The Effects of Post-Purchase Evaluation Factors on Online vs. Offline Customer Complaining Behavior: Implications for Customer Loyalty

Yooncheong Cho, Rutgers University
Il Im, New Jersey Institute of Technology
Roxanne Hiltz, New Jersey Institute of Technology
Jerry Fjermestad, New Jersey Institute of Technology*

ABSTRACT

Although customer complaining behavior has been studied in the traditional market place, little research has been done on handling online customer complaints. This study is aimed at investigating the effects of post-purchase evaluation factors on propensity to complain in the online versus offline-shopping environment. Post-purchase evaluation factors from previous studies such as the degree of dissatisfaction, importance of the purchase, perceived benefits from complaining, personal characteristics, and situational influences have been examined. A survey was conducted and its results reveal the different impacts of post-purchase evaluation factors on propensity to complain in the online versus offline shopping environments. Further, the results suggest how propensity to complain influence the customer's repeat purchase intention both in online and offline shopping.

INTRODUCTION

E-commerce transactions have replaced physical exchanges in markets to such a degree that companies are shifting their focus to new market spaces (Cho et al. 2001). However, there are some aspects of traditional market behavior that may not transfer easily such as the emphasis on finding remedies to customer dissatisfaction as a means of earning customer loyalty and attracting new customers. The importance of customer complaining behavior in the traditional marketplace and a company's reaction to it has been discussed by Fornell and Westbrook (1984) and others. However, only two studies of online market transactions have paid any attention to complaining behavior (Kardaras 1999; Sheehan Hoy 1999).

The purpose of the present study is to investigate the complaining behavior of online customers and to compare it with the complaining behavior of traditional marketplace customers. The motivation for this research is the belief that an understanding of complaining behavior will help e-commerce/e-business firms to maintain stable strategies of developing customer loyalty and solving problems associated with customer complaint data (Levesque and McDougall 1996). By reviewing complaint management as a strategic marketing tool, e-business may gain such benefits as increased customer satisfaction and loyalty, favorable publicity, and fewer customer complaints (Barbara 1985; Cho et al. 2001).

Figure 1 presents a model of customer complaining behavior based on studies by Bearden, Crockett and Graham (1979), Landon (1977), and Richins (1982), but adjusted to reflect today's online business environment. Aspects requiring adjustment in light of current online customer behavior include: a) pre-purchase technological issues (Ho and Wu 1999) and Web assessment factors; b) different levels of product dissatisfaction associated specifically with the online environment; c) different cost expectations based on product information, which reduces the wedge between the market price received by the seller and the "full price" paid by the buyer (Alba et al. 1997); and d) differences in perceived benefits and costs between online and offline shopping (Alba et al. 1997).

In addition, this study will look at the effects of *post-purchase evaluation factors* on propensity to complain in online and offline environments. The post-purchase evaluation factors include a) the degree of customer dissatisfaction, b) importance of the purchase, c) perceived benefits/cost from complaining, d) personal characteristics, and e) situational influences. All of these factors have been identified as determinants of complaining behavior (Landon 1977; Bearden, Crockett, and Graham 1979; Gronhaug 1977). Other factors to be considered in this study are the effects of information search efforts, product cost, and ego involvement on the purchase construct; personal competence as it affects the personal characteristic construct; and the effect of response time on situational influence.

Finally, the influence of propensity to complain on repeat purchase intention in the online vs. offline shopping environments will be examined. Considerable evidence exists showing that the likelihood of repeat purchase intention increases when companies effectively deal with customer complaints (TARP 1979; Blodgett, Granbois, and Walters 1993; Fornell and Wernerfelt 1987). To the authors' knowledge, this study will be the first to address the connection between loyalty and complaining behavior for e-commerce firms. Out intent is to identify how important the successful management of customer dissatisfaction is to stability and profitable growth, and to determine how comprehensive a complaint response strategy needs to be to satisfy online customers and perhaps gain their long-term loyalty (Levesque and McDougall 1996).

HYPOTHESIS DEVELOPMENT

Customer complaining behavior defined as the consequences of customer dissatisfaction (Yi 1990), has long been considered an important forms of market feedback (Fornell and Westbrook 1984). Bearden et al. (1979) have suggested that the propensity of customers to complain depends on the degree of satisfaction or dissatisfaction, purchase importance, perceived benefits/costs of complaining, personal characteristics and situational influences.

Hirschman's (1970) theory of exit, voice, and loyalty provided the theoretical framework for studying consumers' post-complaining behavior – that is, why some dissatisfied consumers seek redress while others silently leave with a promise to never make another purchase (see also Blodgett, Hill, and Tax 1997). Hirschman argues that consumer complaining behavior is triggered by such factors as a) the value of voicing the complaint (i.e., product importance), b) the probability that the complaint will be successful (i.e., likelihood of success), and c) the individual's ability and willingness to take up the voice (i.e., attitude toward complaining). Blodgett, Granbois, and Walters (1993) believe that exiting and refusing to make additional purchases is usually considered a last resort. Fornell and Wernerfelt (1987) described a defensive strategy to reducing customer exit and switching behavior, the fundamental objective of which is to manage customer dissatisfaction so that harmful effects on a firm are minimized.

The six research hypotheses were established according to the categories of a) degree of dissatisfaction; b) purchase importance (including information search effort and product cost); c) the

FIGURE 1
Adapted Model of Online Consumer Complaining Behavior
(Bearden, Crockett, and Graham 1979; Landon 1977; Richins 1982)

• • • • represents major concern of this study
———— will not be considered in this study
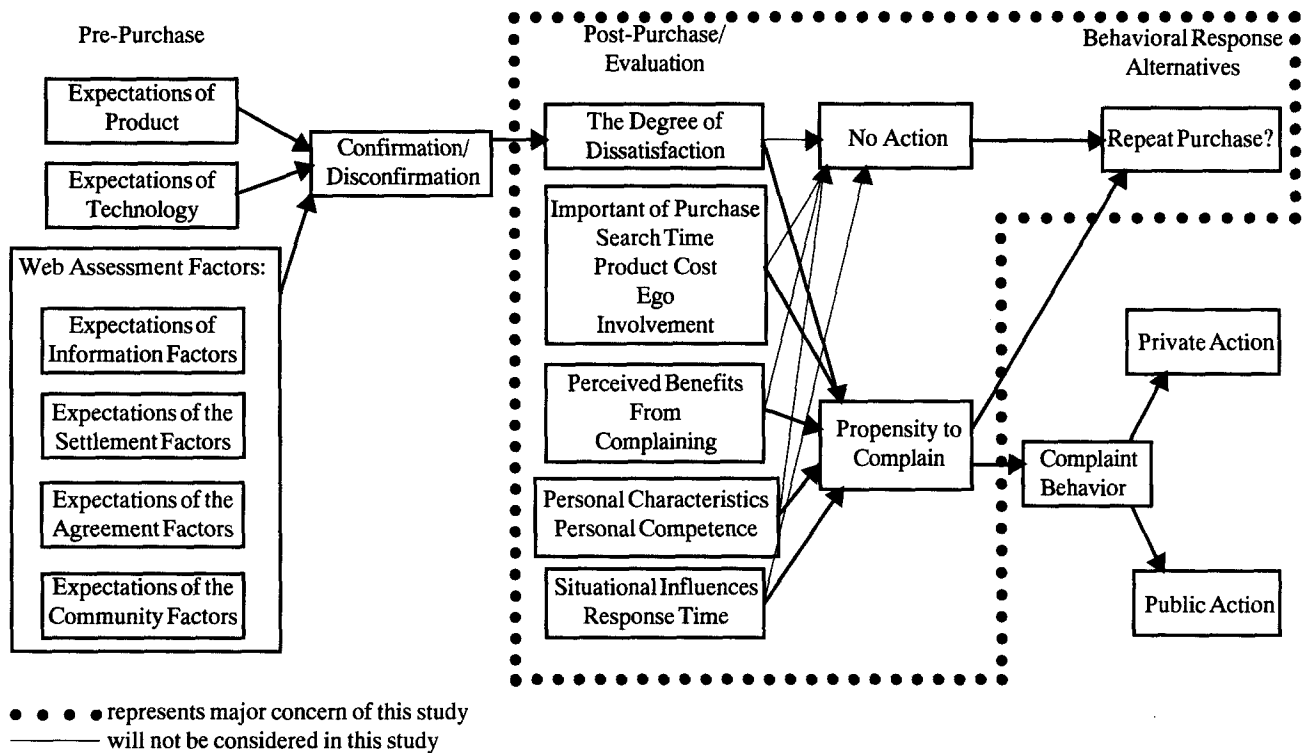
perceived benefits/costs of complaining; d) the personal characteristics of the complainer; e) situational influences; and g) loyalty.

The Degree of Dissatisfaction

Researchers in the customer satisfaction/dissatisfaction (CS/D) area posited that the fulfillment of expectations is a determinant of consumer satisfaction. Most of the definitions of satisfaction or dissatisfaction that have been proposed contain some mention of "expectation" or a synonym [Gilly 1979]. Bearden and Teel (1980) posit that the intensity of complaint behavior was often hypothesized to be directly proportional to the customer's degree of dissatisfaction.

As described in Cho et al. (2001), differences in degree of dissatisfaction sometimes occur between online and offline customers for many reasons: e.g., the most important being problems associated with different customer service center approaches (e.g., lack of an information or help desk during the order process, slow feedback response time, poor after-sales support), general terms and conditions (e.g., guarantees, guidelines for returning products), delivery issues (e.g., late or no delivery, product damage during delivery), security and privacy issues, failure of information quality, and system performance (e.g., slow web sites, broken links to another pages) (see also Schubert and Selz 1999).

Additional reasons that cause online customer dissatisfaction differ from offline customer dissatisfaction. The online shopping environment precludes face-to-face interactions between customers and sellers. According to Alba et al. (1997), personal interactions can increase consumers' confidence and post-purchase satisfaction, since certain product attributes are more easily observed in person prior to the actual transaction. The lack of such personal

interactions, and the disappointment that sometimes comes when products arrive at consumers' doorsteps, may increase propensity to complain.

In this paper, the primary focus of the first hypothesis is the effect of dissatisfaction on customer's propensity to complain in both online and offline environments. This study also measures how the impact of the degree of dissatisfaction on propensity to complain differs in the online environment from the offline environment.

H1: As the degree of dissatisfaction increases, a customer's propensity to complain increases in both the online and the offline environments.

H1a: The impact of the degree of dissatisfaction on propensity to complain will differ in the online shopping environment from in the offline shopping environment.

Importance of the Purchase

Previous research has shown that the degree of purchase importance is the result of numerous factors, with three of the most critical being product/service cost, information search, and ego involvement (Landon 1977; Bearden et al. 1979):

Importance of the Purchase = f (Information Search Effort, Product Cost, Ego Involvement) (1)

Information Search Effort includes both search time and costs. Day and Landon (1977) hypothesized that extended search time tend to increase the importance of a purchase. Bearden et al. (1979) also found that increased time and effort invested in gathering

information prior to making a purchase tend to increase the purchase's positive or negative feelings once the product has been acquired. However, Westbrook (1977) has suggested that information search is positively related with dissatisfaction, mostly because of its role as a proxy variable for basic psychological construct (e.g., risk aversion) that mediates the purchase experience.

The topic of online information searches is attracting the attention of e-commerce researchers. According to Degeratu et al. (2000), online information searches require less effort than offline searches, since they incorporate such advanced features as recommendation systems and decision-aid tools. Alba et al. (1997) argue that consumers benefit from the advantages of screening –that is, they can screen a large number of optional products, which usually outweighs the costs associated with the search effort. Lynch and Ariely (2000) argue that reduced shopping effort and increased screening should increase online customer satisfaction (see also Bakos 1991).

However, no research has been conducted to test whether Bearden et al.'s (1979) assumption holds true for online consumer behavior – that is, the likelihood of complaining about an unsatisfactory experience increases as an individual's purchase involvement increases (with information search costs an important secondary factor). Testing their argument requires making comparisons of consumer involvement in terms of the purchase activity. According to Novak, Hoffman, and Yung (2000), consumers holding positive perceptions of Web searched and other online experiences become acutely involved in the act of online navigation; how such involvement affects purchase decision and complaining behavior is a topic that has yet to received much attention.

Finally, as Bearden et al. (1979) assert, the likelihood of complaining behavior being triggered by an unsatisfactory consumption experience increases as the cost of the product increases. Bellman, Loshe and Johnson (1999) are among several research teams suggesting that cost savings may be the most important benefit offered by online stores, resulting in online customers having higher expectations of finding lower prices on the Web.

The research hypotheses in this area focuses on the overall importance of the purchase:

H2: As the importance of the purchase increases, a customer's propensity to complain increases in both the online and offline environments.

H2a: The impact of the importance of the purchase on propensity to complain will differ in the online from offline shopping environment.

The Perceived Benefits/Costs from Complaining

For complaining to occur, individuals must perceive a significant difference between the costs involved and the potential payoff (Bearden et al. 1979). Even if consumers experience a deep sense of dissatisfaction with their purchases, they will only complain when doing so is viewed as worthwhile (Landon 1977). As Fornell and Wernerfelt (1987) have pointed out, it is difficult to ascertain how any two individual's will view the benefits of complaining, which explains why some consumers never complain even when they are dissatisfied, while others complain about almost every purchase they make. Landon (1977) describes the costs associated with complaining as a function of the time involved, the perceived availability of complaint channels, and previous complaint experiences. Richins (1979) posited that the greater the perceived costs, the lower the likelihood of complaining, regardless of the form of the potential compensation –e.g., money, repairs, or information (see also Fornell and Wernerfelt 1987).

The perceived benefits and costs of complaining online are best viewed in terms of communication channels and product delivery/return. Online customers almost always use online tools for communicating with sellers. E-businesses that place the greatest emphasis on customer service give customers access to real-time chat systems or databases for synchronous communication. Product return is an inconvenience that may or may not match the inconvenience of returning a product in person. Complaining may be perceived as not worth the effort when the inconvenience of re-packaging the product, contacting the shipping company, and paying for the return are considered. Customers who do not want to make an extra trip to a store to return a product will be equally displeased at the prospect of standing in line at the post office. The hypotheses for this category was therefore established as:

H3: As the perceived costs (benefits) from complaining increases, a customer's propensity to complain increases (decreases) in both online and offline environments.

H3a: The impact of the perceived benefits/costs from complaining on propensity to complain will differ in the online from offline shopping environment.

Personal Characteristics of Complaints

Bearden et al. (1979) believe that individual differences account for the tendency of some customers to complain and seek redress while others remain silent, even when they experience similar levels of dissatisfaction. Yi (1990) identified self-confidence and aggressiveness as marking individuals who are more likely to translate dissatisfaction into complaining behavior, and further described complainers as being younger, with higher incomes, and with less brand loyalty. Bearden and Teel (1980) focused their attention on personal competence as a characteristic representing the ability to cope with the complexities and uncertainties of purchase decision-making and the associated evaluative reactions (see also Westbrook and Newman 1978). In the online environment particularly, personal competency might include the individual's skills ability toward computer systems. In other words, online customers, who are expert in computer systems will have lower propensity to complain because they are less likely to make purchase failure in online. The personal characteristics hypothesis for this study was established as:

H4: As personal competence increases, a customer's propensity to complain increases in both online and offline environments.

Situational Influences

Bearden et al. (1979) reported that individual perceptions of complaint situations vary in terms of potential hostility, success, and embarrassment. Rokeach and Kliejunas (1972) also presented evidence showing that complaint behavior is a function of an individual's attitudes toward a situation – e.g., face-to-face interactions with service personnel and response time. The situational factors that Stephen and Gwinner (1998) use to describe complaining behavior are the imminence and duration of a stressful marketplace problem. Imminence refers to the length of time that passes before actual harm occurs; when individuals have less time to select an appropriate coping strategy or to take action to avoid harm, their threat appraisals increase.

Estelami (2000) points out that customer complaining behavior may be the result of a perceived shortcoming in a business. For example, slow response time to a complaint or information request reinforces a negative perception, resulting in escalating dissatisfac-

tion (Bitner et al. 1990; Mohr and Bitner 1995). This is an issue of particular interest to researchers looking at e-commerce, since the technology is in place for immediate responses - almost as fast as face-to-face communication (Alba et al. 1997). However, even with advanced synchronous communication tools in the form of voice, chat, and e-mail applications (Roberts-Witt 2000), a common complaint of online customers is slow response time to requests for information. This is the specific focus of the next hypotheses:

H5: As the problems with response time increases, a customer's propensity to complain increases in both online and offline environments.

H5a: The impact of response time on propensity to complain will differ in the online from offline shopping environment.

Propensity to Complain

Propensity to complain has been used as dependent variable in this study. Propensity to complain is defined as representing a summary measure of an individual's demonstrated inclination and intentions to complain in the face of any unsatisfactory purchase experience [Bearden, Cockett, and Graham 1979]. Previous studies described propensity to complain as an effort to summarize the personality, attitudinal, and lifestyle variables that influence whether a person will seek to obtain redress or complain when dissatisfied and also have an effect on the nature of the action to be taken (Day and Landon 1977; Day 1977; Bearden, Cockett, and Graham 1979). Previous studies found that the propensity to complain has been operationally linked to past complaint actions as a proxy for the inclination of consumers to complain (Gronhaug 1977; Zaltman, Srivastava and Deshpande 1978; Bearden, Cockett, and Graham 1979).

Loyalty

As shown in Figure 1, repeat purchase behavior is actually considered as an outcome of complaining behavior. Gilly (1987) examined the repurchase intentions of offline customers and the likelihood that such intentions actually translate into repurchase behavior, and found that satisfactory responses from sellers frequently result in enhanced loyalty.

Regarding online transactions, Reichheld and Schefter (2000) found that a) the basic requirements for building loyalty have not changed, and b) the Internet is a power tool for strengthening relationships. They argue that most of today's online customers exhibit a clear proclivity toward e-loyalty, and that Web technologies (if used correctly) can reinforce that tendency. Hanson (2000) suggests that by creating a sense of community, specific e-businesses and e-commerce in general can increase customer loyalty and gaining important insights into the nature and needs of their "customer usage." These assertions have been translated into the next hypothesis as:

H6: A customer's propensity to complain will have a positive effect on repeat purchase intention in both online and offline environments if the problem is resolved by the seller.

METHODOLOGY

Data Collection

A total of 161 students were randomly selected from Information Systems (IS), Computer Sience (CS), and the management departments at two major universities on the East Coast. Of these,

128 subjects (80%) were asked to fill out a questionnaire describing their negative experiences and complaining behavior resulting from dissatisfaction over purchase made in both online and offline environments. These students were chosen because they reported dissatisfied experiences in both online and offline environments, and were therefore in a position to give comparative responses to the 24 questionnaire items.

Operational Measures

Multi-item scales were used to measure each of the seven constructs that served as the basis for the questionnaire items (Table 1[1]). The item scales were taken from previous studies (e.g., Richins 1982; Bearden, Crockett, and Graham 1979; Blodgett, Hill and Tax 1997) and modified to serve the objectives of the present study. The operational variables for the personal competence construct was taken from Bearden, Crockett, Graham (1979), Bearden and Teel (1980), and Westbrook (1978).

The items for individual perceptions of the costs and benefits associated with complaining were created based on Richins' (1979). In terms of costs associated with making a complaint, respondents would take time and effort to fill out forms, forego use of the product while it was repaired, and have to "hassle" someone in making their complaints (Richins 1982).

An individual's propensity to complain was operationalized as a composite of a seven-point semantic scale whose items reflect intentions to complain and perceptions of each respondent's complaint history (Fishbein and Ajzen (1975; Bearden, Crockett, and Graham 1979).

RESULTS

Respondent demographics

Of the 128 respondents, 52.9% were male and 43.8% were female. Approximately, 82% were between 18-30, 14% were in the 31-40 age group, and 4% were age 41 or older. About 31% were undergraduates, 61% were college graduate and 7% had done graduate work. Approximately, 69% reported total family income of $39,999 or under, 13% between $40,000 and $59,999, and 15% over $60,000 per year.

Types of products and prior purchases

Respondents reported their dissatisfied experience with a variety of products. In the online shopping environment, subjects reported dissatisfaction with books (11%), computer-related products, including software, and hardware (10%); while subjects reported clothes (26%), grocery (7%), and computer-related products (6%) most likely to be unsatisfactory in the case of offline shopping.

Table 1 presents a summary of the constructs used to create the questionnaire items, their operationalizations, and the overall means, standard deviations, and alphas for responses describing experiences in both online and offline environments. Construct reliability was generally high, with Cronbach alphas ranging from 0.63 to 0.88 in both online and offline cases. Analyses of mean differences (all significant at 0.05 level) show that a) customers are more likely to be dissatisfied with offline transactions than online transactions; b) offline customers perceive greater benefits and costs from complaining than online customers; and c) the tendency of customers to complain is higher online than offline when they don't get prompt responses to inquires.

Based on the results of a factor analysis, 16 items have been remained and used for the final analyses; correlations among the

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[1]Table 1 includes 16 items, which was selected after the factor analysis.

[6]See table 3 for the summary of the hypotheses and results.

TABLE 1
Means, Standard Deviations, Cronbach Alpha's and List of Items for Each Construct (Online vs. Offline)

Constructs & Items	Mean		S.D.[2]		Cronbach Alpha	
	Online	Offline	Online	Offline	Online	Offline
The Degree of Satisfaction/ Dissatisfaction[3]: How dissatisfied were you with the product? Were you dissatisfied with information content? Overall, how dissatisfied were you with the purchase?	3.12	3.84	2.13	1.76	0.88	0.81
Importance of the Purchase: Search time: I spent quite a lot of time searching for the product which I felt dis satisfied with. The product meant a lot to me. The purchase was quite relevant to me. Product cost: I spent a lot of money for the product which I felt dissatisfied with.	3.66	4.30	2.09	1.32	0.74	0.71
Perceived Benefits/Cost from Complaining[4]: I think I waste a lot of time if I complain to someone. I think that the store should refund the purchase price (or replace the product/ repair the product) for an unsatisfactory product, or repair it, or replace it. I don't like special Trip to store to complain. Others would be prevented from experiencing dissatisfaction if I complain.	3.01	3.82	1.72	1.16	0.75	0.75
Personal Characteristics (Personal competence)[5]: I seldom have trouble making up my mind about importance decisions.	3.81	4.56	2.18	1.40		
Situational Influences (Response Time): If a salesperson answers quickly, I cannot express complaints to him/her.	3.76	3.64	1.77	1.79		
Propensity to Complain: I am probably more likely to return an unsatisfactory product than most people I know. I would attempt to notify a manager if I thought service in a store was particularly bad.	3.43	4.03	2.13	1.61	0.88	0.87
Repeat purchase intention: I am willing to purchase a product next time from the same seller if I resolve the problem.	3.45	4.23	1.40	2.01		

[2] Standard deviations are all significant at 0.05 level (2-tailed).
[3] Seven point (1 = strongly dissatisfied, 2 = Not dissatisfied at all) scales were employed.
[4] Items are developed from Richins (1979) and measured on seven point scales.
[5] Items for personal competence are developed from Bearden, Crockett, Graham (1979); Bearden and Teel (1980); Westbrook (1978) and measured on a scale of 1 = strongly disagree, 7 = strongly agree.

latent constructs were low. These analyses found strong discriminant and convergent validity among the latent constructs (Anderson and Gerbing 1988; Blodgett, Granbois, and Walters 1993). Regression analyses were performed to analyze relationship between the constructs presented in Table 1 and the "propensity to complain." The factor score of each construct was used in the two regression analyses: one each for online and offline shopping environment.

Table 2 shows the results of two regression analyses. Hypothesis 1[6] posits that a) as the degree of dissatisfaction increases, a customer's propensity to complain increases; and b) the impact of the degree of dissatisfaction on propensity to complain will differ in the online from offline environment. Both H1 and H1a were accepted. Even though online customers expressed greater dissatisfaction over their negative experiences, the overall mean shows that the effect of dissatisfaction on propensity to complain was higher for offline customers.

As shown in Table 3, hypothesis 2 was not supported in either online or offline environment. In other words, the importance of the purchase did not have significant effects on customers' propensity to complain. Although hypothesis 2 was rejected, the effect of the importance of the purchase is stronger in the online than offline shopping environment.

TABLE 2

The Impact of Post-Purchase Evaluation Factors on Propensity to Complain (Online vs. Offline)

	Standardized Coefficients		t-value (Sig.)	
	Online	Offline	Online	Offline
Degree of Dissatisfaction	-.232	-.286	-2.225 (.035)*	-2.914(.004)**
Importance of the purchase	.037	.085	.284 (.785)	.908 (.426)
Perceived benefits/costs				
from complaining	-.347	-.236	-2.958 (.003)**	-2.211 (.024)*
Personal Characteristics	.243	.253	2.175 (.033)*	2.463 (.012)*
Situational influences				
(Response time)	.241	.217	2.232 (.029)*	2.024 (.047)*
R-square	.216	.219		
F	9.637*	9.184*		

* Significant at 0.05 level (2-tailed); ** Significant at 0.01 level (2-tailed).

TABLE 3

Summary of the Results

H1:	As the degree of dissatisfaction increases, a customer's propensity to complain increases in both the online and the offline environments.	Accepted
H1a:	The degree of dissatisfaction on propensity to complain will differ in the online shopping environment from offline shopping environment.	Accepted
H2:	As the importance of the purchase increases, a customer's propensity to complain increases in both the online and offline environments.	Rejected
H2a:	The importance of the purchase on propensity to complain will differ in the online from offline shopping environment.	Rejected
H3:	As the perceived costs (benefits) from complaining increases, a customer's propensity to complain increases (decreases) in both online and offline environments.	Accepted
H3a:	The impact of the perceived benefits/costs from complaining on propensity to complain will differ in the online from offline shopping environment.	Accepted
H4:	As personal competence increases, a customer's propensity to complain increases in both online and offline environments.	Accepted
H5:	As the problems with response time increases, a customer's propensity to complain increases in both online and offline environments.	Accepted
H5a:	The impact of response time on propensity to complain will differ in the online from offline shopping environment.	Accepted
H6:	A customer's propensity to complain will have a positive effect on repeat purchase intention in both online and offline environments if the problem is resolved by the seller.	Accepted

TABLE 4

The Impact of Customer Repeat Purchase Intentions on Propensity to Complain (Online vs. Offline)

	Standardized Coefficients		t-value (Sig.)	
	Online	Offline	Online	Offline
Customer Repeat Purchase	287	.242	2.565 (.035)*	2.223 (.017)*
Intentions	.254	.279		
R-square				
F	8.422*	8.121*		

* Significant at 0.05 level (2-tailed).

As hypothesized (H3), the perceived benefits/costs of complaining had a significant effect on propensity to complain. Moreover, the effect of the perceived benefits/costs to complaining on propensity to complain was different in the online from in the offline shopping environment (H3a).

As hypothesized, personal competence had a significant effect on propensity to complain in both environments (H4). H5 was also accepted. In other words, prompt online responses are an important factor in determining customer complaining behavior. Hypothesis 5a was accepted. The effect of response time on the propensity to

complain was greater in the online shopping environment than offline shopping environment. In other words, customers are less likely to complain if they encounter a prompt response in the online environment.

Previous studies found that prompt responses to consumers' complaints are related to the repeat purchase intention (Estelami 2000; TARP 1986). Finally, this study found that customers' repeat purchase intentions are highly related to the propensity to complain both in the online and offline shopping environment (Table 4).

DISCUSSION

This study suggests important implications for the online shopping environment: a) it was found that online customers are less likely to complain, even if they are more dissatisfied with their purchases than offline customers in similar situations; b) online customers are more sensitive to benefits/cost of complaining. In other words, online customers are more likely to complain than offline customers for a same level of benefit or less likely to complain for a same level of cost; c) customers in offline environment show stronger personal competence than in online; and d) customers in online environment expressed higher propensity to complain if there are delayed responses by the seller.

Moreover, this study gives an implication to the customers repeat purchase intention with propensity to complain. This study found that the propensity to complain had a positive effect on repeat purchase intention both in the online and offline environment, if the problem is resolved by the seller. This assertion found support from Estelami (2000) and TARP (1986), who reported that prompt responses to customers' complaints are associated with repeat purchase intentions.

There are some limitations to the study. Although this study tested the relationship among constructs, it did not test their precise causal relationship. More detailed analysis of each construct (e.g., information search effort, product cost) on propensity to complain will also be needed. Additionally, another investigation with a larger sample size and with one product category is desirable. It is also suggested that future investigations will be conducted with the respondents who have actually exhibited complaining behavior.

This research developed a model of consumer complaining behavior in the context of online shopping, based on existing studies. This study identifies the factors that affect customer's propensity to complain and show how the effects of those factors differ in the online vs. offline shopping environments. Although there are some limitations, the results provide insights in customer complaint handling for e-commerce companies. The authors believe that the results of the study shed light on effective complaint management for e-businesses, particularly suggesting that certain managerial changes could result in different and more desirable behaviors, perhaps profoundly affecting customer loyalty myopia (Cho et al. 2001). As Cho et al. (2001) stated that such myopia stems from believing that customer loyalty can be created and sustained in and by itself without regard to how complaints are handled.

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APPENDIX
Original Constructs & Items

The Degree of Satisfaction/ Dissatisfaction:
How dissatisfied were you with the product?
Were you dissatisfied with information content?
Overall, how dissatisfied were you with the purchase?

Importance of the Purchase: Information search effort:
I spent quite a lot of time searching for the product which I felt dissatisfied with.
The product meant a lot to me.
The purchase was quite relevant to me.
I compared the product with another product/brand a lot, before I made the purchase.
Product cost: I spent a lot of money for the product which I felt dissatisfied with.
If a detective product is inexpensive, I usually keep it rather than ask for a refund or exchange.
Overall Importance of the Purchase: Overall, how important was the purchase for you?

Perceived Benefits/Cost from Complaining:
I think I waste a lot of time if I complain to someone.
I think that the store should refund the purchase price (or replace the product/ repair the product) for an unsatisfactory product, or repair it, or replace it.
I don't like special Trip to store to complain.
Others would be prevented from experiencing dissatisfaction if I complain.
I am often treated rudely or unpleasantly over an unsatisfactory product.

Personality:
Personal competence:
I seldom have trouble making up my mind about important decisions.

Situational Influences:
A salesperson at customer service centers did not respond my question properly.
If a salesperson answers quickly, I cannot express complaints to him/her.

Propensity to Complain:
I am probably more likely to return an unsatisfactory product than most people I know.
I would attempt to notify a store manager if I thought service in a store was particularly bad.
I often find it embarrassing to return or exchange products I am dissatisfied with.
If I am dissatisfied with a product, I will complain.

Repeat purchase intention:
I am willing to purchase the product next time if I resolve the problem by the seller.
I will be satisfied with this store another time if I resolve the problem.