

# Development Plan for Research on Omni-Channel Shopping to Purchase Intention

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**Abstract**—The new concept of omni-channel has inspired researchers to develop a model of consumer confusion to increase purchase intention. Previous studies were tested that the omni-channel integration quality can improve customer satisfaction. As a novelty, we introduced omni-channel integration as a moderating variable that influence consumer confusion to the intention of purchase. This paper constituted a hypothetical development about the proposed omni-channel integration as a part of the e-quality service. This proposed research aimed to explore the effect of consumer confusion towards purchase intention moderated by omni-channel integration. In addition, this study discussed about the antecedent of consumer confusion to the intention of purchase, namely e-WOM. Three hypotheses were modeled in this research proposal. The future results of this research were expected to be a significant contribution towards business, science, and society.

**Keywords**—consumer confusion; purchase intention; electronic word of mouth; omni-channel integration quality

## I. INTRODUCTION

E-commerce is an industry that is still relatively new in Indonesia, but it is predicted that the industry will experience rapid growth over the next few years. The potential of online shopping in Indonesia is growing up with the Internet accessibility. It also encourages to increase the confidence of consumers to shop online than offline at a store. In 2012, e-commerce sales in Indonesia reached 1.04 billion US dollars [1]. E-commerce sales in Indonesia is expected to keep increasing to reach 4.49 billion US dollars in 2016 [1].

Contrary to the above data, the survey of Association of Indonesian Internet Services [2] showed that the use of the Internet for buying and selling online in Indonesia is still low at around 11 percent. The highest of Internet usage in Indonesia is used for social networks (87.4 percent) and for searching or browsing information (68.7 percent).

The online transaction mostly done in Indonesia were the purchases of movie tickets, performances tickets, exhibitions

tickets, and sports performances tickets [3]. There were 85 percent of Internet users in Indonesia that used smart mobile devices, 32 percent used a laptop / netbook, 14 percent used personal computers, and 13 percent use tablets [2]. Furthermore, Indonesian consumers who using the smartphones to shop online is about 61 percent, using computer is about 58 percent, and using tablet is about 38 percent.

Another survey conducted by [4] and [5] showing that Indonesia is the country that has the highest growth of e-commerce in the Asia Pacific region. Survey [4] concluded that shopping using smartphones in Indonesia was higher (54.9 percent) than Malaysia (45.6 percent) and Singapore (36.7 percent). Reference [5] revealed that m-commerce accounted for 27 percent of the total e-commerce transactions in Asian countries. Indonesia occupied the first position in e-commerce (34 percent), followed by Taiwan (31 percent) and Singapore (29 percent).

As many as 91 percent of consumers will share their experience through social channels [6]. Seventy-four percent of consumers said that advice influenced their buying decision (i.e., what to buy and from whom to buy) [6]. Regarding the recommendation that consumer most trust, 90 percent of consumers trust the recommendations of family and friends; 68 percent of consumers trust recommendations of other consumers [6]. However, only 10 percent of consumers believe the recommendation of retailers or manufacturers [6]. With this fact, it is important to identify that the consumers do not post their comments about the products they buy, but also read the reviews about the products. Sixty-nine percent of consumers write reviews about their experiences with the retailers at least once a month [6]. Moreover, 7 in 10 consumers post or check their comments to the social network community at least once a day [6]. Regardless, reviews are important for shaping consumer opinions [6]. In fact, 6 of 10 consumers have chosen to avoid certain retailers after reading the negative reviews [6].

Google reveals that there are 80 percent of shoppers will research online before making a purchase, and they are turning to other devices to meet their needs [7]. For example, 51 percent of shoppers will research products online and then visit a store to buy a product, and as many as 17 percent will visit a store first and then buy the product online [7]. Meanwhile 32 percent of other buyers will research online, visit the store to see the product, and then back to the online store to purchase the product [7]. A "nonline" experience or a mix of online and offline behavior is called omni-channel experience [7].

According to [8], the technology investment is critical to enabling exemplary omni-channel customer experience. Today, many retailers see the maturity of omni-channel as a key brand differentiator, with increased customer satisfaction, loyalty, and brand perceptions highlighted as the top benefits. However, many retailers have reached a state false expense of omni-channel comfort.

There are five main reasons that consumers in Indonesia does not make a purchase or referred to abandon shopping carts [9]. Those reasons are the fear of delay product delivery, the reluctance of signing up, the fear of receiving the wrong product, the desire to see a product physically before buying, and the lack of intended products. In addition, the other reason is the confusing website that caused consumers abandon shopping carts. Reference [8] reported that there were 65 percent of online consumers who abandon shopping carts or cancel their purchase.

Reference [3] found that consumer confusion on the company's web site is still quite high, which is about 33 percent. This can be a barrier for buyers who are still undecided. Reference [10] argued that the consumer confusion is a situation that must be faced by consumers. Consumers aware of their own confusion, but may not realize the magnitude of the excess load [10]. It is important to see that the consumer does not need to be burdened as it can affect the behavior of consumer decision to purchase.

Based on the above background, the researchers will develop a new construct to reduce consumer confusion towards purchase intention through e-commerce industry in Indonesia. The novelty of this research is omni-channel integration as an aspect of e-service quality that will be examined as a moderator variable that may contribute to reduce consumer confusion in increasing consumer purchasing intentions.

## II. LITERATURE REVIEW

### A. e-Consumer Behavior

In line with rapid technological developments, consumer behavior is also changing. Consumers have the opportunities to access more information and consider purchasing decisions more quickly. Consumer is the person who identifies a need or desire, to purchase products, and consume the product. Reference [11] even gave a new name to the consumer which is called "e-consumer" and their behavior which is called "e-consumer behavior".

Consumer behavior is defined as an assessment of the actions of consumers ranging from search, buy, use, assess, and dispose of the products and services that are expected to meet the needs of themselves [12], [13], [14], [15]. Consumer behavior is defined as an action of someone to buy and use the products and services, including psychological and social processes [16]. Consumer behavior is a social science that seeks to model and understand human behavior in a market or marketplace [17], [18]. The behavior of consumers is defined as a field of science that studies about the things that makes the consumer to purchase [15]. When companies know the factors that encourage consumer to make purchase, the company will be easier to develop strategies for influencing the consumer.

Consumers have six reasons to make online purchases, namely: convenience, choice, customization, communication, cost, and control [16]. Firstly, convenience becomes a source for creating value for online customers. Second, making online purchases is a choice which has two dimensions: (i) product selection and availability of wider services offered to consumers and (ii) the availability of choice assistance. Third, customization is an Internet capability that enable customers to obtain information that is individualized and highly interactive. Online consumers do not only customize the product or service, but also personalize the marketing and the overall purchase of each customer interaction. Fourth, online consumers utilize communication skills supported by Internet technology. Fifth, the cost encourages consumers to make online purchases online. The availability of "dynamic pricing" feature that allows the real time price changes to adjust supply and demand conditions. Sixth, control is another reason for consumers to make online purchases. Consumers can use Internet technology to find information, evaluate options, and make a decision to buy in the appropriate time with the consumer's own terms and conditions.

### B. Purchase Intention

One approach used in predicting consumer behavior involved activities to ask the things that must be done by the consumer. This approach is called consumer intentions. Purchase intention is one type of consumer intentions [15]. The purchase intention represent what is thought by consumers if they would buy [15]. According to [19], purchase intention is the tendency of consumers to buy products in the future and not switch to another brand. Purchase intention is the possibility of consumers to make a purchase of a product or behave in a certain way [12]. Purchase intention is defined as the probability (likelihood) of consumers to purchase the product [20].

Purchase intention represents "what consumers think they will buy" [15]. Purchase intentions refers to the efforts of a consumer to buy a product or service [21]. According to the Theory of Planned Behavior were first developed by Azjen, a person's behavior is determined by the intention to perform that action [22]. The intention is informed itself through behavior, subjective norms regarding its involvement in such behavior, and perceptions of the success of the individual in involvement as a target behavior [22]. Thus, purchase intention can be used to predict consumer behavior [23].

### C. Omni-Channel Integration Quality

Online marketing need to be combined with offline marketing to achieve optimal effectiveness [18]. Reference [9] refers to as the omni-channel retail experience "nonline" or a mix of online and offline behavior. Shopping through the omni-channel focused on sales of products through various channels [18], [24]. There is an integration into a physical store, through websites and mobile platforms.

A new concept emerging from the use multi-channels is omni-channel [25]. This new approach emphasizes the idea that consumer can access online information about products in the store even physical contact with a very diverse information, including promotions, price, and negotiation. This shows the importance of the concept of fusion between online and offline sales model, as well as the synergy between these two models. Reference [25] stressed that companies must choose the channels that have a clear role, in which, consumers need to know what to expect and look for in each channel.

Reference [25] explained that the omni-channel can integrate all processes among the logistics, storage, distribution, customer attendance, database, and marketing. Omni-channel will affect all consumption chain. This enables retailers must make the consumer as the main focus, offering many possibilities for perfect attendance and other contents, continuous investment in technology, new services, new store layout and new value creation objectives. This condition can be responded positively by consumers [25].

Omni-channel shopping gives an experience for the consumer to interact with retailers consistently across all channels [26]. Omni-channel is an operational model that is synchronized where all channels are aligned to the customer and performed consistently by the company [27]. Retail companies need to share knowledge on the entire platform of products to consumers. This will facilitate an integrated channel and attract shoppers to shop on any channel. Features that produce information conflicting and confusing should be minimized so that consumers do not become frustrated [28].

Omni-channel is a development approach that uses all channels dialog capabilities including television and video digital media, online advertising, direct mail, etc., which are generally used to promote awareness, interest and consumer response. It will integrate information, transactions and customer service through e-mail, mobile, e-commerce portal, a platform at the terminal point of sales (POS), and others that provide the means to interact directly with an individual who has made the leap from consumers into customers. Omni-channel become more than just a set of capabilities that span the media [29].

Omni-channel integration quality is defined as the inter-channel service consistency and the ability to offer a service with no limits on some channels which are integrated to the customer [30]. It will be a consideration consumer of omni-channel overall service excellence.

### D. Electronic Word of Mouth

Reference [31] stated that the use of the Internet has changed the way consumers communicate and share their opinions or reviews about products or services. It was called electronic word-of-mouth (e-WOM). With the Internet, communication between individuals and groups become much easier, so that communication by word of mouth began to be built in a variety of features on the website [32]. Electronic word of mouth can be seen as a concept in the form of content created by the user [33].

Word-of-mouth (WOM) has been known that have significant impact on purchasing decision. Reference [32] suggested that one of the best way to help consumers in making the decision to buy a product is to deliver WOM. WOM is done so that the consumers do not feel confused and they can reduce the information which has low credibility. WOM is more powerful than conventional marketing, so it can influence consumers in making purchasing decisions on the recommendation of family, friends, or colleagues.

E-WOM takes place online and is done through social networking, brand communities, blogs, chat rooms, and tweets [12]. E-WOM is defined as a form of communication in the virtual community [34]. E-WOM has been defined as a positive or negative statement made by potential customers, current or former customers about the products or the company, which was made available to many people and institutions via the Internet [10]. Reference [35] identified that there are four dimensions that can be measured in the context of online WOM are WOM intensity, positive WOM valence, negative valence WOM, and WOM content.

### E. Consumer Confusion

Consumer confusion is a failure of consumers to develop the correct interpretation of various aspects of a product or service [36]. Consumer confusion could occur in situations pre-purchase or post-the purchase [37]. Consumers can be confused by too much information ("consumer hyper-choice"), too little information, and excessive product [14], [38]. Reference [39] used other terms for consumer confusion which is called market place decision difficulty (MPDD) or difficulty making decisions.

Consumer confusion comes in many forms for their disagreement information and knowledge and lack of information [15]. Confusion may stem from mistaken identity, such as consumers mistakenly believe that the products of a company turns a product from another company [15]. Consumer confusion may also be due to the product names that are too similar, packaging is similar to other containers, certain product characteristics that are very similar, or because of other reasons.

Several literatures mentioned that there are three dimensions of customer confusion consisting of similarity confusion, overload confusion, and unclarity confusion [37], [38], [39]. Similarity confusion is defined as a lack of consumer understanding and the potential for changes on their choice or inappropriate brand evaluation due to the physical similarity of the products or services offered [37]. Similarity confusion can be caused by the similarity of the brand or by

the emergence of similarities on quality or product attributes. Overload confusion is associated with the fact that consumers are faced with an environment that provide too much information. The overload information can hamper customers to process information and understand fully, and consumers have confidence in making purchases [37]. Unclarity confusion occurs when customers are forced to re-evaluate and change their beliefs or current assumptions regarding the product or purchasing environment [37]. Unclarity confusion is a result of the ambiguous, unclear or contradictory information [36], [37]. The factors that cause unclarity confusion are: the complexity of technology, ambiguity of information, dubious of product claims, conflicting information, and incorrect interpretation [36].

### III. RESULTS AND DISCUSSIONS

The original conceptual model which described the relationship WOM and consumer confusion by [36] is adopted and illustrated in Fig. 1. Initially WOM aspects relating to consumer confusion still focused on conventional word of mouth. The research results stated that word of mouth as a source of information can reduce consumer confusion.



Fig. 1. Conceptual Model, adapted from Leek and Chansawatkit (2006)

Study [36] stated that WOM was considered as a very important source of information. Therefore, WOM became a source of references for consumers. The same thing was stated also by [45], [46] that the opinion of family members and friends are the most important, credible, and reliable sources of information in reducing consumer confusion. From previous studies [41], [42], [45], [46] stated that the source of the information still leads to word of mouth communication traditionally. Other studies found that WOM can also be a consequence of consumer confusion [39], [47], [48], [49], [50], [52] becomes inconsistency that WOM became the consequence of consumer confusion, while on the others WOM became the antecedent of consumer confusion [36], [46]. Moreover, there has been little researches on e-WOM studies related to consumer confusion. This factor will be a novelty in the research to be conducted.

It is also worth noting the role of e-WOM in addressing consumer confusion. The relationship between e-WOM and consumer confusion are very relevant, in which e-WOM is often used as a source of information and as references at a time when consumers have difficulties making a purchasing decision. It can ultimately improve the intention of consumers in making purchasing decisions on the recommendation of family, friends, or colleagues. Currently, e-commerce companies should be aware of the importance of e-WOM that can help confused consumers and reduce the information which has low credibility. E-WOM regarded as a source of actual and potential information that is made available to other consumers via the Internet. In fact, e-WOM is a trigger factor

of purchase, where e-WOM has proven and known as the "proximal causes" that happened prior to the purchase [32].

Consumer confusion is not only facilitated by information from the e-WOM, but also have to be overcome with knowledge of the product for consumers. Due to the number of product categories offered by online retail, consumer is required to understand and have product knowledge. Product knowledge is related to consumer confusion in the purchase decision making process. This study focuses on the role of e-WOM in overcoming the confusion of consumers to increase purchase intentions.

Currently mobile devices such as a smartphone or tablet has been widely used in shopping online, and enable customers to access information anywhere. If the mobile application makes the consumer difficult to deal with product offerings and search for information, consumer confusion level become higher. Thus, we assume that consumer confusion can lead to low consumer purchasing intention.

To reduce the level of consumer confusion, retail e-commerce industry can develop omni-channel integration aimed at helping consumers rather than just focusing on transaction and delivery [27]. Therefore, omni-channel become the most effective strategy to be adapted and innovated in enhancing the consumer experience at this time [44]. In this study, omni-channel integration quality serve as moderator variables that are considered to strengthen in reducing the confusion of consumers to increase their purchase intention.

Products, booking, promotion or price which has no information consistently can cause consumer confusion. It can reduce customer satisfaction and reduce consumer purchases, disclosed [30]. The study found that the dimensions of the consistency of the information, process consistency, customer data integration, and compatibility channel has proven to be factors that are positively related to customer satisfaction in the omni-channel [30]. The result of the research stated omni-channel integration quality are positively associated with omni-satisfaction.

Research model [30] adopted a conceptual framework developed by [43], which identifies quality integration as a new key component of service quality. In this framework, integration quality is defined as "the ability to provide customers with a seamless service experiences across channels" [43].

Reference [30] which has been investigating the omni-channel interaction quality is the basis for this research to continue empirical study of the omni-channel integration of quality relating to the behavior of consumer purchase intentions. Integration quality is one component of the service quality of new (or called new service quality) that may affect a consumer's purchase intention. Therefore, integration is the foundation of an important quality in the omni-channel. It is also one of the novelty owned of this study.

The importance of involving the omni-channel integration quality in addressing consumer confusion in this research is to the start of migration from multi-channel concept to omni-channel concept. It has been predicted that omni-channel

model become one of the strengths of the retail industry, especially in e-commerce in Indonesia. Omni-channel can integrate information, transactions and customer service through email, mobile, e-commerce portal, a platform at the terminal point of sales (POS), and others that provide the means to interact directly with an individual who has made the leap from consumers become customer.

In the e-commerce environment, empirical studies have concluded that service quality has a positive relationship with a user channel satisfaction. Similarly, research found that both offline and online service quality were associated with overall customer satisfaction [44]. Therefore, in omni-channel context, it is proposed that omni-channel integration quality is a key factor that enhances to the overall satisfaction of multi-channel shoppers. When service providers provide a greater perceived omni-channel integration quality, the shoppers will experience a greater satisfaction in the omni-channel context.

We will employ our construct which is represented in Fig.2. We will also extend these dimensions to an omni-channel environment. Because very little research has been conducted in this area, we will also offer a set of potential indicators for the integration quality construct.

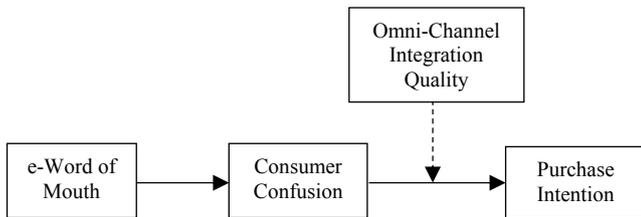


Fig. 2. The Proposed Research Model

Based on this argumentation, we hypothesize that

H1: E-WOM negatively influence on consumer confusion.

H2: E-WOM positively influence on purchase intentions that mediated by consumer confusion.

H3: E-WOM positively influence on purchase intentions that mediated by consumer confusion and moderated by omni-channel integration quality.

This study will apply two approaches, namely descriptive studies and research verification. This descriptive study will be conducted to obtain facts and characteristics of consumers who are confused. This research will require the complete information in the form of 5W (why, when, who, what, where, and way). This verification study aims to examine the answers to some questions of research on e-WOM variable, consumer confusion, omni-channel information quality, and purchase intentions. The method used is the method descriptive survey and explanatory survey with individual analysis unit, namely the consumers who shop online.

In this research, the population to be studied is the consumers who have conducted transactions through online retail shopping incorporated in Indonesian E-Commerce Association (IDEA). About 11 percent of Internet users in Indonesia (about 78 million people) are consumers conducting

transactions online shopping. This number reached about 8.58 million people and will be used as a population of this study. According to [51], in determining the number of samples, when population exceeds 500,000 with a 95 percent confidence level ( $Z^2_{c,1} = 1.96$ ) with an error rate of 5 percent, the samples required in this study is 385. The next step is to conduct sampling by using convenience sampling.

#### IV. CONCLUSION

The main contribution of this study was the thought about omni-channel integration quality concept in e-commerce industry in Indonesia. This study will also explore further about the role of E-WOM towards consumer confusion. Recently consumers have had proneness to consider the opinions and recommendations about the products from their family and friends before making a purchase decision. It makes the company should consider the role of E-WOM for their business. This factor is expected to improve the competitiveness of enterprises.

Judging from the level of consumer confusion is quite high in Indonesia that would give effect to the decline in purchasing intentions. One contributing factor is that 65 percent of online consumers abandon shopping carts or cancel their purchase [7]. Thus, the features that produce information products conflicting and confusing should be minimized so that consumers do not become frustrated or confused.

The limitation of this research is the scope of the consumer coming from online retailers listed on e-commerce association in Indonesia, while there are many online retailers who are not registered in the association. In addition, the need for online retailers based on the categorization of the products offered. For further research, it can be investigated whether the omni-channel may increase the repurchase intention and e-loyalty for Indonesian consumers. Further research will be done on online retail in Indonesia. Online retail is one of e-commerce business model proposed by the Government of Indonesia. E-commerce industry is currently receiving the attention and support of the Indonesian Government and set forth in the Roadmap e-Commerce Indonesia 2016.

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