

**Shopping Cart Abandonment: Indonesian Perspectives**

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## ABSTRACT

The success of online businesses relies heavily upon their ability to attract customers to place an order on their websites. Despite the fact that there are increasing numbers of people who use the Internet every day and visit various shopping sites, it is interesting to find that quite a few of them do not complete purchase transactions. It is still a major challenge for online businesses to learn why these e-shoppers chose not to complete the process. This study intends to explore why Indonesian online shoppers, who visit websites with intentions of completing a purchase, change their minds and leave websites without purchasing anything. The findings from this study should help online businesses better understand the mindset of online shoppers and find out a way to improve their websites to increase the likelihood of having customers completed purchases.

**Keywords:** e-Commerce, Shopping Cart Abandonment, Culture, Indonesian

## INTRODUCTION

The Internet is used everyday by a wide variety of people for several functions. More and more people gravitate towards using the Internet more intensively as the accessibility of technology, the availability of information, and the ability to interact through the Internet increase and evolve. Obvious capabilities of the Internet include avenues for gathering information, purchasing a product, or rendering a service. The advance in Internet technology allows for the expansion of options beyond the traditional methods that may be more time consuming. Having to physically gather information is alleviated, and the customer is better able to efficiently use their time.

As Internet usage increases globally, the e-commerce market also increases, particularly in countries with well-developed marketing infrastructures. Pew Internet, Inc. (2010) reports that 72% of U.S. Internet users made purchases online. Many online shoppers are attracted to the ease and convenience that shopping via the Internet can provide (Shang, Chen, and Shen, 2005). Unfortunately for businesses, despite the increased access to customers that the Internet provides, the number of Internet consumers who complete intended purchases without abandoning their cart has not risen at the same rate.

In order to engage with potential online consumers, companies must build a website, attract visitors to the website, and offer products to the customer with the ease of online purchasing in mind. The crucial point in this selling-purchasing process is the final phase — the completion of the purchase. Businesses must be able to close the sale and have a completed purchase before the customer leaves their website. However, their ability to do so can be difficult. Forrester Research (2005) reported that 88% of online shoppers have abandoned their online shopping cart in the past. The phenomenon of customer shopping cart abandonment prior to purchase completion is a major challenge facing online retailers. Website abandonment rates may vary for different online vendors. However, overall abandonment rates are disturbingly high and indicate that despite the amount of effort and money spent on attracting customers to an online store, companies continue to fail in closing sales.

## LITERATURE REVIEW

Online purchasing in the United States comprises nearly 40% of global Internet purchases, which is the largest retail online sector in the world (Datamonitor, 2010). Pew Internet and American Life Project (2008) reported that the number of Internet users purchasing products online increased 20% from 2000 to 2007, while e-commerce revenues had grown nearly fivefold during the same time. In the United States, Internet adoption at home increased from 62.2% in 2002 to 69.6% in 2008 (Talukdar and Gauri, 2011).

As Internet usage rises, firms are beginning to realize the importance of better understanding their online customers. Today electronic business plays a major role in the world's economy and is expected to continue in the future. A recent study has reported that the number of Internet users in the U.S. has almost doubled over the last eight years to approximately 220 million in 2008 (Hannah and Lybecker, 2010). However, not all consumers are turning to the Internet for shopping. While the number of Internet users who have made an online purchase at one time is more than half, this does not explain the disparity between the number of visits websites record and the number of actual purchases made online. One report shows that although a web site may receive millions of visitors, only about 3% of those visits result in a purchase (Betts, 2001). In addition, another study also reported that about 65% of online shopping carts are abandoned before a purchase is completed (O'Neill, 2001).

The Internet and its online capabilities are generally seen as a research tool by consumers, as the Internet is capable of disseminating a large amount of information conveniently. However, it is not seen as the necessary method of purchase. Consequentially, although online capabilities include the ability to complete a purchase transaction, a good portion of consumers utilize the Internet to find information about a product and then use the information at a physical shopping location.

Physical locations have the contrasting capabilities of providing sensory perception information for the consumer to use in their purchasing decisions that the Internet is seen as incapable of satisfying (Shim, et al., 2001). A physical location can provide more in the way of direct social interaction with others and of entertainment through the process of shopping amongst physically present objects for a consumer (Shang, et al., 2005). Despite the benefits the Internet may provide in terms of online shopping, consumers may simply be using the Internet as a research tool, not a purchasing medium, to better inform themselves about products in order to make their purchases offline.

In a study conducted at a university in the South-western United States by Kim and Eastin (2011), the authors identified a significant relationship between shopping motivations and exploratory information seeking, impulse buying, as well as a significant relationship between exploratory information seeking and impulse buying. This study also identified significant relationships between pre-purchase online communication and post-purchase online communication, pre-purchase browsing time and pre-purchase online communication as well as, pre-purchase browsing time and online buying frequency. The data showed that perceived credibility of a product by other consumers is positively related to both online buying frequency and pre-purchase online communication.

Using the Theory of Reasoned Action (TRA), Cha (2011) analyzed subjective norms as an antecedent determinant of behavior influencing the online shopping intent of college students. The study asserted that subjective norms have a positive association with purchase intent of

both real and virtual items by college students, which was shown as having a significant relationship. Additional research by Chen and Cheng, in their 2009 study of online shopping intentions, confirms the assertions of TRA by making four modifications to the DeLone and McLean model and demonstrating a relationship between satisfaction and behavioral intention and perceived use.

Regardless of how good the website is, it will be useless if a consumer just browse through the website without completing the purchase transaction. According to a study of customer behavior in abandoning purchases, it was found that in order for a purchase to be likely, but not completed, there had to be an initial desire for the product and an emotional connection that turned negative and impeded the decision to complete the purchase (Barnes, King and Breen, 2004). In essence, one of the first obstacles that businesses face in physical and online venues is the converting a viewer to a customer. The intent to buy or purchase a good or service is the initial hurdle. The next obstacle is maintaining the intent of a potential customer to complete a purchase.

Chou, Kang and Cheon (2006) found that high perceived uncertainty contributed most to shopping cart abandonment. Engendering trust is one aspect of maintaining the intent to purchase by consumers. Trust is seen as a major component of consumer willingness to fully participate in e-commerce by fully completing an online transaction. Several studies have found that trust of the business' online presence was listed as a key element in the decision to make a purchase online (Grabner-Krauter and Kaluscha, 2003). Rajamma, Paswan and Hossain (2009) found that a user's perception of risk is an aspect of online shopping that marketers must overcome to build trust and reduce shopping cart abandonment. Research by Chau, Hu, Lee and Au (2007) also suggests that customers weigh the benefits of providing personal information to an online vendor in terms of the risks of providing such information during the purchase process. The use of privacy seals, availability of refunds, security certificates, and product were important to customer's perceived level of trust.

As in many other countries in South East Asia, economic growth in Indonesia continues to be driven by private consumption (Herabadi, Verplanken, & Knippenberg, 2009). According to the survey of Internet Service Providers Association of Indonesia (APJII) at the end of 2010, Indonesia has the ownership ratio of the highest Internet access devices in ASEAN, amounted to 45 million of the total population of 240 million people (Hidayanto, Saifulhaq, & Handayani, 2012). Price and trust are factors that play an important role in online shopping in Indonesia. One study examines the relative influence of perceived trust and perceived price on customers' intention to buy. The results reveal that both factors have an impact of consumers' perceived value and intention to buy (Setiawan & Achyar, 2013).

Prior studies have attempted to find out why shoppers abandon their shopping carts before buying (Changchit, 2006, Kukar-Kinney and Close, 2010; Fenech, 2002; Moore and Mathews, 2008). However, these prior studies did not focus on the subjects who had an intention to buy when they visited the websites. This study intends to explore why Indonesian online shoppers, who visit websites with intentions of completing a purchase, change their minds and leave websites without purchasing anything. The findings from this study should help online businesses better understand the mindset of online shoppers and find out a way to improve their websites to increase the likelihood of having customers completed purchases.

## RESEARCH METHODOLOGY

A direct survey was used to collect the data for this study. The survey questions are compiled from previous study questions pertaining to consumer behaviors (Alomaim, Tunca, and Zairi, 2003; Changchit and Cutshall, 2012; Joines, Scherer, and Scheufele, 2003; Kohli, Devaraj and Mahmood, 2004; Koivumaki, 2001; Koyuncu and Lien, 2003; Lin, 2003). The survey consists of 31 questions. Besides 9 questions on demographics, 20 questions were designed to examine why subjects leave the website before completing the transaction, and the remaining two questions ask for expected benefits they have for online shopping. For the 20 questions, the survey asked subjects to refer to the most recent website they visited with an intention to buy, but decided to leave without actually buying.

The survey was developed with five-point Likert scaled questions. Answers to the scaled questions ranged from “strongly disagree” to “strongly agree” as end points. Subjects were asked to rate their level of agreement with each item as a reason that may have caused them to leave a website without buying. To validate the clarity of these questions, three professors and three researchers were asked to read through the survey questions. Revisions to the survey were made based on the feedback received.

The surveys were administered to Indonesian consumers. One hundred and sixty-one (161) subjects completed and returned the survey instruments. However, only one hundred and nineteen (119) subjects were shopping online. Details on the subjects’ demographics (only for subjects who had experiences shopping online) are provided in Table 1 below.

**Table 1: Subjects’ Demographics**

<b>Gender</b>					
Male: 57 (47.9%)		Female: 62 (52.1%)		No Answer: 0 (0%)	
<b>Age (in years)</b>					
Under 18: 7 (5.88%)	18-24: 93 (78.15%)	25-34: 16 (13.45%)	34-44: 3 (2.52%)	45 up: 0 (0%)	No Answer: 0 (0%)
<b>Highest Education</b>					
Less than High School: 4 (3.36%)	High School: 59 (49.58%)	Bachelors: 37 (31.09%)	Master’s & up: 16 (13.45%)	No answer: 3 (2.52%)	
<b>Employment Status</b>					
Yes: 59 (49.58%)		No: 54 (45.38%)		No answer: 6 (5.04%)	
<b>Income</b>					
Less than \$20,000: 96 (80.67%)	\$20,000- 40,000: 6 (5.04%)	\$40,000-60,000: 2 (1.68%)	Greater than \$60,000: 1(0.84%)	No answer: 14 (11.76%)	
<b>Own Credit/Debit Card</b>					
Yes: 106 (89.08%)		No: 12 (10.08%)		No Answer: 1 (0.84%)	
<b>Credit Card Type Most Frequently Used</b>					
Visa: 55 (46.22%)	MasterCard: 41 (34.45%)	American Express: 0 (0.0%)	Discover: 8 (6.72%)	Other/No Credit Card: 15 (12.61%)	
<b>Have Internet Access at Home</b>					
Yes: 118 (99.16%)		No: 1 (0.84%)		No Answer: 0 (0.0%)	
<b>Have Returned Product Purchased Online Before</b>					
Yes: 54 (45.38%)		No: 60 (50.42%)		No answer: 5 (4.2%)	

## DATA ANALYSIS AND DISCUSSION

This study aims at understanding the reasons why consumers abandoned a shopping cart. Table 2 below summarizes the data collected from subjects on reasons why they did not complete the purchase transactions although they had visited the websites with the intention to buy. The reasons for not completing the transactions are listed in order from highest to lowest based on the mean response to each question.

**Table 2: Reasons for Shopping Cart Abandon**

<b>Reasons</b>	<b>Average</b>
I was afraid that product might not arrive on time	3.78
I did not like to register before checking out the product	3.76
I was afraid of receiving wrong product	3.73
I like to see the actual product before buying	3.69
I did not find the desired product	3.60
Shipping prices were too high	3.57
I was not sure that the site provides the best price	3.50
The site was confusing	3.49
I did not have enough time to complete the purchase.	3.46
Taxes were too high/ not expect to pay tax	3.45
Total cost of items were too high	3.45
The pages took too long to download	3.40
The check-out processes requires too much information	3.39
I hesitated to provide credit card information	3.32
I did not find the information about shipping	3.32
I would like to contact customer service for more information	3.24
I did not like the design of the website	3.20
The site did not accept checks	3.08
The site did not accept credit cards	3.03
My credit card was rejected	2.79

Based on the finding above, the top five reasons why subjects do not complete the purchase transactions are:

1. I was afraid that the product might not arrive on time: This factor had a mean score of 3.78 out of 5. This result reveals a need for a clear statement of the shipping time. A policy regarding on time delivery may be established to gain the trust from this group of customers and convince them to place an order.
2. I did not like to register before checking out the product: This factor had a mean score of 3.762 out of 5. The e-commerce websites usually have the user register before completing purchase transactions. Although it's nice to gather customers' information for after-sales promotions, the online business may want to state clearly the benefits of registering with the company and also allow customers to purchase without registration.
3. I was afraid of receiving wrong product: This factor had a mean score of 3.73 out of 5. This result points out that online businesses may need to do a better job of giving their customers peace of mind that the product they order will be the right one. A clearer

picture and a better description of product may be beneficial in this regard. The online businesses could also consider revising their return policy to reduce the perceived risk that customers feel by giving their potential customers peace of mind of knowing that it will be easy to return the product should it not meet their expectations.

4. I like to see the actual product before buying: This factor had a mean score of 3.69 out of 5. The finding indicates that subjects need sensory input (i.e. being able to manipulate the product through handling or to visually examine the actual product in three dimensions) before actually placing an order. In order to encourage them to place an order, the online businesses may consider providing photos of multiple views of the product or perhaps even utilizing technology that allows the shopper to virtually manipulate the product on the screen to view it from many different angles.
5. I did not find the desired product: This factor had a mean score of 3.60 out of 5. This result reveals that there is still room for online businesses to add products that may be desired by their potential customers. In order to convert these potential customers to actual customers, the online business may want to come up with an incentive that will make customers want to leave feedback about the product they are looking for but cannot find on the current website.

Besides gathering data on the reason why subjects do not complete the purchase transaction, two questions were also asked to examine what can encourage them to complete a transaction in terms of better prices and shipping times. Based on the responses, the subjects state that they will shop online if:

1. On the average, the product is 25.40% cheaper than a physical store and
2. On the average, the shipping time is no longer than 6.5 days

## **CONCLUSION**

Using a sample of 119 Internet shoppers in Indonesia, this study examines what factors influence shoppers who have initial intentions of purchasing online to change their minds and leave the website without completing a purchase. The top five factors reported as the reasons customers leave websites without purchasing are: (1) I was afraid that the product might not arrive on time (3.78), (2) I did not like to register before checking out the product (3.76), (3) I was afraid of receiving wrong product (3.73), (4) I like to see the actual product before buying (3.69), (5) I did not find the desired product (3.60).

This study aimed at providing some guidance to help online businesses reduce shopping cart abandonment at the transaction completion stage. The findings suggest several factors that online businesses should pay attention in order to reduce the chance of losing consumers during the final stage of transaction.

Although this study is preliminary in nature, these findings may help online businesses focus more on the factors that make consumers leave websites before completing purchased transactions. Armed with this information online businesses can make changes to their websites and policies to increase the probability that an online shopper on their site will become an online buyer.

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