi, 2011; McLaughlin, Bradley, Prentice, Verner, and Loane, 2017; Dachyar, & Banjarnahor, 2017; Shihab; Maulana; & Hidayanto, 2018), and price (Joo, 2015).

2. Literature Review

Building a model that helps in understanding the consumer-to-consumer online purchasing behaviors is a very important step. According to McLaughlin, Bradley, Prentice, Verner, & Loane, (2017), the Theory of Planned Behavior by Ajzen (1991, 2002, 2011) is a theoretical model that measures not only consumers' purchasing behaviors but also their intentions and motivations.

This study applies the Theory of Planned Behavior model (TPB: Ajzen, 1991) with the additional factors of trust, reputation/feedback of seller, information quality of merchant, website quality (Delafróoz, Paim and Khatibi, 2011; McLaughlin, Bradley, Prentice, Verner, and Loane, 2017; Dachyar, & Banjarnahor, 2017; Shihab; Maulana; & Hidayanto, 2018) and price (Joo, 2015). A model has been suggested to describe C2C online purchasing behavior (Figure 1).

2.1 Information Quality of Merchants

Information quality is a buyer's evaluation of the quality of the information provided on a seller's website (McKinney & Yoon, 2002). Information quality indicates the relevance, sufficiency, accuracy, and timeliness of the information shown on the website (Zhou, 2012). The disclosure of some degree of verifiable information by a seller, such as pictures and text with specifications, can serve to reduce adverse selection (Lewis, 2011). When the information provided by the seller is useful and complete, the additional searching effort for the buyer is reduced (Liang & Chen, 2009). On the other side, buyers will spend more time and effort searching for extra information in the case of poor or useless information (Zheng; Zhao & Stylianou, 2013). Caldieraro, Zhang, Cunha & Shulman, (2018) found that the disclosure decreases search costs and, thus, helps bidders better match their preferences with the quality of the products being offered in the marketplace. If the information presented by the seller is irrelevant, insufficient, inaccurate, or out-of-date, it may cause uncertainties in the buyer's mind about whether the seller is engaging in immoral behavior and, thus, may reduce their satisfaction when dealing with the seller (Chen; Huang & Davison, 2017). By providing high-quality information, both the economic and social satisfaction of the buyer increase because they spend less time searching and they feel that the sellers understand their needs (Chen; Huang & Davison, 2017).

Therefore, it is hypothesized that:

H1: A seller's information quality contributes to the development of a buyer's trust.

2.2 Service Quality of Platform Providers

Platform quality is linked to a seller's platform as perceived by buyers in terms of its overall performance, which can be seen through degrees of user friendliness (Hsu; Chang & Chen, 2011). Jeong and Gregoire (2003) described website quality as the effectiveness and efficiency of the social website in carrying intentional messages to the buyers. It can be assessed from aspects such as access speed, ease of use, visual appeal, and navigation (Zhou, 2012). Moreover, it contains cues such as information, system, and service quality (DeLone & McLean, 2003). The success of an online deal between purchasers and sellers is reliant on the quality of the seller's website (Chen, Huang, Davison, & Hua, 2015). The website quality influences purchasers online shopping experiences (Wells; Valacich & Hess, 2011). Bai, Law, and Wen (2008) stated that e-sellers should focus on the website quality so that the buyers can search and buy according to their needs. The need for trust will diminish with experience (Gefen & Pavlou, 2012), which leads to positive purchase intention when buyers experience a seller's website that is high quality (Chen, Huang, Davison, & Hua, 2015). The trust is needed for buyers only in an uncertain situation (Fang et al, 2014) and as the quality of the website decreases uncertainty (Benlian & Hess, 2011), the purchase intention increases (Chen, Huang, Davison, & Hua, 2015).

Therefore, it is hypothesized that:

H2: The platform quality contributes to the development of a buyer's trust.

2.3 Reputation/Feedback

Most online C2C marketplaces have reputation/feedback mechanisms in which both sellers and buyers can share and evaluate their experience and provide feedback on their purchases. In the online market, the reputation of a seller can be ascertained via e-WOM (Electronic- Word of Mouth/Mouse) from previous buyers of products from the seller. WOM is defined as "informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers" (Westbrook, 1987, p. 261). Buyers usually view WOM and e-WOM as more trustworthy and honest than business marketing communications (de Matos & Rossi, 2008; Bickart & Schindler, 2001). Christodoulides; Michaelidou and Argyriou (2012) found that exposure to positive and negative e-WOM significantly affects the consumers decision. So, reputation/feedback can be improved when the buyers are satisfied by the sellers. Sellers can signal quality by offering incentives for customers to leave feedback in the online C2C e-commerce (Li, Tadelis, & Zhou, 2016). However, sellers rarely have a bad reputation because those with a lot of negative feedback often change their identity by opening a new account (Friedman & Resnick, 2001). A seller with good feedback and reputation can offer higher prices (Xu; Lin; & Shao, 2010) and gain more trust (Ba and Pavlou, 2002).

Therefore, it is hypothesized that:

H3: There is positive relation between the seller's higher feedback and good reputation and the buyer's trust.

2.4 Trust

Trust is defined as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau, Sitkin, Burt, & Camerer, 1998). In e-commerce, it is defined as the extent to which online sellers will fulfill their obligations, will behave as expected, and will be attentive to their customers (Chen & Ching, 2013). Trust becomes more important for online sellers than offline sellers as the risk increases in e-commerce (Li, Jiang, & Wu, 2014). Therefore, trust plays a critical role in determining online buying intentions (Hong and Cho 2011). Lack of trust has been considered the main reason for why consumers do not want to engage in e-commerce. (Kim et al., 2008). Alsajjan and Dennis (2010) found that trust influences both attitude and intention to engage in the actual behavior.

In e-commerce, trust can be affected by both human intentions and system reliability (Clarke, 2006). Human intentions can be seen via information quality provided by sellers. Another way of building trust in e-commerce sellers is to have good reputation/feedback (Koufaris and Hampton-Sosa, 2004). Jones and Leonard (2008) examined C2C e-commerce trust and found perceived website quality and third-party recognition to influence trust in C2C e-commerce. For that, the researcher predicts that these three factors—reputation of merchant/feedback, information quality, and website quality—can affect the trust between C2C in the online market. In the e-commerce context, the tasks of the vendors are to provide helpful information and facilitate customers to accomplish their task successfully (McLaughlin, Bradley, Prentice, Verner, and Loane, 2017). The vendors here can be the seller and/or a third party.

Therefore, it is hypothesized that:

H4: The relation between trust and higher price is positive in C2C e-commerce.

H5: The increase of trust directly affects purchase intentions.

H6: The increase of trust directly affects attitudes.

2.5 Price

Price is the most crucial motivating factor while making an online purchase for most customers (Heim and Sinha, 2001; Reibstein, 2002; SivaKumar & Gunasekaran, 2017), although price for a certain segment of buyers is not a main concern while shopping online (Arora & Aggarwal, 2018). Price in C2C e-commerce can be determined in two ways. The first type is the auction where many buyers compete to get some product from a single seller and the price may decrease or increase with the decrease or increase in the number of the bidders (Jenamani; Routray; & Singh, 2011). The second type is when the seller sets a fixed price and buyers purchase it at that price. This second type is known as a buy-it-now (BIN) auction and is different from the first type in that buyers may buy directly at the price set by sellers (Xu; Lin; & Shao, 2010). The determination of price by the sellers depends on various factors including their own evaluations and costs, stock available on the market, and prices offered by other sellers (Pathak, 2010). The amount of discount in the prices is related to the type of the product and whether it is expensive or not. According to the perspectives of consumers in C2C e-commerce, the relationship between the product price and the offered discount is positive where bigger discounts are needed to be applied to more expensive products. However, as buyer's trust in a seller increases, price discounts decrease (Joo, 2015).

Therefore, it is hypothesized that:

H7: Low prices have a positive influence on attitudes.

H8: Low prices have a positive influence on subjective norms.

2.6 Subjective Norm

Subjective norms refer to a personal perception that depends upon friends, family, and relatives to act on, or not, the targeted behavior (Ajzen, 1991). Subjective norm is the degree of how crucial the individual sees the role of significant others in their life in endorsing them to buy or sell an item on an online website (McLaughlin, Bradley, Prentice, Verner, and Loane, 2017). Subjective norms have no direct significant relation to the behavior of the consumers, but they generate intentions and, after that, intentions generate behavior (Ajzen, 1991). Several previous studies found that purchasing intention mediates the relationship between subjective norms and behavior (Limayem, Khalifa, & Frini, 2000; Zhou, 2011; Rehman, Bhatti, Mohamed, & Ayoup, 2019). Garbarino and Strahilevitz (2004) also found that a friend recommending a site reduced perceived risk and increased individual's willingness to buy from that site. Therefore, it is hypothesized that:

H9: Subjective norms have a positive influence on purchasing intention.

2.7 Attitude

Schiffman and Kanuk (2007; 200) defined attitude as "someone's inner feeling that shows whether he likes or dislikes something (e.g., brand, service)". Attitude towards a behavior (i.e., shopping from a C2C website) can be described as a person's positive or negative evaluation of a significant behavior and is composed of a person's prominent beliefs regarding the perceived consequences of performing a behavior (Arora & Aggarwal, 2018). Consumers' attitudes towards online buying have been found to be an important factor influencing consumers' intentions to purchase online (Andrews and Bianchi, 2013; Mansour, 2016; Rahman; Khan & Iqbal, 2018). Both attitude and subjective norms affect intention, which in turn affects actual behavior (Lin, Wu, & Tran, 2015).

Therefore, it is hypothesized that:

H10: Consumers' attitudes have a positive influence on purchasing intention.

2.8 Perceived Behavioral Control

Perceived behavioural control (PBC) is defined as the belief of a person on how easy or difficult the consummation of a particular behavior is likely to be (Notani 1998). It describes a personal belief regarding their personal capabilities of exhibiting behavior (Brouwer, Krol, Reneman, Bültmann, Franche, van der Klink & Groothoff, 2009). Perceived behavioral control is the perception of a person's ability to control their actual behavior to carry out a transaction that depends on their capabilities (Francis et al, 2004). Studies found that perceived behavioral control is considered an important factor in determining buyer's intention (Casaló, Flavián, & Guinalú, 2009; Rehman, Bhatti, Mohamed & Ayoup, 2019). It also acts as a proxy for actual behavior (Ashraf, Thongpapanl, & Auh, 2014). According to Pavlou and Fygenson (2006), it differs from attitude as it is a perceived control over performance but not the probability that performing the behaviour will produce a given outcome.

Therefore, it is hypothesized that:

H11: Perceived behavioral control has a positive influence on purchasing intention.

2.9 Purchasing Intention

Purchase intention is a subjective probability or possibility that customers will purchase a product (Meng & Wei, 2015). It is important to understanding the purchase intention of customers because their final buying behavior can be predicted from their intention (Bai, Law, and Wen 2008) and many scholars have used intentions as a proxy for the final behaviors (Choi; Lee & Ok, 2013). According to the theory of planned behavior (TPB), the consumer's behavior is a function of intention to perform the behavior in question and it is based on attitude, subjective norms, and perceived behavioral control (Ajzen, 2015). Intentions are the relations between a product's price and quality, and the trust buyers place in online sellers and their products (Kim, Xu, and Gupta 2012). In addition, customers deciding whether they intend to continue with a purchase depends on the information provided to them (Kim, Donald, and Rao 2008). The quality and quantity of the available information positively influences customers' purchase intention (Park, Lee, and Han 2007). The trust that customers place in the sources of information and the available recommendations and feedback influences their final purchasing intention (Wang and Chang 2013). Establishing more effective reputation systems including feedback mechanisms, escrow services, rigorous regulations, and rules for sellers can reduce uncertainty and opportunism and induce purchase intention (Joo, 2015).

2.10 Behavior

The consumer behavior process involves several interconnected stages where consumers undertake several activities in relation to a purchase. This behavior in relation to using a C2C online website can be measured by looking at if the consumer had ever bought from such a website or not (McLaughlin, Bradley, Prentice, Verner, & Loane, 2017). According to Ajzen (2015), as the attitude, subjective norms, and perceived control toward engaging in the behavior become greater and favourable, the more likely it is that an individual will form an intention to perform that behavior.

3. Methodology

3.1 Sample:

The aim of this study was to explore C2C e-commerce behavior. A convenience sampling method was selected for the data collection from the participants using an online survey. In accordance with past research studies, exploring attitudes toward online shopping by means of a convenience sampling method is efficient, satisfactory and is appropriate for the purpose of multivariate data analysis (Yoo & Donthu, 2001; Park & Kim, 2003; Cai & Jun, 2003; Carlson & O'Cass, 2010; Arora & Aggarwal, 2018). The design of the questionnaire did not allow for uncompleted responses to be submitted. The collected data were screened and prepared for the following steps such as factor analysis and hypothesis tests.

The questionnaire was used as an instrument to collect quantitative data from the participants. A total of 672 completed questionnaires were received and 476 were appropriate for the analysis. Those 476 participants purchased at least once from a C2C online website. The other 196 never purchased from a C2C online website and, for this reason, they were eliminated from the analysis. The demographic data of the participants are shown Table 1. This data shows that male participants represented 74% of the sample, around 43% of the sample were between 36 and 45 years of age, more than 30% of the sample made between 6001 and 10000 Saudi Riyal per month, around 50% of the sample have bachelor's degree, and 57% of them are government employees. The questionnaire items were adapted from earlier studies (Fang, Chiu, & Wang, 2011), (Shihab; Maulana; & Hidayanto, 2018), (Kim et al., 2008), (Heijden et al., 2003), (Javernpaa et al., 2000), (Pavlou, 2003), (Dachyar & Banjarnahor, 2017), (Shin, Chung, Oh, & Lee, 2013), (DeLone & McLean, 2003), (Kim, 2012), (Kim et al., 2008), (Gefen, 2000), (Venkatesh et al., 2003), (Tang, Yang, & Shao, 2019), (Rehman, Bhatti, Mohamed & Ayoup, 2019). Some items were constructed by the author for the purpose of the study. Some modifications were made to ensure the coherence of the items by changing some words and using synonyms. Back translation by two experts were performed to ensure the meaning of the items did not change during the translation from English to Arabic. The questionnaire was divided into three parts: demographic data, direct questions about the consumer's historical buying activities regarding C2C e-commerce, and five-point Likert scale questions where participants were asked to choose the most appropriate answer, as they saw fit, from strongly agree, agree, neutral, disagree, and strongly disagree. The questionnaire was designed to include all these variables: Information Quality of Merchants (IQM), Service Quality of Platform Providers (SQPP), Trust (TRU), Purchasing Intention (PI), Attitude (ATT), Subjective norms (SN), Perceived Behavior (PB), Reputation (REP), and Price (PRC).

3.2 Factor analysis, Validity, and Reliability

Several data analysis steps were employed to achieve the goal of this study. According to Schreiber et al (2006), factor loadings, unique variances, and modifying indexes by, for example, keeping or eliminating variables, are assessed to derive the best indicators of latent variables prior to testing a structural model. Factor analysis was used first, followed by testing validity and reliability. The data were analyzed using Social Sciences (SPSS) software version 23. A confirmatory factor analysis (CFA) was performed to assess the goodness of fit indices and validity and reliability measures. To perform factor analysis, the factorability was tested. According to Hair et al., (2010), if the Kaiser-Meyer-Olkin (KMO) value is greater than 0.6 and with the Bartlett's Test of Sphericity (BTS) being significant at $\alpha < .05$, then factorability of the correlation matrix is assumed. In this study, KMO is .821 with BTS significant having α at .000, which indicates the merit of the questionnaire for the factor analysis. The nine factors, which are the dimensions based on the theoretical review, were extracted under the condition of eigenvalues being greater than 1 and with 0.4 as the minimum factor loading cut off point. Twenty-nine items met the criteria and form the nine factors. They explain 76.19 % of the variance. The factor and item loadings are shown in Table2.

Validity and reliability of the questionnaire were tested. Construct validity refers to the suitability of an instrument for its purpose and was measured by calculating Average Value Extract (AVE). According to Fornell and Larcker (1981), a value higher than 0.5 is recommended. The values of AVE were above this cutoff except for two, which were close to the recommended value. They were kept because the items were adapted from previous studies where they have been validated and the item loadings supported this validation. The reliability test aims to test the internal consistency of a variable for whether the selected items are reliable to measure latent variables. Reliability is measured by Cronbach's Alpha (Cronbach α) and Composite Reliability (CR). The recommended minimum value is 0.6 (Hair et al., 2010) and both calculations on this study's data yield higher values than the recommended minimum, indicating the reliability of the questionnaire. The values of these three tests are shown in Table 2 and they confirm the validity and reliability of the questionnaire.

4. Structural Equation Model

Structural Equation Model (SEM) is a comprehensive collection of statistical techniques that enable the examination of the relationship between the observed and latent variables. It also tests hypotheses about relationships between independent and dependent variables (Ullman & Bentler, 2003). SEM allows scholars to assess theoretical propositions regarding how constructs are theoretically related and the directionality of significant relationships (Schreiber et al (2006). The data statistics were completed in SPSS and AMOS software.

To use SEM, it is necessary to test Goodness of Fit (GOF). The GOF tests that were employed as a part of this study were absolute fit and incremental fit indices. According to Hooper, Coughlan & Mullen (2008) absolute fit indices are Chi-Square values, the probability value should be $p > 0.05$, CMIN/df should be between 2 and 5, Root Mean Square Error of Approximation (RMSEA) at < 0.08 , Goodness of Fit Index (GFI) at > 0.9 , Adjusted Goodness-of-Fit Statistic (AGFI) is accepted at 0.9 or higher. Incremental fit indices were also tested via Normed-fit index (NFI), with values greater than 0.90 indicating a good fit, and comparative fit index (CFI), with a value of $CFI \geq 0.95$ recognized as indicative of good fit. Table 3 shows Goodness of Fit (GOF) indices of the model with the recommended values according to Hooper, Coughlan & Mullen (2008) and the model output values.

The results of the fit tests showed that there is an acceptable fit between the proposed model and the collected data and it is suitable for path analysis and testing the hypotheses.

5. Hypothesis test

The hypotheses were examined through an investigation of the path coefficients. The results of the hypothesized effects are shown in Table 4 and Figure 2. The results show that Information Quality of Merchants (IQM) and Service Quality of Platform Providers (SQPP) have a strong influence on the consumer Trust (TRU) with ($\beta=.365$, $p<.001$) and ($\beta=.426$, $p<.001$), respectively, which leads to acceptance of H1 and H2. Reputation (REP) has no effect on Trust with ($\beta=-.016$, $p>.05$), which resulted in rejection of H3. Both H4 and H5 were accepted as Trust (TRU) significantly affects accepting the Price (PRC) and Purchase Intention (PI) with ($\beta=.487$, $p<.001$) and ($\beta=.661$, $p<.001$), respectively. On the other side, Trust (TRU) has insignificant influence on Attitude (ATT) with ($\beta=.094$, $p>.01$) which leads to rejecting H6. Price (PRC) has a positive significant effect on both Attitude (ATT) and Subjective Norms (SN) with ($\beta=.229$, $p<.001$) and ($\beta=.235$, $p<.001$), respectively, resulting in accepting H7 and H8. Subjective Norms (SN) has insignificant effect on Purchasing Intention (PI) with ($\beta=.002$, $p>.05$) leading to rejection of H9. Attitude (ATT) and Perceived Behavior (PB) have significant effect on Purchasing Intention (PI) leading to H10 and H11 being accepted with ($\beta=.125$, $p<.001$) and ($\beta=.250$, $p<.001$), respectively.

6. Discussion

The proposed model for consumer-to-consumer online purchasing showed some interesting findings. The proposed model indicated how Information Quality of Merchants, Service Quality of Platform Providers, Trust, Price, Attitude, and Perceived Behavior have a significant influence on consumer Purchasing Intention. Seller Reputation and Subjective Norms have no influence on Purchasing Intention. Reputation of the seller has no effect on consumer trust which differs from what was found by other research (Michaelidou and Argyriou, 2012). The reason for this may be related to the website type. The sellers in this website are mostly not professional sellers or retailers. Instead, they are normal consumers who mostly resell unwanted new or used products. Changing the name and profile is easy for the sellers and that is why buyers do not pay attention to the seller reputation. Another reason for why seller reputation has no effect on consumer trust is that the method of payment used by 63 % of buyers was cash on delivery.

On the other hand, Information Quality of Merchants was found to be an important factor in increasing consumer Trust, which support earlier studies (Caldieraro; Zhang; Cunha & Shulman, (2018)). It appears that buyers found different factors that increase their trust. Detailed product information supported with images was found to be more important than seller reputation in effecting the consumer's Trust. Similarly, the Service Quality of Platform Providers has a positive effect on consumer Trust, which is supported by previous studies (Chen, Huang, Davison, & Hua, 2015). The buyers appear to be careful about the website itself as a way of increasing the Trust, but not for the seller as they can change their names and delete negative comments.

Trust was found to be the most crucial factor in consumer-to-consumer online shopping. It has a direct and indirect effect on Purchasing Intention. It has a significant positive effect on price, which is supported previous studies (Joo, 2015), and purchasing intention (Hong and Cho, 2011; Alsajjan and Dennis, 2010). The highest direct effect on the model was the Trust on the Purchasing Intention and it was higher than the effect of Attitudes and Perceived Behavior on the Purchasing Intention. It appears that buyers from a C2C website care more about Trust than other factors due to the product's type (i.e., used or unwanted new products) and the website reputation, but not the seller reputation. Trust has insignificant effect on attitude, which is not in line with some previous studies (Alsajjan and Dennis, 2010). It appears that other factors effect attitude more, such as price. Product price was found to be important and has significant positive effect of both attitude and subjective norms. This was also supported by previous findings (SivaKumar & Gunasekaran, 2017). It seems that the lower prices of the products attract buyers especially when the risk is minimized by paying at delivery. Subjective norms were found to be insignificant in purchasing intention, which differs from some previous findings (Limayem, Khalifa, & Frini, 2000; Zhou, 2011; Rehman, Bhatti, Mohamed, & Ayoup, 2019). It seems that the type of sellers (not professional or a retailer) also has an impact, which minimizes the chance of recommending the same seller to a friend or relative due to the product's type (unwanted new or used product). Perceived behavior has a significant effect on the purchasing intention, which supports the findings of other studies (Casaló, Flavián, & Guinalú, 2009; Rehman, Bhatti, Mohamed & Ayoup, 2019). Perceived behavior comes second in effect after the trust.

7. Implications and Limitations

These findings show that businesses that provide C2C e-commerce services should pay more attention to the quality of product descriptions when sellers list their products. For example, requiring a minimum number of pictures, general specifications, and technical specification.

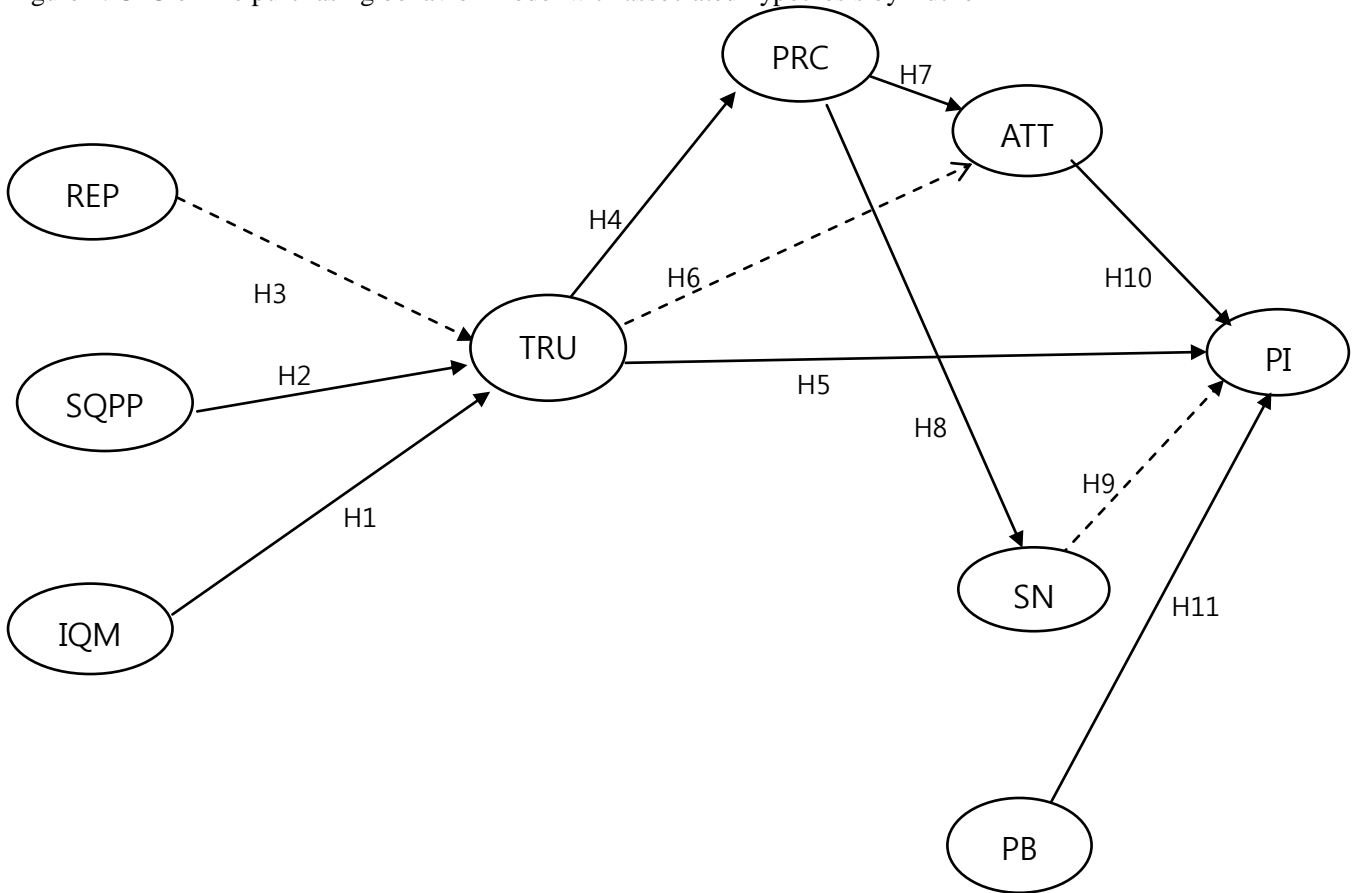
The choice of payment is crucial for buyers as a way of trust. So, business needs to provide third party payment services where the money is not received by the seller until the product is received and checked by the buyer. The second way is by encouraging buyers to pay on delivery. Comments should not be deleted by the seller once they are posted. Lower prices are very important to the consumer-to-consumer online buyer and should be also encouraged.

As per other studies, this study has its limitations. Female participants made up only around quarter of participants. Participants were only from the three big cities namely Riyadh, Jeddah, and Dammam. Consumers from smaller cities and different regions may have different views. Researchers may look at different variables in consumer-to-consumer online shopping such as the type of products and the availability of products via online business-to-consumer.

8. Conclusion

This study aimed to investigate consumer-to-consumer online shopping behavior based on the Theory of Planned Behaviour model (TPB: Ajzen, 1991) with the addition of two factors: trust and price. The proposed model was supported, and important findings were concluded. Trust, attitude, and perceived behavior significantly influences purchasing intention. Lower price significantly influences attitude and subjective norms. Seller reputation has no influence on trust and subjective norms has no influence on consumer-to-consumer online purchasing intention.

Figure 1. C2C online purchasing behavior Model with associated hypothesis by Author



Gender	Male: (74%)	Female: (26%)				
Age	< 25: (5.8%)	25-35: (39.9%)	36-45: (43.3%)	> 46: (10.9%)		
M. income: 1USD=3.75 Saudi Riyal	<3000: (9.2%)	3001-6000: (5.9%)	6001-10000: (30.3%)	10001- 15000: (22.7%)	15001-25000: (20.6%)	>25000: (11.3%)
Education	High Sch. Or less: (5.5%)	Diploma: (5,5%)	Bachelor: (49.5%)	Higher Education (39.5%)		
Occupation	Student: (4.2%)	Gov. Employee: (57.1%)	Priv. Employee: (29%)	Priv. Business: (3.8%)	Unemployed: (5.9%)	

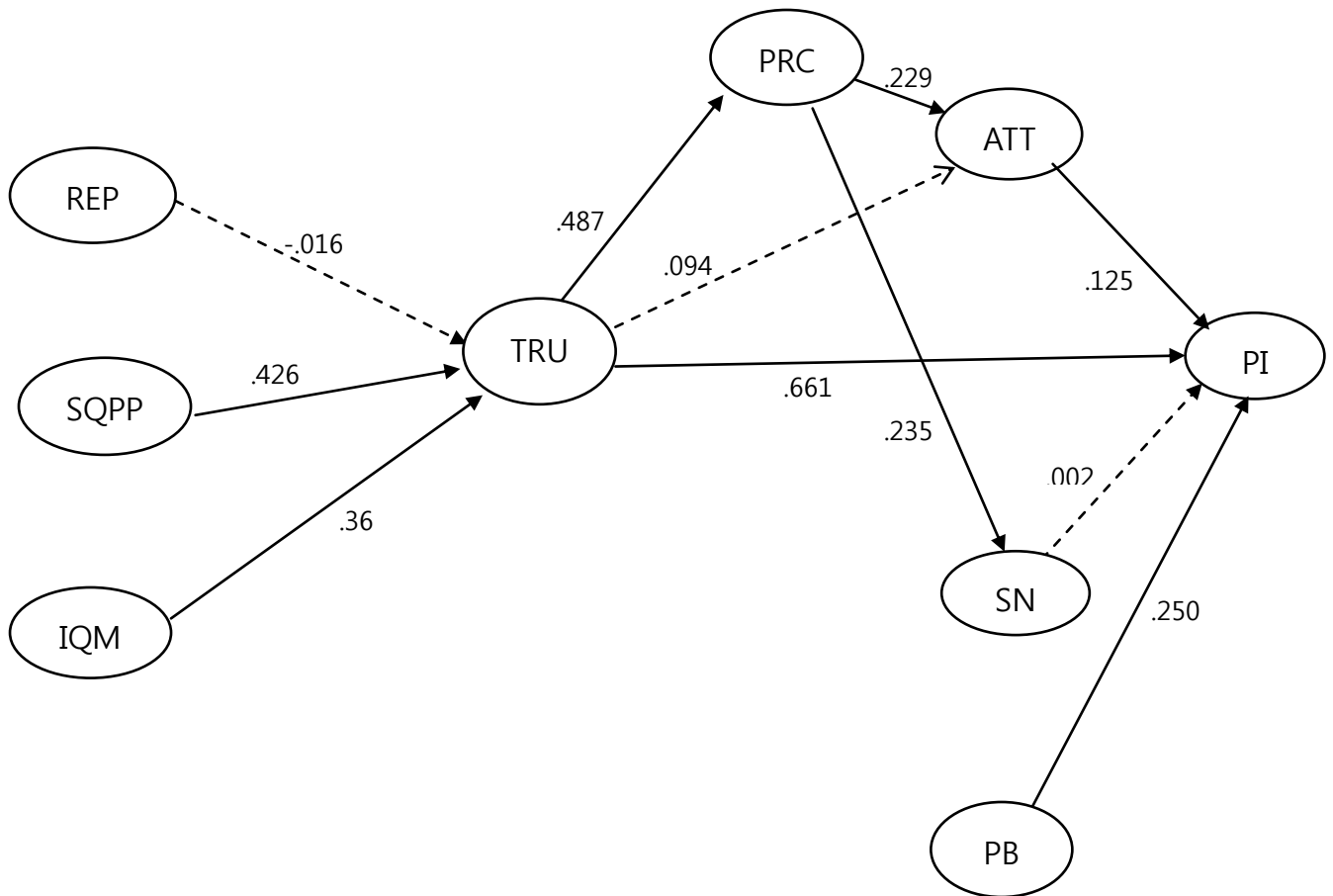
Table 1: The demographic data of the participants

Item	Item loading	AVE	CR	Cronb. Alpha
Information Quality of Merchants (IQM)		.477	.815	.893
IQM1: The merchant displays product / services information accurately.	.461			
IQM2: The merchant displays a variety of information about the features and quality of a product / service.	.646			
IQM3: The merchant features the latest information about a product / service (including availability).	.723			
IQM4: The merchant displays information that is easy to understand.	.749			
IQM5: The merchant displays detailed and complete information.	.821			
Service Quality of Platform Providers (SQPP)		.532	.818	.819
SQPP1: The platform provider enables customer service on its website to help deal with customer problems.	.787			
SQPP2: The platform provider answers questions aptly.	.794			
SQPP3: The platform provider mediates disputes between merchants and buyers.	.699			
SQPP4: The platform provider displays clearly visible contact information on their website, i.e., phone numbers and e-mail.	.626			
Trust (TRU)		.407	.727	.810
TRU1: This site is trustworthy.	.771			
TRU2: This site gives the feeling that it keeps guarantees and responsibilities	.705			
TRU3: I believe this site keeps my best selection in mind	.555			
TRU4: This Website has a good reputation.	.481			
Purchasing Intention (PI)		.654	.849	.906
PI1: I predict that I will use Haraj websites in the future.	.858			
PI2: I plan to use Haraj website in the future.	.822			
PI3: It is likely that I will shop from Haraj website in the near future.	.743			
Subjective norms (SN)		.532	.691	.512
SN1: I shop online as I can shop whenever I want	.818			
SN2: I shop online as I can then save myself from chaos of traffic	.629			
Attitude (ATT)		.609	.818	.879
ATT1: I would like to use Haraj website to resell goods frequently.	.564			
ATT2: Using Haraj website is a good idea.	.883			
ATT3: I like using Haraj website	.855			
Perceived behavior (PB)		.538	.822	.862
PB1: I shop online as I get broader selection of products online	.764			
PB2: Online shopping gives facility of easy price comparison	.786			
PB3: I shop online as I get user/expert reviews on the product	.719			
PB4: I like to shop through the Internet.	.659			

Reputation (REP)		.638	.779	.637
REP1: The seller evaluation is easy to be manipulated	.811			
REP2: Bad sellers may change their names and have new names	.787			
Price (PRC)		.698	.822	.721
PRC1: Lower prices motivate me to buy from Haraj	.882			
PRC2: Most of the time, I buy from Haraj because of its lower prices.	.787			

Table 2: Factors and item loadings

Figure 2 Path Diagram of the applied model



Testing of MOF	Recommended values	Indices of the model
Model chi-square (χ^2)	$p > 0.05$.000
CMIN/df	between 2 and 5	3.436
RMSEA	< 0.08	.072
NFI	$> .9$.970
CFI	≥ 0.95	.978
AGFI	$> .9$.930
GFI	$> .9$.981

Table 3: Goodness of Fit

Hypothesis	Hypothesize Path		β	t-value	p	Label	
H1	TR U	<---	IQM	.365	8.120	***	Accepted
H2	TR U	<---	SQP P	.426	9.839	***	Accepted
H3	TR U	<---	REP	-.016	-.474	.635	Rejected
H4	PRC	<---	TRU	.487	10.526	***	Accepted
H5	PI	<---	TRU	.661	15.778	***	Accepted
H6	ATT	<---	TRU	.094	1.846	.065	Rejected
H7	ATT	<---	PRC	.229	5.138	***	Accepted
H8	SN	<---	PRC	.235	5.424	***	Accepted
H9	PI	<---	SN	.002	.044	.965	Rejected
H10	PI	<---	ATT	.125	2.519	.012	Accepted
H11	PI	<---	PB	.250	4.523	***	Accepted
***Significant at $p < .001$							

Table 4: Path Coefficients with hypothesis test

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