



## SHOPPING CART ABANDONMENT : A COMPARISON BETWEEN AMERICAN AND TAIWANESE PERSPECTIVES

**Chuleeporn Changchit, College of Business, Texas A&M University – Corpus Christi  
6300 Ocean Drive, Corpus Christi, TX 78412, Tel: 361-825-5832, Fax: 361-825-5609,  
chuleeporn.changchit@tamucc.edu**

**Tzong-Ru Lee (Jiun-Shen), National Chung Hsing University, Taichung 402, Taiwan,  
ROC, trlee@dragon.nchu.edu.tw**

### ABSTRACT

*Despite the fact that millions of people 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 aimed at comparing the factors that influence the purchase intent and shopping cart abandonment between American and Taiwanese consumers. Three hundred and eighty-six (386) Americans and three hundred twenty-nine (329) Taiwanese participated in this study. The research findings may be used by online businesses to help recognize the factors that influence purchase intentions of these two nationalities. The results should help online businesses gain an understanding of these factors and thus direct their efforts to develop features that satisfy the needs of their target customers.*

**Keywords:** e-Commerce, Shopping Cart Abandonment, Culture, Taiwanese, Americans

### INTRODUCTION

According to a survey of U.S. market research by Internet World Stats, the number of Internet users continues to rapidly increase due to the rapid development of the Internet. Until June 2009, the population of global Internet users was more than 1.66 billion people. International Data Corporation (IDC) also estimates that in 2013, global e-commerce trading amount will amount to more than 16 trillion U.S. dollars. 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).

As the number of Internet user's increases, so does the number of businesses establishing an online presence. 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. 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.

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). Although several studies have attempted to investigate shopping cart abandonment, there are two major absences from these prior studies (1) the studies did not focus on the subjects who had an intention to buy and (2) the studies did not take into consideration cultural differences. This study attempts to answer the question: Are there differences between Americans and Taiwanese in terms of reasons for not completing an intended online purchase? In addition, this study also focuses on the subjects who indeed visited a website with an intention to buy instead of just browsing for information.

## **LITERATURE REVIEW**

### **Online Shopping in the United States**

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 five times 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).

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 website 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).

One explanation of these occurrences is that the majority of consumers are going online to window-shop and plan on making their purchases offline (Forsythe, 2003). Research is seen as a valuable tool by consumers in their decisions to buy products, but the Internet is not seen as the necessary method of purchase. 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. 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 study 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. This suggests that the more social influence purchasing something online possesses, the more likely they are to complete the purchase. The study also found that the TAM constructs did not influence the intent to purchase virtual items. It also found that security concerns did not influence purchase intent either. Instead, subjective norms and male gender were the significant factors determining the purchase intent of virtual items. 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.

### **Online Shopping in Taiwan**

Lee and Lin (2005) conducted an Internet shopping survey of Taiwanese students. The constructs they tested included the positive correlation between trust, site design, reliability, personalization, and responsiveness to service quality and customer satisfaction by ways of influencing the intent to purchase. The results demonstrated that all the constructs tested affirmed a positive correlation to service quality and customer satisfaction on the intent to purchase except personalization. These findings suggested that in Taiwan, personalization was not a significant factor in the decision to buy. Chin and Kao (2009) conducted online shopping research in Taiwan by measuring the four dimensions of process quality including design, information accuracy, functionality, and ease of use to establish the importance of process quality as a factor that may build customer loyalty. Their research confirmed similar findings with regard to process quality and outcome quality having positive direct influence on customer satisfaction, although behavioral intentions remained unaffected.

Additional research conducted in Taiwan includes the importance of logistics in online shopping and its influence on customer loyalty (Huang, Kuo, and Xu, 2009). This study



determined that the performance of logistical services demonstrated a positive effect on loyalty and indirectly influenced loyalty through customer satisfaction. Liang (2009) studied the critical factors influencing young Taiwanese online shoppers and developed a prediction model based on the results of this study. The prediction model is targeted to Generation Y shoppers for use by the retailers who target this shopping demographic. Risk aversion, convenience, brand reputation, interaction function, promotion, services for members, trust, and site quality all influenced the Generation Y online shoppers' decision to purchase online. These motivational factors should be considered during marketing plan development for online retailers. The motivations to adopt the use of e-payment systems in Taiwan have been investigated by way of comparison to Vietnam (Lin & Nguyen, 2011). They conducted a survey of Taiwanese e-payment users to determine the moderating effects of the Technology Acceptance Model (TAM) and the Personal Innovation in Information Technology (PIIT) construct. The research demonstrated that the TAM model was consistent and that the Taiwanese are more prone to adopt e-payment systems than the Vietnamese. The factors that influenced e-payment adoption in Taiwan were related to culture, affluence, and education level.

Consumer acceptance of the Internet as a distribution channel in Taiwan as studied by Cheng, Sheen, and Lou (2006) revealed that the TAM factors significantly influence positive attitudes towards the Internet as a distribution channel. Perceived security risk showed no influence on consumer attitudes or usefulness perceptions of the Internet as an online distribution channel. They also found that a positive attitude toward online distribution can influence actual use of an online distribution channel.

### **Cultural Considerations**

Culture has long been recognized as an important factor shaping consumer behavior in offline shopping scenarios (Gong, 2009). Hence, one would expect that culture would also shape consumer behavior in an online shopping context. Culture is not an easy concept to define, but there are definitions that have been developed. For example, Matsumoto (1994) states that culture is the degree to which people share attributes, values, beliefs, and behaviors. Perhaps the most popular definition of culture that has been used by many is that of Hofstede who defines culture as "the collective programming of the mind which distinguishes the members of one group from another" (1984, p.21).

In his work, Hofstede (1984) identified four dimensions of culture. The first dimension is power distance, defining as the extent that less powerful members of an organization accept that power is distributed unequally. The second dimension is individualism, which refers to the degree to which individuals emphasize self-interest over that of the group. The third dimension is that of masculinity, which attaches importance to goals such as career and material success versus social goals such as relationships and helping others. The fourth dimension is uncertainty avoidance. This dimension addresses the degree to which people of a society feel uncomfortable with uncertainty and ambiguity.

While Hofstede's work was first applied to human resource management, it is now increasingly used in business and marketing studies (Yoon, 2009). Different cultures respond differently to situations (Fenech and O'Cass 2001; Park and Jun, 2003). This study attempts to examine which factors influence the online shopping perception between these two groups,



Americans and Taiwanese. Data was collected to analyze their overall view of the Internet as a secure vehicle for purchasing goods and/or ordering services. The results should help e-businesses gain an understanding of these factors and thus direct their efforts to tailor the websites to integrate features that satisfy the needs of their target markets.

### **Shopping Card Abandonment**

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 of 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 by Anglo college students.

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) 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.

Gold (2007) also reported a study conducted by the Vividence Corporation, a leader in Customer Experience Management (CEM) products and services. The company evaluated the experiences of 719 consumers as they used shopping carts at e-commerce websites. According to this study, the top ten reasons for shopping cart abandonment are: (1) high shipping prices (72%), (2) comparison shopping or browsing (61%), (3) changed mind (56%), (4) saving items for later purchase (51%), (5) total cost of items is too high (43%), (6) checkout process is too long (41%), (7) checkout requires too much personal information (35%), (8) site required registration before purchase (34%), (9) site is unstable or unreliable (31%), and (10) confusing checkout process (27%).

Another study also examines what factors influence shoppers who have initial intentions of purchasing to change their minds and leave the website without completing a purchase. The results report that the top five factors contributing to the reasons why customers leave websites without purchasing are: (1) I like to see the actual product before buying, (2) I was not sure that the site provides the best price, (3) shipping prices were too high, (4) I did not like to register before checking out the product, and (5) I did not find the desired product (Changchit and Cutshall, 2011).





Although several studies have attempted to investigate shopping cart abandonment, there is an absence of prior studies examining what influence, if any, culture has on shopping cart abandonment. Beyond recognizing the abandonment phenomenon exists, it is important to understand what role culture plays in making shoppers abandon their online shopping cart. This study, therefore, aims at examining the cultural differences between Americans and Taiwanese in terms of what factors influence shoppers who have initial intentions of purchasing online, but ultimately change their minds, abandon their online shopping carts, and leave the website without completing a purchase.

## **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, et al., 2003; Joines, Scherer and Scheufele, 2003; Kohli, Devaraj and Mahmood, 2004; Koivumaki, 2001; Koyuncu and Lien, 2003; Lin, 2003; Posnock, 2004). The survey consists of fifty-eight (58) questions. Twenty (20) questions were asked to gather information on subjects' perception about online shopping. Twenty-two (22) questions were designed to examine why subjects leave the website before completing the transaction. For these 22 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. Two (2) two questions ask for expected benefits subjects have for online shopping. One (1) question asks whether subjects prefer online shopping or physical store shopping. The remaining thirteen (13) questions ask for subjects' demographics.

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.

For the American subjects, the surveys were administered to random shoppers at local malls and to students at a South-western United States university. Three hundred and eighty-six (386) subjects completed and returned the survey instruments. However, forty-two (42) subjects do not have an experience conducting an online transaction. They are thus excluded from the data analysis. Details on the subjects' demographics are provided in Table 1 below.

**Table 1: Subjects' Demographics (Americans)**

<b>Gender</b>					
Male: 178 (51.74%)		Female: 166 (48.26%)		No Answer: 0 (0.0%)	
<b>Age (in years)</b>					
Under 18: 1 (0.29%)	18-24: 274 (79.65%)	25-34: 45 (13.08%)	34-44: 14 (4.07%)	45 up: 10 (2.91%)	No Answer: 0 (0.0%)
<b>Highest Education</b>					
Less than High School: 4 (1.16%)	High School: 271 (78.78%)	Bachelor: 60 (17.44%)	Graduate: 6 (1.74%)	No answer: 3(0.87%)	
<b>Employment Status</b>					
Yes: 259 (75.29%)		No: 83 (24.13%)		No answer: 2(0.58%)	
<b>Income</b>					
Less than \$20,000 249 (72.38%)	\$20,000- 40,000 57 (16.57%)	\$40,000- 60,000: 15(4.36%)	Greater than \$60,000: 17(4.94%)	No Answer: 6(1.74%)	
<b>Own Credit/Debit Card</b>					
Yes: 329(95.64%)		No: 11(3.20%)		No Answer: 4 (1.16%)	
<b>Credit Card Type Most Frequently Used</b>					
Visa: 224 (65.12%)	MasterCard: 85(24.71%)	American Express: 15(4.36%)	Discover: 8 (2.33%)	Others: 12(3.49%)	
<b>Have Internet Access at Home</b>					
Yes: 326 (94.77%)		No: 18 (5.23%)		No Answer: 0 (0.0%)	
<b>Have Returned Product Purchased Online Before</b>					
Yes: 128 (37.21%)		No: 212 (61.63%)		No answer: 4(1.16%)	
<b>Number of Times Browsing a Website But Not Purchase</b>					
None: 24 (6.98%)	1-5 105 (30.52%)	6-10 93 (27.03%)	11 and up 119 (34.59%)	No Answer 3(0.87%)	

For the Taiwanese subjects, the surveys were administered to Taiwanese consumers. Three hundred and twenty-nine (329) subjects completed and returned the survey instruments. However, only two hundred and fifty-four (254) subjects were shopping online and were included in the data analysis. Details on their demographics are provided in Table 2 below.

**Table 2: Subjects' Demographics (Taiwanese)**

<b>Gender</b>					
Male: 92 (36.22%)		Female: 160 (62.99%)		No Answer: 2 (0.79%)	
<b>Age (in years)</b>					
Under 18: 0 (0%)	18-24: 145 (57.09%)	25-34: 85 (33.46%)	34-44: 19 (7.48%)	45 up: 4 (1.57%)	No Answer: 1 (0.39%)
<b>Highest Education</b>					
Less than High School: 3 (1.18%)	High School: 7 (2.76%)	Bachelors: 191 (75.20%)	Master's & up: 52 (20.47%)	No answer: 1(0.39%)	
<b>Employment Status</b>					
Yes: 156 (61.42%)		No: 96 (37.80%)		No answer: 2 (0.79%)	
<b>Income</b>					
Less than \$20,000: 34 (13.39%)	\$20,000-40,000: 88 (34.65%)	\$40,000-60,000: 31(12.2%)	Greater than \$60,000: 15(5.91%)	No answer: 86 (33.86%)	
<b>Own Credit/Debit Card</b>					
Yes: 122 (48.03%)		No: 129 (50.79%)		No Answer: 3 (1.18%)	
<b>Credit Card Type Most Frequently Used</b>					
Visa: 86 (33.86%)	MasterCard: 21 (8.27%)	American Express: 0 (0.0%)	Discover: 0 (0.0%)	Other/No Credit Card: 147(57.87%)	
<b>Have Internet Access at Home</b>					
Yes: 253 (99.61%)		No: 1 (0.39%)		No Answer: 0 (0.0%)	
<b>Have Returned Product Purchased Online Before</b>					
Yes: 85 (33.46%)		No: 166 (65.35%)		No answer: 3(1.18%)	
<b>Number of Times Browsing a Website But Not Purchase</b>					
None: 5 (1.97%)	1-5 98 (38.58%)	6-10 64 (25.2%)	11 and up 85 (33.46%)	No Answer 2(0.79%)	

## DATA ANALYSIS AND DISCUSSION

This study aims at identifying the cultural differences between online shopping perceptions of American and Taiwanese subjects. Subjects were divided into two groups, American (344) and Taiwanese (254). Statistical t-tests on the means were conducted on subjects' responses to the question "Overall, I prefer to shop online than in the physical store". The compared results are presented in the Table 3 below:



**Table 3: T-Test - Two-Sample Assuming Unequal Variances**

<b>Overall, I prefer to shop online than in the physical store</b>	<b>American</b>	<b>Taiwanese</b>
Mean	3.680758017	3.236220472
Variance	1.050564336	0.845165105
Observations	343	254
Hypothesized Mean Difference	0	
df	574	
t Stat	5.560938774	
P(T<=t) one-tail	2.05835E-08	
t Critical one-tail	1.647512593	
P(T<=t) two-tail	4.11671E-08*	
t Critical two-tail	1.964105441	

\* indicates p-value  $\leq 0.05$

The results of the t-test show a significant difference between the American and Taiwanese preferences for online shopping. On the average, American subjects prefer online shopping more than Taiwanese subjects.

Additional statistical t-tests were conducted on subjects' responses to 20 questions testing perception factors of online shopping. The results are in Table 4. These results mostly support why more Americans prefer online shopping than Taiwanese. Except the perceived ease of use, the remaining four factors were perceived differently between Americans and Taiwanese. On the average, Americans perceive higher positive experiences, better security, and lower uncertainty with online shopping than Taiwanese.

It is also interesting to note that on the average, Taiwanese perceive higher benefits of online shopping than Americans. However, according to the result shown in Table 3, more Americans prefer online shopping than Taiwanese. This finding may indicate that of all the five factors, the perceived benefits of online shopping may be the least important compared to other concerns such as security or uncertainty.

**Table 4: Consumers' Perceptions with Online Shopping**

<b>Factors</b>	<b>Mean: Americans</b>	<b>Mean: Taiwanese</b>	<b>p-value</b>
Perceived Benefits of Online Shopping	3.27	3.42	0.0026*
Perceived Ease of Use of Online Shopping	3.72	3.66	0.2312
Past Experience with Online Shopping	3.85	3.36	0.0000*
Perceived Security of Online Shopping	2.97	2.75	0.0007*
Perceived Uncertainty of Online Shopping	3.14	3.78	0.0000*

\* indicates p-value  $\leq 0.05$

Additional data were also collected from subjects to examine the reasons why they did not complete the purchase transactions although they have visited the websites with an intention to buy. The results are demonstrated in Table 5 below.

**Table 5: Reasons for not Completing Purchase Transactions**

Reasons	Average	
	American	Taiwanese
I did not have enough time to complete the purchase.	2.45	2.80
I did not find the desired product	<b>3.22</b>	3.18
I did not find the information about shipping	2.54	2.57
I was not sure that the site provides the best price	<b>3.40</b>	3.37
The pages took too long to download	2.66	2.70
The site was confusing	2.68	2.85
Shipping prices were too high	<b>3.33</b>	<b>3.59</b>
Taxes were too high/ not expect to pay tax	2.63	2.93
I hesitated to provide credit card information	3.03	<b>3.52</b>
The checkout processes requires too much information	3.04	<b>3.61</b>
I did not like to register before checking out the product	<b>3.38</b>	<b>3.60</b>
The site did not accept credit cards	2.24	2.87
The site did not accept checks	2.38	2.45
Total cost of items were too high	3.02	3.49
I would like to contact customer service for more information	2.70	3.42
I was afraid of receiving wrong product	2.70	2.82
I was afraid that product might not arrive on time	2.95	3.31
I like to see the actual product before buying	<b>3.45</b>	<b>3.87</b>
I did not like the design of the website	2.54	2.74
My credit card was reject	1.88	2.37

The top five reasons why American did not complete the purchase transaction are as follows:

1. I like to see the actual product before buying (3.45)
2. I was not sure that the site provides the best price (3.40)
3. I did not like to register before checking out the product (3.38)
4. Shipping prices were too high (3.33)
5. I did not find the desired product (3.22)

The top five reasons why Taiwanese did not complete the purchase transaction are as follows:

1. I like to see the actual product before buying (3.87)
2. The checkout processes requires too much information (3.61)
3. I did not like to register before checking out the product (3.60)
4. Shipping prices were too high (3.59)
5. I hesitated to provide credit card information (3.52)

Comparing the reasons for shopping cart abandonment between these two nationalities, it is very interesting to note that both Americans and Taiwanese share the same three reasons and they are even ranked at the same orders. It is very obvious that the main concerns for them are the lack of the ability to see the actual product as both nationalities rank this concern as

the top reason why they decided to abandon the shopping cart. The other two main concerns that they share are the requirement for registration and shipping prices.

The other two concerns among the top five that Americans have are the uncertainty that they will find the best price online and the inability to find the product they like. Although these two factors were not ranked among the top five for Taiwanese, they seem to be of concern to the Taiwanese as well, ranking high at 3.37 and 3.18, respectively.

The remaining two concerns among the top five that Taiwanese have are the hesitation to provide credit card information and the amount of information required for the check-out process.

In addition to gathering data on the reasons why subjects did not complete the purchase transaction, two questions were also asked to examine what can encourage them to place a transaction in terms of better prices and shipping times. Table 6 below shows the expected discount and the length of lead time subjects expected when shopping online.

**Table 6: Expected Discount and Lead Time from Online Shopping**

<b>Americans</b>	<b>Taiwanese</b>
On the average, the product is 25.12% cheaper than a physical store	On the average, the product is 57.97% cheaper than a physical store
On the average, the shipping time is no longer than 6.52 days	On the average, the shipping time is no longer than 3.64 days

The results suggest that, on the average Taiwanese expect much higher benefits from online shopping than Americans. This finding also conforms to the findings in Table 1 that more Americans prefer Internet shopping than Taiwanese.

### **CONCLUSION**

This study compares online shopping perceptions between Americans and Taiwanese. The results of the study reveal the factors that cause the shoppers who have initial intentions of purchasing to change their minds and leave the website without completing a purchase.

The findings suggest that American prefer online shopping more than Taiwanese. Further analysis also reveals that this may be due to the fact that Taiwanese perceive less security and higher uncertainty when shopping online.

Additional data from the survey from both populations revealed the top five reasons customers leave websites without purchasing and it is noteworthy that they share the same three reasons: (1) I like to see the actual product before buying, (2) I did not like to register before checking out the product, and (3) shipping prices were too high.

Two concerns of the top five for American subjects that are not among the top five for Taiwanese subjects are (1) the uncertainty that they find the best price and (2) the inability to find the product they like. This result suggests that in order to encourage more American to



buy online, the online businesses may want to include the price comparison feature or price-match policy to give potential customers peace of mind that they are getting the best price. In addition, a feature to gather feedback from the customers about the product they cannot find from the website should be incorporated.

The two concerns of the top five from Taiwanese subjects that are not among the top five from American subjects are (1) the hesitation to provide credit card information and (2) the amount of information required for the check-out process. These results suggest that Taiwanese subjects do not trust the security of the website and highlights the need for online businesses to better design the check-out process. In order to encourage the Taiwanese to buy online, online businesses may need to come up with a fraud protection policy and consider collecting only necessary information via the check-out process. Taiwanese respondents also expect a much better price and shorter delivery time than Americans. These findings suggests that marketers and online businesses in Taiwan may have to offer more in the way of price reductions, delivery options, and security to truly capitalize on the online market potential presented by the Taiwanese population.

This study contributes to current literature by exposing how cultural dimensions influence online purchase intentions of Americans and Taiwanese. More research is needed with respect to cultural differences in online shopping intentions. Research concerning other populations beyond these two would continue to contribute to the growing research area of online retailing and facilitate growth of the online marketplace in terms of creating viable business offerings to a diverse Internet population.

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