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# CAUSES AND OUTCOMES OF ONLINE CUSTOMER COMPLAINING BEHAVIOR: IMPLICATIONS FOR CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

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## Abstract

*Handling customer complaints has been issued in the traditional market place with customer satisfaction and dissatisfaction. However, online studies have rarely addressed the importance of the customer complaining behavior. How e-businesses handle customers' "complaining behavior" has been referred to as the critical "moment of truth" [Tax et al. 1998] in managing and developing customer loyalty and Customer Relationship Management (CRM). The purpose of this study is to investigate causes of complaints and customer actions that appeared in Negative Feedback Systems (NFS). Causes of complaints have been generated from a disparity between customers' expectation in the pre-purchase stage and disconfirmation in the post-purchase stage. Survey data provides the most critical factors based on customer expectations of products, technology issues, and Web assessment factors –i.e., factors such as information, agreement, settlement, and the community phase-. Additionally, customer actions have been gathered from the data in online.*

**Keywords:** Online customer complaining behavior, complaint management, causes of online complaints, actual responses, negative feedback systems, customer retention

## Introduction

E-commerce replicates most of the physical activities that take place in the market place to the point where increasing e-commerce usage is shifting companies from those traditional market places to new market spaces. The traditional marketplaces emphasize the "remedy to customer dissatisfaction" as a way to earn customer loyalty and hold potential customers. In addition to the importance of the overall product/service quality issues, customer satisfaction in the online environment, particularly, involves user satisfaction, which has been issued in computer-mediated communication studies. There is growing concern that today's marketers, participating in the market-space, have to be concerned about Customer Relationship Management (CRM), which addresses ultimate customer satisfaction. For successful CRM, it is crucial for e-commerce/e-business firms to maintain a stable strategy, which leads to improved customer loyalty and solves problems with customer complaint handling data [Levesque and McDougall 1996].

Customer complaining behavior is an outcome of the customer satisfaction process; therefore, a proper measure of complaining behavior ought to consider the nature of the customer satisfaction behind it. Previous studies found that effective resolutions of customer complaints, as a defensive marketing strategy (Fornell and Wernerfelt 1988), are closely linked to customer satisfaction (Tax et al. 1998). Thus, by considering complaint handling as an opportune Web strategic marketing tool, e-business can obtain such benefits as: a) maximized customer satisfaction and company/brand loyalty; b) favorable publicity; and c) minimized future

customer complaining behavior (Barbara 1985). Burke Customer Satisfaction Associates (<http://www.burke.com>), one of the leading online customer relationship managements, took a look at almost 1,200 department store shoppers and studied the relationship between customer complaining behavior and loyalty (Sterne 1996).

## Research Questions

Understanding online customer complaining behavior has been crucial for a dot-com's defensive strategy to minimize customer turnover while maximizing customer retention, by protecting products and markets from competitive inroads (Fornell and Wernerfelt 1987; Fornell 1992). It also has been the fundamental issue of managing customer satisfaction in such a manner that its negative and harmful effects on the firm are minimized [Fornell and Wernerfelt 1987]. TARP (1997) reported that getting customers to articulate their problems provides an effective mechanism to increase satisfaction/brand loyalty.

Although the importance of investigating complaining behavior has been proven in studies of the traditional market place (e.g., Fornell and Westbrook 1984), online market studies have rarely paid attention to complaining behavior. While there is growing attention to online customer satisfaction studies, approximately 33.6% (# of cited/total # of reviewed e-commerce behavioral studies: 42/150) of studies examined overt behavior, which includes purchase/no-purchase, loyalty, requests, feedback, etc. and only 0.013% (2/150; by Kardaras 1998; Sheehan and Hoy 1999) mentioned complaining behavior.

## Literature Review

Most complaining behavior studies have been explored by traditional marketers. According to Hunt (1977), complaining behavior is stimulated during the process of an evaluation depending upon whether the consumption experience was at least as good as it was supposed to be. Along with this implication, Engel and Blackwell (1982) investigated the importance of consistency of an evaluation from the chosen alternatives, with prior beliefs with respect to that alternative.

Causes and responses of online complaints in the pre- and post-purchase stages have been explained in the model of online customer complaining behavior (Figure 1). Causes of online complaints are generated from the disparity between customer expectation and disconfirmation on product, technology, and Web assessment factors (Schubert and Selz 1999). Expectations about technology have been issued in the context of the online shopping environment because it uses computer systems (e.g., PC or workstation), communication networks, and information systems, which are open to all users all the time (Ho and Wu 1999). Web assessment factors have been introduced by measuring the effectiveness of e-commerce sites going beyond traditional marketing paradigms [Schubert and Selz 1999]. Thus, this study assumes that if any of the critical factors do not reach their expectations, customers might be disconfirmed, so dissatisfaction might be increased.

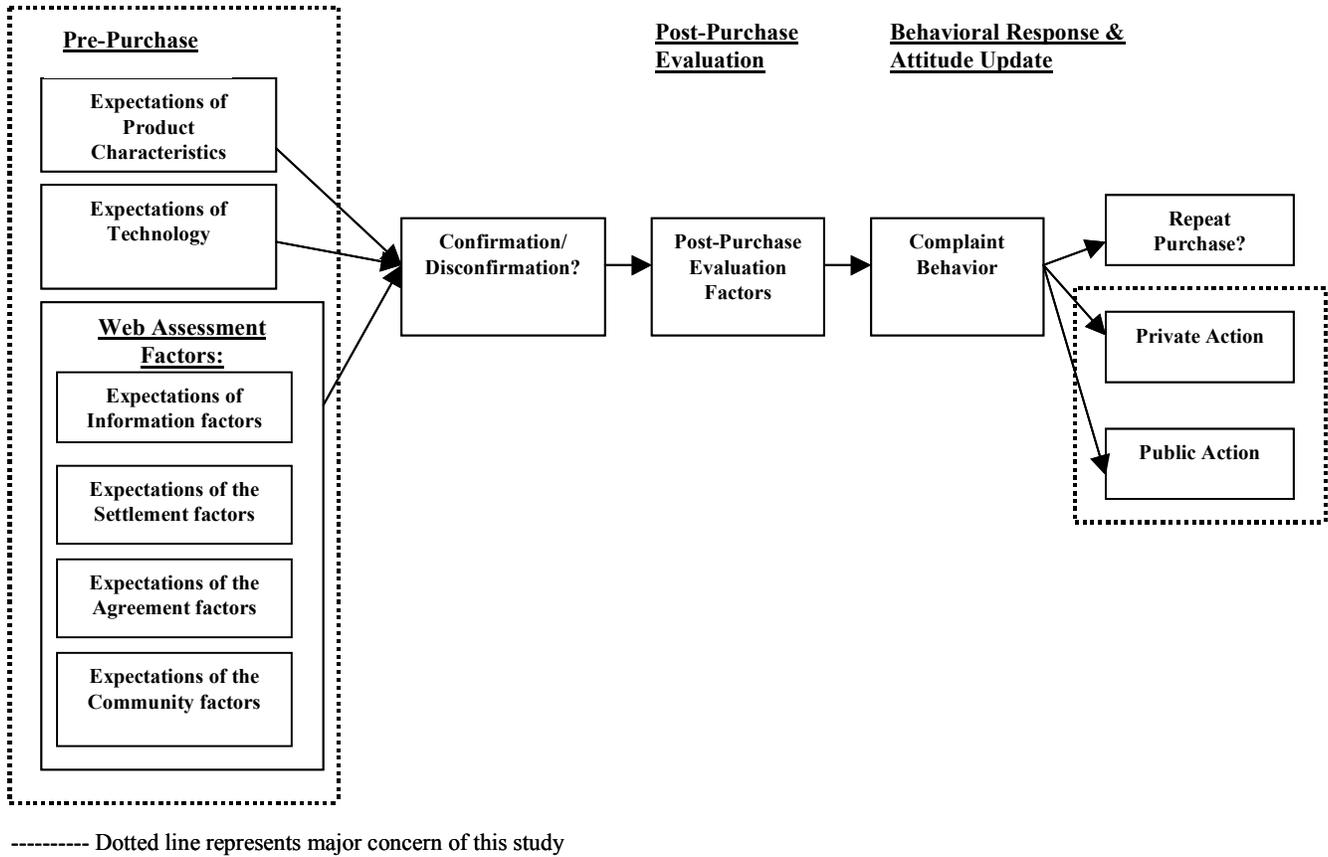
Theories such as contrast theory (Engel and Blackwell 1982; Howard and Sheth 1969; Cardozo 1965), dissonance theory (Festinger 1957), and attribution theory (Mizerski et al. 1979) have explained complaining behavior using the confirmation/disconfirmation paradigm (Oliver 1980). Such a paradigm addresses the disconfirmation between expectation and actual performance for each factor that might cause complaints (Hunt 1977; Oliver 1980; Tse and Wilson 1988).

### *Expectations about Products*

Since online customers cannot see/touch/smell/ hear the product before it is delivered, the customers' purchase decision might only depend on images of the product, information on the product, and other factors. However, online customers might have other fundamental benefits, such as a lower cost of information search (Bakos 1991). Thus, customer expectations about product quality or product price might differ online from the offline-shopping environment. Positive attitudes toward complaining might occur if actual product performance and/or product price does not meet customer expectation.

### *Expectations about Technology*

According to Liang et al. (1999), the Web is the technological dimension that provides the electronic space in global networks where business processes, inter-organization transactions, and market trading take place. Additionally, technology issues should be examined in the context of online shopping situations because customers use computer systems (e.g., PC or workstation), communication networks, and information systems, which are open to all users all the time (Ho and Wu 1999). According to Ho and Wu (1999), the better the technological characteristics that are installed by the online store, the higher the customer satisfaction becomes. In other words, the lack of technology competency by the vendor might lead to dissatisfaction from online-shopping.



**Figure 1. Modified Model of Online Customer Complaining Behavior (Bearden et al. 1979)**

**Expectations about Web Assessment Factors**

Web assessment factors might lead to customer complaints during and/or after the transaction. According to Schubert and Selz (1999), Web assessment factors are crucial for Internet marketing strategies as well as for successfully conducting business on the Internet. Factors include three phases from an online transaction -information, agreement, and settlement- and the community component (Schubert and Selz 1999).

According to Schubert and Selz (1999), in the *information phase* customers collect information on potential products and services. Thus, the information phase covers the initial satisfaction of the consumer’s need for information in order to conciliate his demand for a product/service with the offer. [Schubert and Selz 1999]. Schubert and Selz (1999) found several criteria for the information phase, such as good user interface, good structure of content, reasonable information quality, apparent benefits from stored customer profiles, and good products/service combination possibilities.

*Media richness theory* (Trevino, Lengel, and Daft 1987) examines the different levels of information content and context for Web site users [Palmer and Griffith 1998]. This approach can distinguish the site in terms of the richness of product information available to the customer.

The *Information processing theory* (Hirschman 1970) can also explain customer complaining behavior. Singh (1996) tested the information processing theory and concluded that voice customer response (i.e., customer complaints) estimates - that is, the likelihood that particular customer complaint responses would be chosen by the dissatisfied customers- should be consistently supported regardless of the dissatisfaction level and service category.

Schubert and Selz (1999) mentioned that negotiations between suppliers and customers take place in the *agreement phase*. This phase serves to establish a firm link between supplier and buyer that will eventually lead to a contract, fixing details such as product specifications, payment, delivery, etc. [Schubert and Selz 1999]. Criteria for the agreement phase include easy selection

of generic services, good integration of generic services, e-commerce applications that make effective use of customer profile, good tracing and tracking, good IT-integration, and convenient after-sales support [Schubert and Selz 1999].

The physical and/or virtual delivery of the product ordered will take place during the *settlement phase* [Schubert and Selz 1999]. This phase takes place after sales interactions, such as guarantee claims or help desk services, occur [Schubert and Selz 1999]. Bakos (1998) called this stage *settlement*, which involves transferring payment to the seller after a transaction is agreed upon. Criteria for the agreement phase include adjustable customer profiles (e.g., payment information), guided ordering according to profiles (personalized services), possibilities of customized products, transparent, interactive integration of business rules, good implementation of security issues, and good contact possibilities with the vendor [Schubert and Selz 1999].

A commercial Web site facilitates the means to establish a *community* of people sharing common interests (Schubert and Selz 1999). Palmer and Griffith (1998) posit that communication is a vital aspect of the successful marketing of the product or service. Further, the utilization of the Web for communication purposes can enable a firm to achieve a competitive advantage in the market-space [Berthon et al. 1996]. Online communities, such as USENET, MUD, and NewsGroup have been the place where customers can share common interests, build loyalty, generate a certain level of trust, and thus inspire a fertile electronic commerce environment. Thus, e-businesses using an online community might take the opportunity to directly respond to customer requests and needs, thereby strengthening the bond between the company and its clients.

Criteria for the community phase include good access to the community, uniqueness/originality of information, adequate number of members, well-implemented collaborative filtering, whether privacy is sufficiently protected, customized push mechanisms, and good pull mechanisms (the customers actively seek information updates).

Based on the consideration above, a survey was conducted to investigate the causes of complaining behavior. The items include the expectations about critical factors, such as products, technology, and Web assessment factors. Therefore, quantitative analysis has been used for the analysis of the causes of complaints, while qualitative research has been done for the comparison analysis to the actual responses.

## Data Collection

The data for this study have been collected from undergraduate students in two major universities in East Coast. The questionnaire is designed with sets of items, which ask about subjects' expectations for each of the causes, such as the product factor, technological characteristics factor, and Web assessment factor: a) information factors; b) agreement factors, c) settlement factors; d) community factors. For each question, which asks about subjective opinions, subjects are supposed to answer twice about the level of expectation and the perceived importance. A 7-point Likert type scale was used for each item.

## Results of the Study

Most of subjects ( $n = 51$ : male = 34, female = 17) in this study have had online-shopping experiences. 94.1% of the subjects answered that they have purchased products online. Subjects were most likely to purchase computer-related products (e.g., software, CDs, etc.: 35.3%), books (29.4%), and clothes (3.9%). Others (5.9%) include games, shoes, etc. The most significant reasons for online-shopping are as follows: a) lower price (27.5%); b) accessibility (easy-to-access: 11.8%); c) availability (6.3%), convenient with delivery (6.3%), better quality product (6.3%), and product variety (6.3%). Smaller proportions of the subjects answered that their preference for online purchases was due to popularity of the site (2.0%) and easy of use (2.0%).

The survey results have several implications. A higher proportion of online customers did not feel like complaining before they made a purchase from the online store (80.4%), although for the product they have returned (23.5%). Several reasons have been raised for returning the product: product failure, information failure, service failure, etc. Most of subjects express their complaints using e-mail to the seller (12%), while a relatively small proportion of subjects choose online communities, a private agency, government agency, or legal actions for the place where they express complaints.

The actual outcomes of complaining behavior have been collected from a review of customers' complaints, which were posted in negative feedback systems. 160-posted negative opinions among the reviews have been collected from <http://www.epinions.com> and <http://cnet.com>. Those are the leading feedback systems, which allow users to share pro- and con-opinions about products, services, etc. 135 negative reviews from <http://www.epinions.com>, and 25 negative reviews from <http://cnet.com> were randomly selected for the analysis of cause of complaints. The selected reviews are the result of product experience, such as computers, printers, cameras, and sound speakers. The following table (Table 1) presents the different causes of complaints, examples, # of reviews, and percentage of them.

There is a limitation for the comparison between the survey results and the analysis of the feedback systems, since it is probable that not all reviewers purchased the product online. The reviewers complained about the product (i.e., product performance, product quality: # of reviews: 80 (50.0%)); price (# of reviews: 33 (20.6%)); customer service (# of reviews: 28 (17.5%)); problems with delivery (# of reviews: 15 (9.4%)) and others. Minor problems include security, trust issues, tracking service, and misleading information, etc.

**Table 1. An Analysis of Complaints from the Feedback Systems**

Causes of Complaints	Classification in Web CCB Model	Example of Actual Reponses*	# of reviews (%)
Product (e.g., product quality, product performance, etc.)	Product factor	Freezes occasionally, poor video acceleration, underwhelming performance, speakers stop working periodically.	80 (50.0%)
Price	Product factor	Expensive, pricey, be wary of their financing program, interest rates are insanely high.	33 (20.6%)
Customer Service (i.e., after service, technical support)	Settlement factor	Poor response from vendor, a bad sales force, no stores rely on Web, phone, and shipping services, longer than average waiting time holding for questions, they don't fix the problems, unfriendly technical support.	28 (17.5%)
Problems with delivery (Time and Cost)	Agreement factor, Settlement factor	Long delivery time, wait, shipping contributes a lot to the cost.	15 (9.4%)
Information mislead	Information factor	Hardware was not as good as advertised.	2 (1.3%)
Security, Trust	Agreement factor	Believe that this company rips people off.	3 (1.9%)
Tracking and Tracing	Settlement factor	The site didn't provide the order status.	1 (0.6%)
Promotion	Information factor, Agreement factor	Very few "buy computer-get printer" offers.	1 (0.6%)

\*Source: <http://www.epinion.com> and <http://cnet.com> reported from May 2000 to January 2001.

The importance of Web assessment factors has been supported by the survey results. Questions were asked about subjects' expectations about the product purchase they recently made online. Subjects answered one out of 7-point Likert scale items (1: strongly unimportant, 7: strongly important). Subjects showed a higher level of importance for factors related to the information, agreement, settlement, and community. The mean score and standard deviation for each factor is presented in the following tables (see table 2-5). Table 2 indicates the results from the expectations of the information factors. Overall, reliability between information phase factors shows higher value (i.e., Cronbach alpha = 0.85). Higher scores mean a higher level of importance. Among the many criteria for the information phase factors, *performance of the system* showed the highest mean score. In other words, online customers experience strong expectations about the performance of the system, while other items such as interface design, good structure of content, and reasonable information quality showed relatively lower levels of importance.

**Table 2. Results of the Pilot Study: Importance of the Information Factors**

Items	Mean Score	Std. Deviation
Performance of the system	5.29	0.57
Good structure of content	5.23	0.75
Reasonable information quality	5.22	0.82
Interface design	5.06	0.83

Table 3 indicates that all the items in the agreement phase are important for online shopping. Reliability between agreement factors also shows higher value (Cronbach alpha = 0.83). Among the items, *good implementation of security issues* shows the highest score (i.e., most important factor in the agreement phase); payment information (i.e., content of information on payment) is the second most important factor; interactive integration of business rules is the next one, etc. This result indicates that good implementation of security issues is the most important factors among the agreement factors.

**Table 3. Results of the Pilot Study: Importance of the Agreement Factors**

Items	Mean Score	Std. Deviation
Good implementation of security issues	5.67	0.74
Payment information	5.59	0.58
Interactive integration of business rules (e.g., guarantees, possibility of returning products)	5.45	0.87
Good contract possibilities with vendor	5.29	0.87
Personalized services	4.86	1.35
Possibility of customized products	4.80	1.35

*Convenient after-sales support* was indicated as the most important factor in the settlement phase (Table 4). Overall settlement factors show high value of reliability (Cronbach alpha = 0.80). In other words, subjects have a higher level of importance on convenient after-sales support than any on other items in settlement phase. Thus, e-business/e-commerce firms should provide support for the handling of after-sales services (e.g., guarantee form, feedback form: Schubert and Selz 1999) in order to satisfy their customers. In addition, other factor, such as the high mean value of good IT-integration indicates “small and medium-sized businesses (SMEs) should provide an export filter (i.e., a link to their accounting system) for financial data since this could be of great value” [Schubert and Selz 1999].

**Table 4. Result of the Pilot Study: Importance of the Settlement Factors**

Items	Mean Score	Std. Deviation
Convenient after-sales support	5.42	0.94
Good tracking and tracing	5.39	0.78
Good IT-integration	5.09	0.82
Easy selection of generic services	4.92	1.03
Personalized services	4.80	1.26

Table 5 shows the importance of the *privacy issues* (mean value = 5.65) when users have access to online communities. It implies the customer’s expectation toward the handling of privacy issues by the e-communities can influence the customer dis/satisfaction and complaining behavior. Overall reliability of community factors shows high value of reliability (Cronbach alpha = 0.79). Customers using online communities do not want to reveal personal information about them. Schubert and Selz (1999) mentioned that there are clients who prefer the anonymity of the Web to the face-to-face encounter in a brick-and-mortar shop.

**Table 5. Result of the Pilot Study: Importance of the Community Factors**

Items	Mean Score	Std. Deviation
Protected privacy	5.65	0.69
Perceived real added-value from membership	4.84	1.24
Good access to community	4.82	1.17

Overall, in open-ended questions, the subjects responded that the lower price factor (21.6%) is the most important factor in online shopping; ease-of-use (convenient: 13.7%) is the second most important factor; and then, fast delivery (9.8%); easy-to access, speed; and product variety (each showed 6.0%). Subjects identified the factors which need improvements as follows: security and privacy issues (13.7%); technological ability issues (13.7%); customer service (11.8%); shipping cost (5.9%); lack of information and follow-up ads (i.e., spam: 3.9%).

## Conclusion

This study provides several implications for e-businesses’ complaint handling management. By examining root causes of complaints, e-business can determine factors, which might lead to purchase failure. Although the study does not prove causal relationships between causes of complaints and actual responses, e-business should be aware that failure from any of the factors

might not lead to ultimate customer satisfaction. In other words, e-business should consider remediation strategy for effective prevention (TARP 1997) to reach successful customer relationship management.

Causes of complaints also suggest solutions for Web usability improvement can hold customers. Since online customers do not see/touch/hear/smell the product until it is delivered, Web usability factors might be the key to hold navigators to become actual buyers. In other words, well-implemented Web assessment factors and technological factors might be the clue to maximize customer satisfaction and minimize dissatisfaction.

Additionally, the analysis of actual responses suggests solutions in customer relationship management. According to the analysis from consumer reports, customers' dissatisfaction resulted from product failure, poor customer service, delivery failure, etc. Online customers might require an equivalent or even higher customer relationship before and after they make a purchase. Therefore, frequent interaction with customers should be necessary for the successful e-business.

Like previous studies (Fornell and Wernerfelt 1988) addressed in the context of the offline environment, in the Web, "complaint management will also provide a very powerful competitive weapon for those firms that embrace it, while many firms may not be aware of it." Web "complaint management will facilitate how businesses handle complaints, so it can be an effective tool for customer retention" [Fornell and Wernerfelt 1988]. Well implemented complaint management, as an e-businesses' defensive strategy, will have a great impact on product quality, Web design quality, information factors, community factors, and other Web assessment issues, such as technological and operational issues.

The study has some limitations: a) the survey was performed using a small number of subjects, who were not representative of any other population; b) customers' responses in the feedback system might not be the result of online-shopping. Customers might shop offline, but reported online via feedback systems; c) although subjects indicated their dissatisfaction about Web assessment factors, the study did not examine causal effects. Therefore, a future study might examine whether causes of complaints might actually lead to purchase failure.

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