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# Trust Transfer and Its Effects on The Continuance Usage of Mobile Service in B2C E-marketplaces

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# Trust Transfer and Its Effects on The Continuance Usage of Mobile Service in B2C E-marketplaces

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## Abstract

*This study extends the concept of expectancy confirmation model (ECM) to discuss the trust as an internal motivation that can make customers continue to use mobile service in the middle of risks and uncertainties in mobile service transactions. This study want to know how to build trust in the B2C E-Marketplaces based on trust transfer theory. In the B2C E-Marketplaces, there are three entities that affect overall trust, such as the intermediary, community of sellers, and mobile service provided by an intermediary. To build customer trust, we need to know the factors that affect trust in those entities and whether customer trust in those entities can influence each other. This study used four antecedents of trust (mobile service quality, familiarity, consumer disposition to trust/CDT, and interpersonal recommendation) as factors that can affect trust. This study obtained 606 respondents who are Go-Jek users spread in Jabodetabek, Bali, Bandung and Surabaya. Data were analyzed by using structural equation modeling (SEM) with AMOS 22.0 tools. Results of this study concluded that trust has a significant impact on customers' continuance intention to use mobile service. Trust in intermediary affected by familiarity, interpersonal recommendation, quality of the mobile service, and CDT. Trust in mobile service influenced by CDT, familiarity, and quality of mobile services. Meanwhile, trust in community of sellers only influenced by quality of the mobile service. In addition, this study also concluded that trust transfer occurred from the intermediary to the community of sellers and from the community of sellers to the mobile service provided by an intermediary.*

**Keywords:** AMOS, B2C E-marketplaces, community of sellers, continuance intention, ECM, intermediary, mobile service, SEM, trust transfer theory.

## Introduction

More than two billion or equivalent to a quarter of the world's population will be using smartphones in 2016 and Indonesia will become the world's fourth largest country for using smartphones in 2018 (EMarketer, 2014). In addition, according to Statista (2015), the mobile internet users in Indonesia will continue to grow until 2018. The dynamic and practical culture of mobile devices are expected to dominate the business competition, especially in mobile commerce industry (Witabora, 2014). Moreover, according to Com Score (2014), more customers will be doing online shopping using their mobile applications (51.1%) instead of visiting the websites directly (49.8%) (Witabora, 2014). Therefore, the growth of mobile services in business will continue to grow and provide the great and potential opportunities for the companies to obtain the optimal benefits (Gao, Waechter, & Bai, 2015).

According to Chen (2013), competition between mobile vendors will be very tight because there are a lot of mobile applications that can be downloaded for free (Gao, Waechter, & Bai, 2015). This will make customers can easily switch to another mobile service. Hsu et al. (2014) states that increasing customer loyalty is very important in mobile commerce industry, because the costs for acquiring new customers five times greater than retaining them (Gao, Waechter, & Bai, 2015). Thus, it is important for mobile vendors to retain their customers in order to compete in the dynamic and uncertain business environment as well as to achieve sustainable competitive advantage. Expectancy confirmation model (ECM) from Bhattacharjee (2001) is the first model that is used to describe the continuance behavior in electronic commerce (Hung, Yang, & Hsieh, 2012). However, ECM focuses only on the external motivation, such as satisfaction and perceived usefulness of the customers and it ignores the internal motivation (Hung, Yang, & Hsieh, 2007). Therefore, ECM can explain why customers discontinue their use even though they have already accepted it (Bhattacharjee, 2001). However, ECM cannot explain why customers discontinue their use even though they are satisfied with the services (Hung, Yang, & Hsieh, 2007).

There are various risks such as privacy and security issues and uncertainties in online transactions that make customers discontinue using mobile vendor's services (Chen & Lan, 2014). According to Sonja (2002) trust is one of the internal motivation that can reduce the risk, uncertainty and complexity that occurs in online transactions (Hung, Yang, & Hsieh, 2012). In addition, Bart et al. (2005) and McKnight et al. (2001) also said that trust is a key success factor in building a long-term relationships with customers (Belanche et al., 2014). Therefore, this study expands the ECM model from Bhattacharjee (2001) to discuss the concept of trust as an internal motivation that can affect customers' continuance behavior to use mobile services. The same thing has been done by Hung, Yang, & Hsieh (2012), which discusses the concept of trust in mobile commerce as a whole. Unlike the previous research, this study will discuss how to build customers trust in a specific business model of electronic commerce, namely Business-to-Customer (B2C) E-marketplaces.

According to Hong & Cho (2011) B2C E-marketplaces business model has the highest risk and complexity compared with other e-commerce business models. That is because: 1) the customers will receive a service or buy a product from multiple unknown vendors that they have never met before; 2) there are two service providers in this business model, namely intermediary and community of sellers, so it was not clear who would be responsible if there is a problem when fulfilling the customer orders. Therefore, the trust becomes an important factor in long-term relationship between all of the parties involved in this business model (e.g., customers, intermediary, and community of sellers). In the mobile commerce context, intermediary provide a mobile service in the form of mobile application to bring together the community of sellers with customers. The customers will use the mobile application to conduct transactions with the community of sellers. In other words, customers have to deal with three different entities when they want to use the services, i.e., intermediary, community of sellers, and mobile application from intermediary.

Therefore, we address three main questions: (1) whether customers' trust in those entities (i.e., trust in intermediary, trust in mobile application, and trust in community of sellers) can affect their continuance intentions to use mobile service? (2) What are the antecedents of trust in those three entities? and (3) Whether there is a trust transfer between those three entities. By answering those questions, we hope mobile vendors can utilize their company's resources more effectively, such as by focusing to improve the quality of the variable that have the highest contribution in retaining customers. In addition, the result of this study can enrich the empirical evidence about the role of trust in retaining customers as well as the role of trust transfer theory in building trust in B2C E-Marketplaces.

The rest of this paper is organized as follows: Section 2 provides theoretical background, hypotheses development and purposed research model. In Section 3, a methodology of the research is explained. Section 4 examines the research analysis and results. Section 5 discusses the key implications and limitations of this research. The final section provides the conclusion of this research.

## **Theoretical Background**

### ***E-Marketplaces Business Model***

Electronic marketplace (e-marketplace) is a virtual place where sellers and buyers can meet each other and perform some transactions. A market, either traditional or electronic (e-market) has three main functions: (1) to bring together buyers and sellers, (2) to facilitate the exchange of products, services, and/or information, as well as payment transactions, and (3) to provide the institutional infrastruc-

ture, such as the legal framework and the rules for all activities in traditional or e-market (Turban, King, & Lang, 2011). Although both traditional and electronic market have the same functionality, however the use of computer technology make e-market more efficient because it can provide the latest information and can provide a greater variety of services to make transactions easier and faster.

According to Turban, King, & Lang (2011), there are seven components or main actors in the e-marketplace, i.e., customers, sellers, products or services, infrastructure, front end, back end, and intermediaries. The sellers sell their products or services to the customers by infrastructures provided by intermediaries. Online intermediaries create and manage e-market and also help the transaction processes between sellers and buyers. Moreover, Turban et al. (2011) also mention that there are two type of e-marketplace, namely private e-marketplace and public e-marketplace.

Private e-marketplace is an e-marketplace that are owned or managed by a specific company, which acts as a seller (sell side) or buyer (buy-side). On the sell-side e-marketplace, a company will sell products or services either to individual customers (Business-to-Consumer/B2C) or business customers (Business-to-Business/B2B). Moreover, on the buy-side e-marketplace, a company buy products or services from many suppliers (many-to-one transaction). Meanwhile, the second type, public e-marketplace is an e-marketplace that are owned by the third parties that are not acting as a sellers or buyers. These third parties serve many sellers and buyers. Furthermore, this type of e-marketplace is also known as exchanges.

Based on the research background in the previous section, this study will focus on how to build customers trust in B2C E-Marketplaces.

### ***Trust in E-Marketplaces Business Model***

Trust is defined as the willingness of a trustor to accept the actions of another party based on the expectation that the other party will do something beneficial for trustor, regardless of their ability to monitor or control the actions of the other party (Hong & Cho, 2011). Based on this definition, there are risks involved when trusting other people. Trust remains a significant problem in e-commerce, because customers face some challenges, such as doing transactions with vendors that are unknown and cannot identifying the products directly. In general, online transaction involves the trust between two parties (dyadic relationship), for example, one-to-one relationship between a seller and a buyer. Trust between two parties (dyadic trust) is easy formed because there is only two parties that involved in that relationship.

Meanwhile, trust in e-marketplaces is more complicated than dyadic trust because it involves two service providers, i.e., intermediary and community of sellers (Pavlou & Geven, 2011). Customers should be involved in two type of trust, i.e., trust in intermediary (intermediary trust) and trust in community of sellers (sellers trust). This relationship is similar with one-to-many relationship between a buyer and many sellers (Hong & Cho, 2011). According to Verhagen et al. (2006), intermediary trust involving intermediary as the link between sellers and buyers, while sellers trust describe the buyers' perception when making a transactions. Moreover, intermediary trust refers to the sense of security and safety that the buyer feels related to the work done by intermediary in providing warranty, regulatory, and security effectively (Hong & Cho, 2011). Meanwhile, seller trust associated with the believe that the community of sellers are reliable in providing services to customers (Verhagen et al., 2006). Based on the characteristics of online transactions, customers will always face various risks associated with the uncertainty of the services that will obtained and trust can be a key strategy for addressing those risks and uncertainties (Kim, Ferrin, & Rao, 2008).

### ***Continuance***

Previous studies have focused on technology acceptance and adoption (Chen, 2013; Chen & Lan, 2014; Tan, Ooi, & Lin, 2014; Yang, 2012; Yang & Forney, 2013), and also have shown that trust affect the adoption of technologies (Gefen et al., 2004; Warkentin et al., 2002). However, little research has discussed the role of trust during post-adoption stages (Belanche et al., 2014). Although the acceptance is important for the success of IT/IS implementation, but the existence and long-term success of IT/IS depends more on continuance usage (Bhattacharjee, 2001; Zheng, Zhao, & Stylianou, 2013).

Expectancy confirmation model (ECM) from Bhattacharjee (2001) is the first model that is used to describe the continuance behavior in electronic commerce (Hung, Yang, & Hsieh, 2012). However, ECM only focus on satisfaction and perceived usefulness as the key determinants of continuance intentions. In addition, Hung, Yang, & Hsieh (2007) also state that ECM focuses only on the external motivation, such as satisfaction and perceived usefulness of the customers and it ignores the internal

motivation. In marketing literature, trust is one of the internal motivation that can enhance customer loyalty (Belanche et al., 2014). Therefore, this study will enhance ECM model by adding trust as an effective complement in enhancing users' continuance intention to use mobile services.

### ***Trust Transfer Theory***

Some studies suggest that trust can be transferred between multiple entities (Kuan & Bock, 2017; McKnight & Chervany, 2001; Pavlou & Gefen, 2004; Stewart, 2003). Trust transfer theory explains the basic theory of the trust transfer. According to Stewart (2003), trust transfer occurs when a person builds the trust on an entity based on the trust in other related entities. Doney & Cannon (1997) states that trust can be transferred between multiple entities that are independent but closely related to one another, such as companies with their salespersons (Belanche et al., 2014). Moreover, the transfer of trust between some entities will generate representative effect, because one entity represent other entity, such as salespersons will represent their company in their action. Therefore, trust in one entity will represent trust in other related entities as well (Belanche et al., 2014).

Beside representative effects, Belanche et al. (2014) also mentions contextual effects in trust transfer activity. Trust in contextual effect will shape an individual's belief that an entity will provide a standard, regulation or penalties which could force other related entities to act in accordance with the established standards. Therefore, if an entity has a good reputation to customers, automatically its related entity will have a good reputation too even though customers do not familiar with it.

### ***Antecedents of Trust***

Understanding the antecedents of trust can help mobile vendors to build customers trust effectively (Kim, Ferrin, & Rao, 2008). In the traditional transactions, customer trust is influenced by characteristics of the customers, service providers and organization, and also the interaction of those parties when the transaction occurred. The concept of building customers trust in traditional transaction also applies to online transactions. There are four categories that affect customers trust, such as:

a. Cognition (observation)-based

This category is associated with a customer's observations and perceptions related to the features and characteristics of a particular entity. Factors affecting trust that included in this category is mobile service quality, such as information quality, security and privacy, as well as system reliability. In this study, consumers can only directly observe the mobile application, before finally able to communicate with sellers and observe the quality of whole services from intermediary and sellers. Thus, we analyze the quality of mobile application as the antecedent of trust from cognition-based category.

b. Affect-based

This category associated with the interaction, either directly or indirectly between customers. Factors affecting trust that fall into this category such as recommendation, the customers' review of their experiences when using the products or services, word-of-mouth, and the reputation of products or services.

c. Experience-based

This category associated with a customers' personal experiences with service providers. Factors affecting trust that fall into this category such as internet using experiences, mobile shopping experiences, and familiarity.

d. Personality-oriented

This category related to the habits and characteristics of customers behavior. Factors affecting trust that included in this category is the customer disposition to trust (CDT).

Based on the definition of those four categories, this study choose a factor of each those categories, namely mobile service quality from cognition-based, interpersonal recommendation from affect-based, familiarity from experience-based, and customer disposition to trust (CDT) from personality-oriented category.

## **Hypotheses Development**

Based on the theoretical background in the previous section, it can be concluded that continuance intention is influenced by external motivation (such as satisfaction and perceived usefulness) and internal motivation (such as trust). Mobile commerce transactions in B2C E-Marketplaces business model are very complicated, complex, and involve uncertainties and risks (such as privacy and security concerns). Trust has an important role in reducing those risks and uncertainties. Therefore, this study will analyze how trust can affect customers continuance intention to use mobile service and how to build trust in B2C E-Marketplaces.

In this study, there are three different entity involved in customers' transactions, i.e., intermediary, community of sellers, and mobile service from intermediary to bring together the sellers and customers. First, the intermediary is a salient component which provide mobile service to the customers. Second, we consider the community of sellers, because they will provide a service directly to customers. Customers will use the mobile service from intermediary to conduct the transactions with community of sellers. Therefore, the performance of those three entities (intermediary, community of sellers, and mobile service) will affect the overall customer trust. Figure 1 represents a research model and the hypotheses of this study. The process of formulating the hypotheses will be explained as follows.

### ***Customer Disposition to Trust (CDT)***

CDT refers to the individual nature of the customer which leads them to trust other people or other things (Kim, Ferrin, & Rao, 2008). In addition, CDT is a common tendency to show the beliefs among people and to apply mutual trust to others. Every customer has their own personalities, cultural backgrounds, and experiences. Therefore, the level of trust of a customer will be different to another customer. According to Fukuyama (1995), McKnight et al. (1998), Rotter (1971), the difference level of customers trust is not based on their knowledge of a particular party, but based on their perceptions and personal experiences during their lifetime (Kim, Ferrin, & Rao, 2008). Moreover, if a customer has a high desire to trust others, then the probability of customer will trust the service providers and their related entity will be higher too.

As mentioned earlier, the service providers in this study consist of intermediary, community of sellers, and mobile service provided from intermediary. Therefore, we proposed that,

**H1.** CDT positively influence (a) trust in intermediary, (b) trust in community of sellers, and (c) trust in mobile service.

### ***Interpersonal Recommendation***

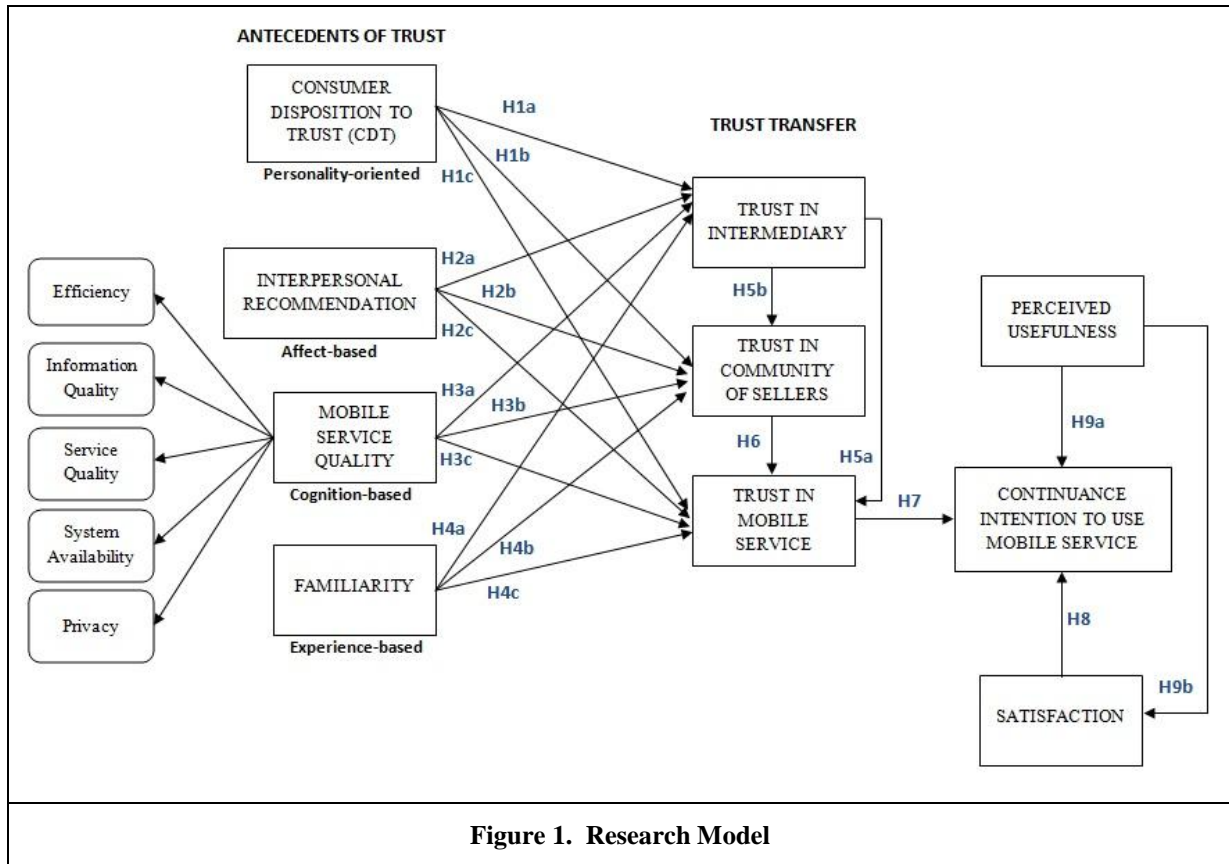
Interpersonal recommendations are defined as informal, non-commercial, and person-to-person exchange of information (Belanche et al., 2014). Customers will collect opinions from people around them to reduce uncertainty when doing online transaction using mobile services (Bhattacharjee, 2000). Moreover, in mobile service transactions, interpersonal recommendations entail word-of-mouth which is influenced by family, friends, colleagues, and/or superiors, which may increase trust in the intermediary, its mobile service, or the community of sellers.

First, the role of intermediary is connecting many sellers and buyers by providing mobile services in the form of a website or a mobile application. This makes customers difficult to evaluate the service quality of the intermediary and community of sellers, because they will never meet the intermediary and there are so many sellers in the intermediary's marketplace. Even after using the intermediary services and have a direct interaction with the community of sellers, customers are still not sure about their evaluation (Belanche et al., 2014). Fulk (1993) states that based on social information theory, interpersonal recommendation will influence customers' evaluation involving uncertainties. Folkes & Patrick (2003) added as friends, colleagues, relatives, or superiors recommend to use a mobile service from a particular intermediary, then it will confirm their trust in that intermediary. In other words, a recommendation from someone to use a particular service would force customers to trust a higher entity, such as the organization that provide that service.

Second, one of the biggest challenges in mobile commerce industry is how to introduce and promote the mobile service to customers. Recommendation or word-of-mouth is the most effective marketing strategy to help customers to grasp and understand how to use all of the features in mobile service (Kumar & Benbasat, 2006). Moreover, Belanche et al. (2014) also state that the interpersonal

recommendation can easily enhance customer trust in the mobile service. Thus, the proposed hypothesis related to this concept is as follow:

**H2.** Interpersonal recommendation positively influence (a) trust in intermediary, (b) trust in community of sellers, and (c) trust in mobile service.



### Mobile Service Quality

Belanche et al. (2014) define mobile service quality as the degree of a mobile application can facilitate purchasing, payment, and delivering transactions. Moreover, the quality of mobile service is measured by several indicators, such as efficiency, privacy, fulfillment, and system availability (Parasuraman et al., 2005). Customer use mobile service to be more efficient either in time or effort when conducting the transaction with sellers. In addition, the quality of mobile application also depends on their reliability to protect customers' privacy (Parasuraman et al., 2005). Therefore, service providers should address those issues well. Moreover, according to Gao, Waechter & Bai (2015) when using mobile service, customers expect to find an up-to-date information in order to make any purchases anytime and anywhere. Gao et al. add that if the information in mobile service is inaccurate, irrelevant, and not up-to-date, the customers will doubt the integrity and capability of mobile vendor in providing services. All those indicators will affect the quality of mobile service (Gao, Waechter & Bai, 2015). Thus, we use efficiency, privacy, system availability, information quality, and service quality as the indicators to evaluate the mobile service quality.

The quality of the mobile service can affect the success of mobile service adoption (Bisara, 2014). As we said before, this study will discuss efficiency, privacy, system availability, information quality, and service quality as the factors to measure the quality of mobile service. According to McKnight et al. (2002) those factors are key factors that can affect customer trust in mobile service (Belanche et al., 2014). For example, providing an accurate and up to date information, ensuring the privacy and security of customers, and ensuring the reliability and fast response of the system when processing all of the customers' transactions will increase their satisfaction and also their trust not only in mobile service, but also its service provider.

In this study, customers use mobile applications from intermediary to communicate and conduct transactions with community of sellers. If the mobile application does not work properly, e.g., fails to process payment transactions or provide inaccurate and irrelevant information, customers will

assume intermediary or community of sellers are not reliable to provide services. This condition will bring down customer trust as well as their intention to use the service. Furthermore, maintaining the quality of mobile applications implies an investment from service providers to build customer trust and their long-term commitment with company (Belanche et al., 2014). Therefore, we proposed that,

**H3.** Mobile service quality positively influence (a) trust in intermediary, (b) trust in community of sellers, and (c) trust in mobile service.

### ***Familiarity***

Customer familiarity to the service providers (intermediary or community of sellers) refers to how much customers know those service providers and understand all of the procedures when conducting transactions with them, including how to use mobile service from intermediary (Kim, Ferrin, & Rao, 2008). Familiarity is a prerequisite emergence of trust because the familiarity leads to the understanding of the present activities of a certain entity, while trust associated with the expectation about the action on an the entity in the future (Kim, Ferrin, & Rao, 2008). Furthermore, customer familiarity is based on their previous experiences when using the mobile service or when interacting with the intermediary or community of sellers. As the result of this familiarity, the level of customer trust will increase and they will expect service providers to fulfill all of their promises and obligation and provide better services to them. Therefore, the proposed hypotheses related to this concept are as follow:

**H4.** Familiarity positively influence (a) trust in intermediary, (b) trust in community of sellers, and (c) trust in mobile service.

### ***Trust Transfer Between Intermediary, Community of Sellers, and Mobile Service***

In this study, customer loyalty in using intermediary services is indicated by the re-use of the mobile application from intermediary. Customers use the mobile application to conduct transactions with the community of sellers, so that there are three entities that affect overall trust of customers, i.e., trust in intermediary, trust in community of sellers, and trust in mobile service. In this study, trust in intermediary is defined as the customer's desire to receive services from intermediary in the hope that intermediary can protect the privacy and security of customers when conducting transactions or using the services. Meanwhile, trust in community of sellers is defined as the customer's desire to receive the services of community of sellers in the hope that the community of sellers is reliable in providing services. Moreover, trust in mobile application is defined as the customer's desire to use mobile application in the hope that the mobile application is reliable in connecting customers with community of sellers and reliable in processing all transactions (Hong & Cho, 2011).

Trust can be transferred from the well known target, such from offline channel to a unfamiliar target, such as online channel (mobile service) (Belanche et al., 2014). Kuan & Bock (2007) also said that when customers have trusted the company through the offline channels, then they will also trust the mobile service as an online channel of the company. Belanche et al. (2014) have proven that trust in public administration will affect the trust in e-service provided by those public administration. In this study, intermediary provides mobile service to the customers, therefore it can be concluded that the trust formed in the intermediary will affect the trust in its mobile service too.

In addition, Stewart (2003) also stated that trust can be transferred from several different sources, such as people, places/locations, and organizations (Hong & Cho, 2011). For example, customer trust in the sellers can be transferred to a company where the sellers works or vice versa. Furthermore, trust that has been established due to the security assurances given by the company will help to build the trust in the sellers who work for that company. This is because the trust that has been established in the intermediary can reduce the risk in transacting with unknown community of sellers. Moreover, Verhagen et al. (2006) have proven that there is a trust transfer from intermediary to community of sellers in the e-marketplaces business model. Thus, based on this concept, we proposed that,

**H5.** Trust in the intermediary positively influence (a) trust in the mobile service and (b) trust in the community of sellers.

As mentioned before, mobile service is a service that involves various risks and uncertainties, both due to the limitations of mobile devices and the ability of service providers to process transactions (Gao, Waechter, and Bai, 2015). According to Pavlou & Gefen (2004) customer trust in the community of sellers can reduce these risks and uncertainties, and will increase customer's desire to conduct other



transactions (Hong & Cho, 2011). In addition, Verhagen et al. (2006) also stated that there is a positive relationship between customer trust to the community of sellers with the desire of customers to conduct the transactions.

Furthermore, customers conduct a transaction with the community of sellers through the mobile service provided by the intermediary. In other words, customers only use the mobile service if they trust the sellers and they are willing to do a transaction with them. Therefore, we can say that trust in the community of sellers will affect the use of the mobile service. Thus, based on this concept, we proposed that,

**H6.** Trust in the community of sellers positively influence trust in the mobile service.

### ***Trust in Mobile Service, Satisfaction, and Perceived Usefulness as an Antecedents of Continuance Intention***

This study proposes that customer trust in mobile service will affect the reuse of the service in the post-adoption phase. According to Belanche et al. (2014) customer perceptions related to the system's vulnerability until the benefits of its use will appear in the post-adoption phase. This is because the system has stored and used the customer's personal information. Furthermore, trust can increase the customer's desire to reuse an information system by reducing the risks and uncertainties of the systems and transactions associated with it (Belanche et al., 2014).

In addition, according to Sonja (2002) trust is a mechanism to reduce the complexity of relationship that occur in the e-market. Moreover, Bart et al. (2005) and McKnight et al. (2001) suggest that trust is a key factor for success in building long term relationship with customers. Trust will make customers continue to use mobile service as well as reduce their desire to switch to other mobile service from different organization. Thus, based on this concept, we proposed that,

**H7.** Trust in mobile service positively influence continuance intentions to use the mobile service.

In addition, allign with ECM model of Bhattacharjee (2001), this study also purposed that,

**H8.** Perceived usefulness positively influence (a) continuance intentions to use the mobile service and (b) customer satisfaction on mobile service

**H9.** Satisaction on mobile service positively influence continuance intentions to use the mobile service.

## **Methodology**

### ***Measurement***

The research instruments of this study were adapted from related previous studies. First, the antecedents of trust constructs were adapted from Kim, Ferrin, & Rao (2008), Belanche et al. (2014), and Gao, Waechter, & Bai (2015) studies, which is the measurement items of Consumer Disposition to Trust (CDT) and Familiarity constructs were adapted from Kim, Ferrin, & Rao (2008) study, while the measurement items of Interpersonal Recommendation and Mobile Service Quality constructs were adapted from Belanche et al. (2014) and Gao, Waechter, & Bai (2015) studies. Second, the measurement items of Trust in Intermediary, Community of Sellers, and Mobile Service constructs were adapted from Belanche et al. (2014) and Gao, Waechter, & Bai (2015) studies. Finally, the measurement items of Satisfaction, Perceived Usefulness, and Continuance Intentions constructs were adapted from Belanche et al. (2014) studies.

This study is conducted based on quantitative approach and using survey method. The questionnaire that used in this study was in 1 to 5 likert scale, with 1-point indicated strongly disagree and 5-point indicated strongly agrees. As this study was conducted in Indonesia, the measurement items of all constructs in the questionnaire were translated from English into Bahasa. Therefore, we have to perform readability test to 15-20 people in order to make sure that the questionnaire was quite understandable and unambiguous. After readability test, the data collecting process can be conducted.

### ***Data Collecting***

The data was collected through online questionnaire, which distributed in the social media, mailing list, and online discussion forums. The respondents of this study are the customers of PT Go-Jek Indonesia, which is the users of Go-Jek mobile application. PT Go-Jek Indonesia was an e-commerce

company that provide the transportation services to the customers. They act as an intermediary that bring together the drivers and the customers. The customers and the drivers can communicate to each other by using mobile application provided by the intermediary. The data were collected for a month, which is from October 2015 until November 2015. From this data collecting process, the number of valid respondents that we obtained were 606 respondents. The demographic of the respondents is shown in Table 1.

**Table 1. Sample Characteristics**

Characteristics	Item	#	Characteristics	Item	#
Gender	Male	188	Users Experience using m-service	<1 year	85
	Female	418		1-2 year(s)	184
Age	<20	254		3-4 years	189
	20-30	340	>4 years	148	
	31-40	7	Shopping Frequency in last month	Never	65
	>40	5		<5 times	317
Occupation	Students	548	5-10 times	141	
	Public servant	7	>10 times	67	
	Private employee	36	Always	16	
	Businessman	9			
	Others	6			

## Analysis and Results

The research model was analysed using structural equation model (SEM) with AMOS 22.0. The data analysis took place through a two-stage methodology, in which the first stage is to develop and evaluate the measurement model and the second stage is to evaluate the structural model.

### Measurement Model Evaluation

The measurement model evaluation involves establishing the indicator reliability, construct reliability, and construct validity, which consists of two components: convergent validity and discriminant validity.

Firstly, to measure the internal coherence of all the measurement items in relation to the constructs, the indicator reliability was calculated. In order to analyze the indicator reliability, factor loadings of all measurement items should be statistically significant and preferably greater than 0.7 but greater than 0.5 are also acceptable (Hair et al., 2010). The loading factors for each items in this study can be seen in Table 2. SA3 and IR2 were the items with loading factors lower than 0.5, so those items were excluded. Meanwhile, all other items were retained and their loading factors are greater than 0.5. Therefore, all of those remaining items satisfy the internal consistency.

Secondly, the construct reliability was checked by using two indicators: Composite Reliability (CR) and Cronbach's Alpha (CA). The reliability for CR and CA are acceptable if their values is 0.7 or greater (Wijayanto, 2008). An shown in Table 2 the value of CR and CA for each construct are above the expected threshold, indicating they construct reliability are satisfied. Then, in order to assess convergent validity, average variance extracted (AVE) was calculated. The value of AVE is should be greater than 0.5 to satisfy the convergent validity (Wijayanto, 2008). As shown in the Table 2 the AVE values for each constructs are exceed the expected threshold, therefore the convergent validity was satisfied. Finally, to grant discriminant validity, the square root of AVE should be greater than the correlations between the constructs. As shown in Table 3 all the square roots of AVE exceed the inter-construct correlations, indicating all of the constructs in this study satisfy the discriminant validity.

Additionally, we calculate goodness-of-fit measures. Based on the recommendations of Byrne (2010) and Hair, et al. (2010), we choose root mean square error of approximation (RMSEA), comparative fit index (CFI), tucker lewis index (TLI), normed fit index (NFI), and goodness-of-fit index (GFI). The recommended values for these fit indices and the result for the measurement model are given in Table 4, which shows that all values are within the recommended ranges indicating that the measurement model has a good fit.

Table 2. Scale Reliability and Convergent Validity

Construct	CA	CR	AVE	Item	Factor loading
<b>Customer Disposition to Trust (CT)</b>	0.866	0.872	0.633	CT1	0.829
				CT2	0.681
				CT3	0.911
				CT4	0.741
<b>Familiarity (FM)</b>	0.918	0.918	0.737	FM1	0.837
				FM2	0.840
				FM3	0.887
				FM4	0.868
<b>Service Quality (SQ)</b>	0.838	0.845	0.579	SQ1	0.666
				SQ2	0.818
				SQ3	0.867
				SQ4	0.673
<b>Information Quality (IQ)</b>	0.868	0.871	0.631	IQ1	0.831
				IQ2	0.870
				IQ3	0.803
				IQ4	0.658
<b>Efficiency (EF)</b>	0.846	0.849	0.652	EF1	0.822
				EF2	0.832
				EF3	0.767
<b>Privacy (PV)</b>	0.905	0.908	0.767	PV1	0.840
				PV2	0.866
				PV3	0.920
<b>Interpersonal Recommendation (IR)</b>	0.747	0.703	0.542	IR2	0.692
				IR3	0.766
<b>System Availability (SA)</b>	0.999	0.856	0.748	SA1	0.850
				SA2	0.880
<b>Trust in Intermediary (IT)</b>	0.797	0.754	0.505	IT1	0.745
				IT2	0.688
				IT3	0.698
<b>Trust in Community of Sellers (SL)</b>	0.798	0.757	0.510	SL1	0.713
				SL2	0.701
				SL3	0.728
<b>Trust in Mobile Service (AP)</b>	0.839	0.818	0.600	AP1	0.798
				AP2	0.819
				AP3	0.702
<b>Continuance Intention (CI)</b>	0.898	0.867	0.684	CI1	0.787
				CI2	0.830
				CI3	0.863
<b>Satisfaction (SAT)</b>	0.898	0.900	0.750	SAT1	0.871
				SAT2	0.880
				SAT3	0.846
<b>Perceived Usefulness (PU)</b>	0.897	0.900	0.751	PU1	0.901
				PU2	0.899
				PU3	0.796

Notes: CA: cronbach's alpha; CR: composite reliability; AVE: average variance extracted.

### Structural Model Evaluation

After testing the measurement model, we test our structural model and our main focus is to test the hypothesized relationships. The structural equation model results are shown in Figure. 2. Based on our analysis result, 14 hypotheses were supported with the significance level  $p = 0.05$ , while 5 hypotheses which have t-value lower than 1.96 were rejected. From the result, we can conclude that not all of the antecedents of trust have a significance effect on trust. First, CDT only has a significant effect on trust in intermediary ( $\beta = 0.125$ ;  $t = 2.767$ ) and trust in mobile service ( $\beta = 0.106$ ;  $t = 3.037$ ), so H1a and H1c are accepted. However, CDT does not have a significant effect on trust in community of sellers ( $\beta = -0.014$ ;  $t = 0.385$ ), so H1b is rejected. Secondly, Interpersonal Recommendation only has a significant effect on trust in intermediary ( $\beta = 0.165$ ;  $t = 2.673$ ), but does not have a significant effect on trust in community of sellers ( $\beta = 0.041$ ;  $t = 0.822$ ) and trust in mobile service ( $\beta = 0.015$ ;  $t = 0.364$ ), so H2a is accepted, but H2b and H2c are rejected. Thirdly, Mobile Service Quality have a significant effect on trust in three entities, such as intermediary ( $\beta = 0.579$ ;  $t = 8.088$ ), community of sellers ( $\beta = 0.515$ ;  $t = 5.452$ ), and mobile service ( $\beta = 0.721$ ;  $t = 5.576$ ). Thus, the hypotheses H3a-c are

accepted. Meanwhile, Familiarity only has a significant effect on trust in intermediary ( $\beta = 0.217$ ;  $t = 3.184$ ) and trust in mobile service ( $\beta = -0.164$ ;  $t = 2.421$ ), while on trust in community of sellers does not ( $\beta = -0.038$ ;  $t = 0.636$ ). Therefore, only H4a and H4c are accepted, while H4b is rejected.

In addition, there was a trust transfer from intermediary to the community of sellers ( $\beta = 0.451$ ;  $t = 4.618$ ) and from the community of sellers to the mobile service ( $\beta = 0.250$ ;  $t = 1.965$ ). However, trust transfer cannot occur directly from intermediary to the mobile service ( $\beta = 0.070$ ;  $t = 0.761$ ). Thus, the hypothesis H5b and H6 were accepted, but H5a was rejected. Figure 2 also shown that trust in mobile service has a significant effect on continuance intention ( $\beta = 0.227$ ;  $t = 3.317$ ), so H7 was accepted. Moreover, allign with Belanche et al. (2014), Hung, Yang, Hsieh (2012), and Bhattacharjee (2001), this study also confirm that continuance intention is influenced by satisfaction ( $\beta = 0.386$ ;  $t = 3.952$ ) and perceived usefulness ( $\beta = 0.357$ ;  $t = 3.959$ ). Then, perceived usefulness also have a significant effect on satisfaction ( $\beta = 0.809$ ;  $t = 21.139$ ). Therefore, H8, H9a, and H9b all accepted.

**Table 3. Discriminant Validity Assessment**

	SA	PV	EF	IQ	SQ	PU	SAT	AP	SL	IT	FM	IR	CT	CI
SA	<b>0,86</b>													
PV	0,23	<b>0,87</b>												
EF	0,43	0,24	<b>0,81</b>											
IQ	0,24	0,13	0,34	<b>0,79</b>										
SQ	0,15	0,23	0,13	0,43	<b>0,76</b>									
PU	0,21	0,15	0,13	0,13	0,14	<b>0,87</b>								
SAT	0,13	0,26	0,22	0,53	0,23	0,42	<b>0,87</b>							
AP	0,21	0,35	0,33	0,32	0,16	0,51	0,23	<b>0,77</b>						
SL	0,13	0,21	0,43	0,11	0,28	0,23	0,37	0,23	<b>0,71</b>					
IT	0,24	0,34	0,24	0,23	0,25	0,43	0,19	0,33	0,34	<b>0,71</b>				
FM	0,32	0,25	0,21	0,46	0,36	0,23	0,25	0,42	0,23	0,26	<b>0,86</b>			
IR	0,45	0,32	0,38	0,47	0,39	0,43	0,38	0,41	0,41	0,18	0,36	<b>0,74</b>		
CT	0,51	0,45	0,37	0,28	0,45	0,54	0,46	0,51	0,23	0,36	0,45	0,43	<b>0,79</b>	
CI	0,34	0,21	0,43	0,28	0,47	0,12	0,26	0,23	0,25	0,39	0,26	0,35	0,43	<b>0,83</b>

Notes: SA: System Availability; PV: Privacy; EF: Efficiency; IQ: Information Quality; SQ: Service Quality; PU: Perceived Usefulness; SAT: Satisfaction; AP: Trust in Mobile Service; SL: Trust in Community of Sellers; IT: Trust in Intermediary; FM: Familiarity; IR: Interpersonal Recommendation; CT: Customer Disposition to Trust; CI: Continuance Intention; diagonal bold letters are the square roots of AVE.

**Table 4. Goodness-of-fit Measures for the Measurement Model**

Goodness-of-fit Measure	Recommended Value (Byrne, 2010); Hair, et al., 2010)	Result
$X^2/df$	$\leq 3$	1,117
GFI	$> 0.80$	0.817
RMSEA	$\leq 0.05$	0.014
TLI	$\geq 0.90$	0.994
NFI	$\geq 0.90$	0.950
CFI	$\geq 0.90$	0.995

## Discussion

This study modifies the ECM concept from Bhattacharjee (2001) by adding trust as the internal motivation. Allign with the Hung, Yang, & Hsieh (2012) and Gao, Waechter, & Bai (2015), this study confirm that trust has a significant direct effect on the continuance intention. In addition, the path coefficient estimate of satisfaction is higher than perceived usefulness to continuance intention. Thus, this finding aligns with Bhattacharjee (2001) which states that the continuance intention is influenced more by satisfaction than perceived usefulness. In other words, it can be concluded that in this study customer satisfaction when using a mobile service become a major factor affecting customer continuance intention.

In addition, this study also found a very strong relationship between perceived usefulness and satisfaction. This means that the perceived usefulness can improve customer satisfaction as well as their desire to continue using the mobile service. Furthermore, the results of this study also show that all antecedents of trust only influence trust in intermediary. Then, trust in mobile service influenced by CDT, interpersonal recommendation, and mobile service quality. Meanwhile, trust in community of sellers only influenced by mobile service quality.

Some studies suggest that trust can be transferred between multiple entities (Kuan & Bock, 2007; Pavlou and Gefen, 2004; McKnight & Chervany, 2001; Stewart, 2003). Trust transfer theory explains the basic theory of the transfer that trust. According to Stewart (2003) transfer of trust occurs when a person builds the trust of an entity based on a faith in other related entities. This study confirm this concept by proving that trust can be transferred from intermediary to community of sellers and continue to mobile service. Based on these findings, it can be said that customers are willing to accept the risk to trust the community of sellers not because they believe in service quality and the ability of the sellers but because they already trust the intermediary. This is consistent with the results of the study Hong and Cho (2011) and Verhagen et al. (2006) which states that there is a transfer of trust from the intermediary to the community of sellers.

Lastly, Figure 2 also showed that there is a relationship between trust in the community of sellers and trust in mobile service. This proves that the trust transfer activity in B2C E-marketplaces not only occur on the intermediary to the community of sellers, but also from sellers continue the mobile service. Moreover, trust in intermediary does not directly affect trust in mobile service, but it is mediated by trust in the community of sellers. In other words, customers who already trust intermediary would not immediately trust the mobile service provided by the intermediary before they trust the sellers who interact directly with them.

### ***Theoretical Implications***

The results of this study indicate that trust can be added to the concept of continuance intention, which previously only used the satisfaction and perceived benefits of customers after using the service. The result of this study also proves that continuance intention is not only influenced by satisfaction and perceived usefulness which is the external motivation, but also influenced by internal motivation which is trust in mobile service. In addition, trust can be formed by considering the factors that influence it, such as interpersonal recommendation, familiarity, mobile service quality, and the customer disposition to trust others (CDT). However, this study found that these antecedents of trust do not apply to all trust in three entities. In this study, these four antecedents of trust only affect trust in the intermediary. Meanwhile, trust in mobile service is only influenced by the familiarity, mobile service quality, and the CDT. Meanwhile, trust in community of sellers is only influenced by the mobile service quality.

Furthermore, the results of this study suggest that trust in mobile service is influenced by trust in community of sellers, then trust in community of sellers itself influenced by trust in intermediary. Therefore, this study proves that trust can be transferred from intermediary to community of sellers and from community of sellers to mobile services from intermediary.

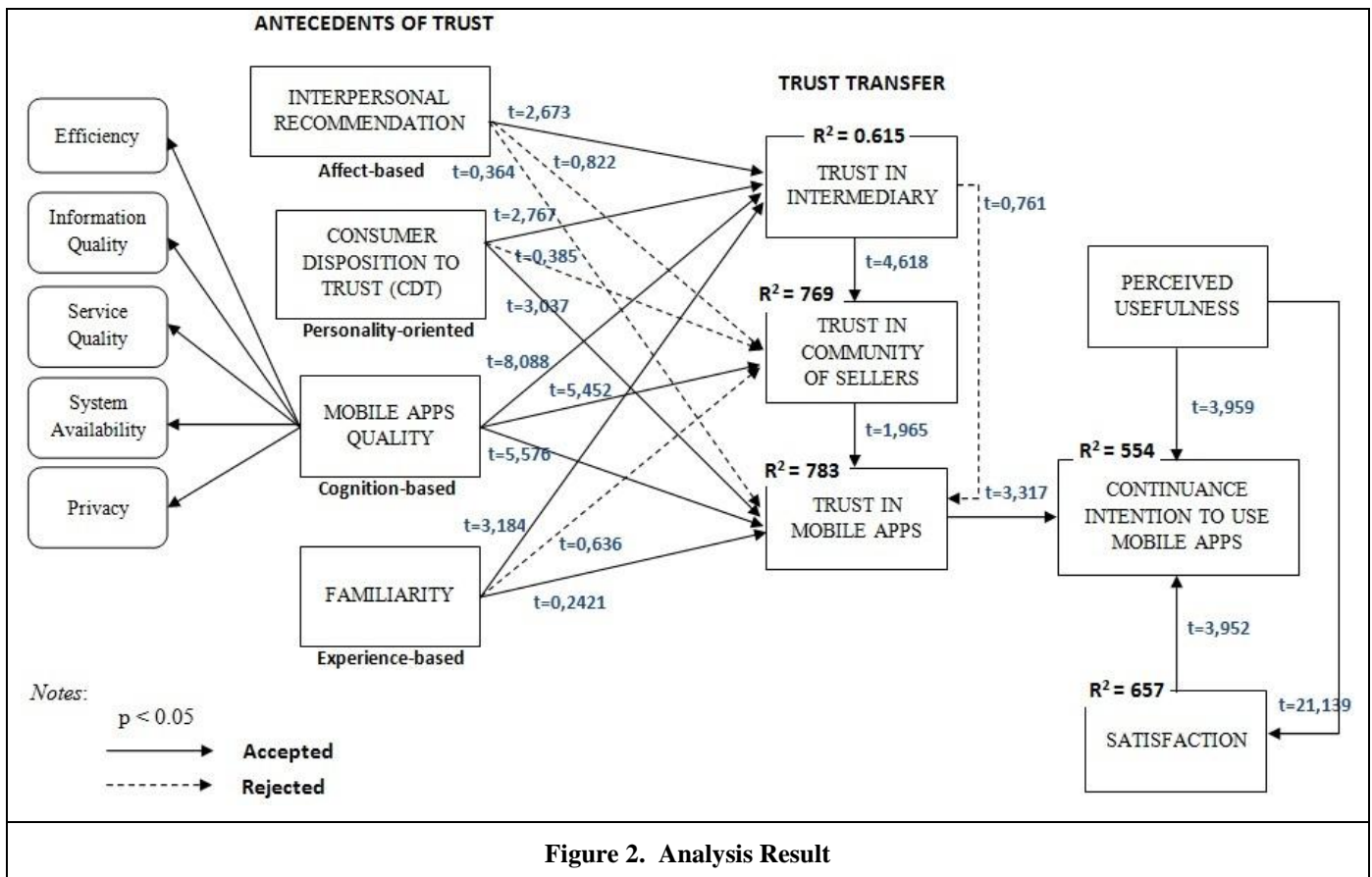
### ***Managerial Implications***

The results of this study can help mobile service providers to build trust in the B2C E-marketplaces business model. This research has shown that the company (intermediary) should build customer trust in the company first. Factors that may affect customer trust in the company are familiarity, recommendation, and the quality of mobile service. Therefore, companies should improve their promotion or marketing strategy to introduce their mobile service to customers, so it can improve the familiarity and word of mouth of the customer. In addition, companies should also pay attention to the quality of mobile service, such as the quality of information, system availability, the efficiency, privacy, and the quality of service provided through the mobile application. After building the customer trust to the company, then the customer will transfer the trust to the employees and the mobile service provided by the company.

In addition, the results of this research can also help business to retain their customers by considering customer trust, satisfaction, and their perceived usefulness after using the services.

## Limitations and Future Research

Based on the discussion in this study, the main limitation in this study is the respondents who mostly from among students (90%) with age range 20-30 years and most of them are woman (68%). Thus, the findings of this study cannot be generalized to the respondent group who work as employees over the age of 30 years. Further research is expected to involve other respondents, such as employees with more varied age and gender. In addition, future research may modify the research model in this study. For example, by developing some rival models to find any possible relationship between trust in intermediary, community of sellers, and mobile services.



## Conclusion

This study was conducted to determine how trust can influence the customer continuance intention to use mobile service. In addition, this study also want to know how to build trust in the of B2C E-marketplaces business model, involving several entities, namely intermediary, community of sellers, and mobile service provided by intermediary. For building the customer trust in this business model, we need to know the factors that affect trust in those entities and whether those three entities can influence to each other. The result of this study can help managers to utilize their company's resources more effectively, such as by focusing to improve the quality of the elements that have the highest contribution in retaining customers. In addition, the result of this study can enrich the empirical evidence about the role of trust in retaining customers as well as the role of trust transfer theory in building trust in B2C E-Marketplaces. However, despite those important findings, this study also have a limitation related to the characteristic of the respondents. Most of them are college students with an age range 20-30 years. Thus, it will affect the findings. Thus, future studies can enrich the demographic of the respondents.

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