



# Factors Affecting Online Customer-to-Customer Purchase Intention: A Study of Indonesian Customers

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#### Abstract

This paper develops a research framework for analyzing customers' perceptions of using customer-to-customer (C2C) online shop. This paper provides insights into consumer behavior, and the results have important implications for providers of marketers, managers, and designers, and system providers of C2C online shop.

An empirical investigation was carried out to test the hypotheses. The samples include 196 respondents. For testing the relationships of the model, Multiple Linear Regression is used. The results show that trust and social influence are key predictors of a customer's intention to purchase C2C online shop. These findings also indicate, based on gender, only social influence has a significant difference. While based on age, it indicates that only trust has no significant difference.

This study not only contributes more understanding of behavior intention theories for researchers, but they also offer useful knowledge to those involved in promoting C2C online shop to potential purchasers. The value of the paper is that the results could be applied to other types of platforms using C2C such as online auction.

Keywords: C2C online shopping; UTAUT; purchase intention; performance expectancy; effort expectancy; social influence; trust

### 1. Introduction

The growth of Internet users drives the trend of online shopping in Indonesia. The convenience of online shopping has attracted Internet users to adopt online shopping as an alternative to obtain their desired products and services. Internet users can conveniently shopping from their place without worried about the availability of the products in the store, opening hours, or traffic jam. Southeast Asian e-commerce tends to be conducted in large eBay-style marketplaces, often with origins as online classifieds sites, where both individuals (customer-to-customer or C2C) and companies (business-to-business or B2C) sell directly to consumers. Examples of

Indonesian big marketplaces are Bhinneka, Blibli and Tokopedia. Marketplaces make money by charging for listing space and ads on their sites and sometimes by offering shipping and processing services.

These online shop adopters are performing their activities on regular basis using their laptops, tabs or smartphones. There are factors that determine the intention of an online shop adopters to perform the activities. This paper is trying to investigate what factors that affecting purchase intention of Indonesian people on C2C online shop. By using UTAUT framework, how much the performance expectancy, effort expectancy, social influence, and trust will be examined.

#### 2. Literature Review

#### 2.1. Theoretical Foundation in E-Commerce Adoption Research

Technology Acceptance Model is one of the most commonly used model by researchers to study about the acceptance of a new technology. It studies about correlation between two main variables, which are perceived of usefulness and perceived ease of use, toward intention to use a technology (Davis, 1989). Over years, Technology Acceptance Model has been gradually studied and developed. The Unified Theory of Acceptance and Use of Technology (UTAUT) is one of several studies that is developed from this model. Vanketash et al. (2003) identified four variables namely performance expectancy, effort expectancy, social influence, and facilitating conditions that affects people intention to use or adopt a certain technology.

Based on the several previous studies regarding purchase intention on e-commerce, this study will use three out of four independent variables of UTAUT, which are performance expectancy, effort expectancy, and social influence. While the other independent variable which is facilitating conditions is omitted and substitute by trust (perceived trust). The reason for excluding facilitating conditions is because it directly refers to user's behaviour, but not to behavioural intention (purchase intention). In addition, according to Flavian and Guinaliu (2012), trust hold a significant role in creating satisfied and expected outcomes in online transaction. Hence, it is selected as one of the independent variables.

#### 2.2. Factors that influence C2C Online Shop Purchase Intention

Based on the discussion above, in this study those factors that influence online shoppers in their intention to purchase are categorized into four main categories: performance expectancy, effort expectancy, social influence and trust.

Performance expectancy has a direct and significant impact towards people intention to use online shop as a purchasing medium (Renny & Siringoringo, 2013). Based on the research conducted by Shadkam et al. (2013), performance expectancy has a higher impact to people's purchase intention on online platform, compared to effort expectancy as a variable. In e-commerce aspect, performance expectancy measures the benefits of using Internet as the media of purchase, whether doing online shopping enhance people's shopping performance compared to conventional way.

Furthermore, in performance expectancy, intention to purchase on online shop also related to individual's personal behavior, since shopping in online shop is less formal and less interactive compared to conventional shop. (Sareen & Jain, 2014). Someone with self-centered behavior tend to have a higher intention to use online shop as medium of shopping that shopping in conventional way (Homer & Kahle, 1988).

### H1: There is a positive relationship between performance expectancy and purchase intention on C2C online shop.

Not only for determining the level of intention to use on technology, both of perceived of usefulness and perceived ease of use also showed a significant impact on the purchase intention on online shop (Honarbakhsh et al., 2013). On the e-commerce aspect, effort expectancy determine the degree of how people perceived that using online shop as media of transaction could help them to purchase product with less effort compared to the conventional transaction (Chui et al., 2005). Moreover, effort expectancy refers to easiness of navigating the website, accessing the information, and ordering the products (Reibstein, 2002).

#### Lamarauna & Mariani

Website design or the platform interface also have a significant impact on the effort expectancy. According to Lee and Lin (2005), there is a good relationship between a good and user-friendly website design towards customer satisfaction on doing online shop, resulting in increase of users' intention to purchase. In contrast, users will avoid using complicated website or interface that is hard to navigate, which leads to the decrease of people intention to purchase on online shops (Chui, Lin, & Tang, 2005; Green, Pearson, & Pearson, 2007).

There are two major effort expectancy aspects that significantly affect people intention to purchase on an online shop, which are expected of visualization and expected convenience (Sareen & Jain, 2014). Expected visualization, which are includes the visualization of website and products, could increase people purchase intention if the website use good template, user-friendly colour-scheme, readable font and font-size. On the other hand, product visualization related by the picture quality of product and angles of product that could be view. Moreover, expected convenience affects people intention to purchase if the website has a quick response and loading, fast navigation between links on website, and good search engine facility.

# H2: There is a positive relationship between effort expectancy and purchase intention on C2C online shop.

Social influence, also refers as subjective norm, is influence towards certain behaviour or activities that is caused by social pressure such as relatives and friends (Ajzen, 1991). In e-commerce context, people could have a higher purchase intention if they know their relatives or friends doing an online shopping, or if their relatives recommend of doing it, and it refers to social pressure (Sareen & Jain, 2014). Social influence could have a significant relationship toward purchase intention of Indonesian people, since Indonesia is categorized as collectivist country, scoring a very low score in individualism on Hofstede dimension (ITIM International, 2016). Thus, most of them will consider to follow the trends in society, especially from family and friends (Atilgan-Inan & Karaca, 2011).

Social influence is not limited to the influence of close relatives such as friends and families. The trend in society also has a significant impact to people's purchase intention (Sareen & Jain, 2014). In this context, people could perceived that online shopping is a new trend for shopping, hence they will try and adopt online shopping as their status symbol.

### H3: There is a positive relationship between social influence and purchase intention on C2C online shop.

Compared to the conventional way of shopping, perceived trust by the consumers holds a significant role for ecommerce since there is lack of face to face interaction between seller and buyer that may affects people intention to do online purchasing (Mohseni & Sreenivasan, 2014). Based on its definition, trust refers to buyer's perception about seller' behaviour and honesty (Chervany & McKnight, 2001). The main dimension of online trust involves security, reliability, and privacy as the benchmark to measure if an online shop is trustworthy or not. As the result, people assumed that big e-commerce companies is more reliable and trustworthy compared to small online shop, affecting people to have higher purchase intention on online shop (Koufaris & Sosa, 2004).

Moreover, since online transaction is perceived to have a higher risk compared to conventional transaction, trust is used to reduce buyer's concern over seller's behaviour that might negatively impacts people intention on purchasing product from online shops (Chui, Lin, & Tang, 2005). Therefore, to gain the trust, seller should be more transparent and responsible for the transaction in order to have a better long-term relationship with the buyers.

H4: There is a positive relationship between perceived trust and purchase intention on C2C online shop.

### 3. Methodology

The study was conducted using quantitative approach and the questionnaire was distributed online. The questionnaire was developed by reference to previous studies.

Target respondents were Indonesian people within he population used in this research are Indonesian people within the age group of 18–45 years old. The purposive sampling is used to limit the respondents into the digital

native or young generations (18-35 years old) as well as middle aged people or older generation (35-45 years old). But it is not limited to people who had already purchase products from C2C online shop. While the quota sampling is set with the limit of 200 respondents. Within 200 respondents, it was expected to have a fair and reasonable number for respondents based on the gender and age group.

The questionnaire was developed based on a set of measurement items according to the original UTAUT model, the modified UTAUT model (UTAUT2), other researches related to e-commerce, ICT acceptance and the consumer literature (Venkatesh et al., 2003). Following the procedure explained, the questionnaire consists of 15 items that were rated on 6-point Likert scale varying from strongly agree to strongly disagree. A pilot study performed on a selection of 20 university students who had previous experience in online C2C purchasing, while subjects who had not formerly purchased anything online were removed. Built on the findings of this pilot study, only small alterations were made to the phrasing of some items to enhance additional simplicity and easiness.

# 4. Findings

To examine the relationship between independent variables with dependent variables, multiple regression analysis is used. Before conduction the analysis, tests concerning validity and reliability were carried out to ensure the data used in this study met requirements of multiple regression analysis. The table below presents the multiple regression results.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate					
1	.724 <sup>a</sup>	.524	.514	.80316					

ANOVAª										
Model	Sum of Squares	df	Mean Square	F	Sig.					
Regression	135.666	4	33.916	52.578	.000 <sup>b</sup>					
Residual	123.207	191	.645							
Total	258.872	195								

Coofficients

Coefficients										
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.					
	В	Std. Error	Beta							
(Constant)	.413	.321		1.287	.200					
PE	.094	.070	.103	1.346	.180					
EE	.113	.073	.111	1.565	.119					
SI	.467	.061	.473	7.605	.000					
TR	.237	.061	.216	3.884	.000					

From the Table 1 above, it can be seen that the adjusted R square value for the regression model is 0.524, which means that in this model 52.4% of variances on purchase intention are explained by the independent variable collectively, and the significance value of the regression model is .000 which means that independent variables involved in this model collectively have a significant correlation with the dependent variable, which is C2C online

involved in this model collectively have a significant correlation with the dependent variable, which is C2C online shopping purchase intention. From Table Coefficients, only two of variables have a significance value below 0.05, which are social influence and trust, while the others have a significance value greater than 0.05. These reflect that among four variables proposed as determinant factors of C2C online shopping purchase intention in this study,

 Table 1. Multiple Regression towards Purchase Intention

#### Lamarauna & Mariani

only two variables: social influence and trust, positively and significantly influence Indonesian C2C online shopping customers in their intention to purchase. So in this study, H3 and H4 are fully supported.

In order to compare the results between the demographic of Indonesian consumers, an independent sample t-test is conducted to compare the consumers based on their gender and age. The result shows from 98 male and 98 female respondents, only one variable (perception towards social influence) has a significant difference. While comparison based on age indicates there are three variables have significant differences between young generation and older generation respondents': perception towards performance expectancy, effort expectancy and social influence.

### 5. Conclusions and Recommendations

#### 5.1. Conclusions

Based on the analysis, both performance expectancy and effort expectancy does not have a significant impact on people's purchase intention on C2C online shop. It indicates people do not necessarily feel that their shopping performance is more efficient compared to the conventional way. People do not consider online shop is a more enhance way to do the shopping. While on effort expectancy, previous study by Chui et al. (2005), indicates similar result that even though online shop is sometimes helpful in some particular occasion, but the effort of using it is not less than the effort of shopping in a conventional way.

Social influence does have an impact on people's purchase intention on C2C online shop. As a collectivist country, hence Indonesian people value others opinions and recommendations more than in the individualist country (ITIM International, 2016). Moreover, people could have a higher purchase intention if they know their relatives or friends doing an online shopping, or if their relatives recommend of doing it, and it refers to social pressure (Sareen & Jain, 2014).

Trust does have an impact on people's purchase intention on C2C online shop. Similar study by Mohseni and Sreenivasan (2014) shows similar result that perceived trust by the consumers holds a significant role for e-commerce since there is lack of face to face interaction between seller and buyer that may affects people intention to do online purchasing. Therefore, in order to succeed, e-commerce businesses should inform a clear warranty for the transaction to the customers.

Comparison based on the gender, only social influence is perceived significantly different by male and female respondents. Male respondents have a significantly higher means in terms of social influence. On the other hand, based on the age, performance expectancy, effort expectancy, and social influence are perceived significantly different by young and old respondents. Old respondents have a significantly higher means in all three variables mentioned.

Even though both of performance expectancy and effort expectancy have not a significant impact towards the purchase intention, these variables affect young and older respondents differently. Older generation considered online shopping more efficient compared to the conventional way. In addition, older generation is not considered as the digital native. Therefore, older generation tends to prefer platform that is easy to navigate and simple.

For the social influence, people could have a higher purchase intention if they know their relatives or friends doing an online shopping, or if their relatives recommend of doing it, and it refers to social pressure. Male and older respondents value other people opinions higher compared then female or young respondents. In order for businesses to successfully targeting male or older customers, they should give a good impression towards their platform. If the platform gives a good experience to the visitors, those visitors will spread the word about the platform and it will engage on the male or older respondents.

## 5.2. Recommendation

This study intends to have a better insight on purchase intention of C2C online shop in Indonesian market. However, the questionnaires only distributed into only several cities It is expected to have respondents from many other cities in Indonesia. Moreover, it could also specify on some particular cities, and even comparing cities and regions in Indonesia. The four independent variables that used in this study have not been able to fully explain the factors that affecting purchase intention on C2C online shopping. Based on the research and other studies related to online purchase intention, there are two new possible independent variables that could be studied for the next research, which are price and product variety. First, price is selected since based on Reed (1999), 85% of consumers look for price information when they shop online. It is visible that price is an important cue for consumers choosing online shopping. However, Chiang & Dholakia (2003), found that price is the motivation that has the greatest impact on the possible of online purchase, which showed it influence negatively or positively the likelihood of purchase behavior when the price is relatively high or low compared with market price.

Secondly, product variety is chosen because according to Moe (2003), a broad variety of category-level websites are likely get more visit from hedonic browsers. While, product-level pages are likely to attract goal-directed buyers as it provide more targeted and relevant information. According to Park et al. (2012), browsing on the Internet will improve shopping efficiency because the ease of access to comparable items and thus enabling better product choice when encounter a variety of products. Last but not least, further research is recommended on specific type of C2C, for example auction sites.

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