Using the Service Encounter Model to Enhance Our Understanding of Business-To-Consumer Transactions in an eEnvironment

Kevin Crowston
Syracuse University

Nelson Massad
Florida Atlantic University

Follow this and additional works at: http://aisel.aisnet.org/bled2003

Recommended Citation
http://aisel.aisnet.org/bled2003/67

This material is brought to you by the BLED Proceedings at AIS Electronic Library (AISeL). It has been accepted for inclusion in BLED 2003 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.
Using the Service Encounter Model to Enhance Our Understanding of Business-To-Consumer Transactions in an eEnvironment

Nelson Massad
Florida Atlantic University, United States
NMassad@syr.edu

Kevin Crowston
Syracuse University, United States
Crowston@syr.edu

Abstract

The aim of this paper is to provide an alternative perspective to enhance our understanding of the transactions between customers and service providers in an electronic environment. The service encounter literature is well established in the Marketing field and provides an alternative model to explore online business-to-consumer transactions. The taxonomy of antecedents of satisfaction developed from this model has been tested over time, across respondents (i.e., customers’ perspective vs. employees’ perspective), and across different settings. This taxonomy, however, has been mostly restricted to the bricks-and-mortar environment. Based on the analysis of a pretest sample of customer-reported online experiences, the taxonomy has the potential to enhance our understanding of business-to-consumer online transactions. The next step is to carry out a complete study in order refine the taxonomy to account for the electronic context.

1. Introduction

During the last few years, the Internet and the World Wide Web (referred to hereafter as the Web) have changed the way customers and service providers have traditionally conducted business. This change has manifested itself in the explosive growth of electronic commerce, the use of the Internet and the Web to enable commercial
transactions between and among organizations and customers (Laudon & Traver, 2002). According to Boston Consulting Group, Web-based business-to-consumer (B2C) sales will increase to $168 billion by 2005 (www.nua.ie, 2001). Similarly, Forrester Research projects the sales to reach $184 billion by the year 2004 while Gartner Group's Dataquest found that B2C sales are expected to reach $147 billion by the year 2003 (Cyberatlas, 1999).

The Internet and the Web have empowered customers to access vast amounts of information about a wide range of products and services across different service providers. Customers also have the opportunity to conduct business with a wide number of service providers without being restrained spatially or temporally. As the number of purely online start-up businesses (e.g., Amazon.com, eBay.com, CDNow.com) increases and organizations complement their existing business (e.g., Barnes & Nobles, Egghead, Gap, Wal-Mart) by "going online," it is important to understand how the transactions between customers and service providers is affected on the Web.

Researchers have investigated various aspects of this electronic environment, including online buying and shopping behaviors (e.g., Li, Kuo, & Russell, 1999), online consumer trust (e.g., Hoffman et al., 1999; Javenpaa & Tractinsky, 1999), impacts of electronic commerce on local communities (e.g., Steinfield & Whitten, 1999), and Web interfaces (e.g., Lohse & Spiller, 1999). There is also a growing stream of research that has investigated the quality of services rendered to customers on the Web, including e-satisfaction with online shopping in general (Szymanski & Hise, 2000), satisfaction with self-service technologies including Internet-based ones (Meuter et al., 2000), e-service quality (Zeithaml et al., 2000), the development of the WebQual instrument (Barnes & Vidgen, 2001), and the development of the SITEQUAL instrument (Yoo & Donthu, 2001).

Although this growing body of research is insightful, it does little to explain the quality of the interactions between customers and service providers during an individual transaction. To partially fill this gap, this paper proposes a framework to enhance our understanding of the transactions between customers and service providers that take place on the Web.

2. Conceptual Framework

A service encounter is defined as the period of time that a customer interacts with a service (Shostack, 1985). The definition of a service encounter is broad and includes a customer’s interaction with customer-contact employees, machines, automated systems, physical facilities, and any other service provider visible elements. On the Web, customers engage in service encounters with businesses by visiting their Web site, navigating through it, searching for product and service information, communicating with customer service representatives, and perhaps purchasing a product and/or service.

Researchers (e.g., Czepiel, 1990; Gronroos, 1990; Mohr & Bitner, 1995; Collier & Meyer, 1998) believe that the quality of the interaction between customers and service providers during the service encounter is important because it is at this level where customers judge the services provided to them. They also agree that a service encounter is composed of a service outcome (i.e., what the customer receives during the exchange) and the process of service delivery (i.e., the way through which the outcome is delivered to the customer). They maintain that customer satisfaction with service encounters, also known as transaction satisfaction, is a combination of the customer satisfaction with the service outcome and the customer satisfaction with the process of service delivery.
Moreover, customers with multiple encounters with a service provider will develop an overall perception of service quality and, hence, an overall satisfaction or dissatisfaction with the service provider. Perceived service quality and the overall satisfaction with the firm are attitudinal constructs. These constructs are more enduring in nature when compared to the transaction satisfaction construct, which is transitory in nature. The following figure, taken from Mohr and Bitner (1995), represents the conceptual framework guiding the present study.

Figure 1: Service Encounter Conceptual Framework

While perceived service quality and overall satisfaction with the firm are important concepts, they have been investigated in the electronic context and are beyond the scope of this paper. This paper will concentrate on customer transaction satisfaction with Web services (inside the box in Figure 1).

In the bricks-and-mortar context, researchers have recognized the importance of customer satisfaction because it has been empirically linked to word-of-mouth communication, repurchase intentions/behaviors, and profitability. Word-of-mouth refers to customers communicating with friends and relatives about their experiences (positive or negative) with a firm, thereby affecting the likelihood of these friends and relatives becoming potential customers of the firm. Research (e.g., Richins, 1983; Curren & Folkes, 1987; Nyer, 1999) has shown that satisfied customers engage in positive word-of-mouth communication while dissatisfied customers engage in negative word-of-mouth communication. Satisfied customers are also more likely to engage in repurchasing intentions/behaviors than dissatisfied customers (e.g., Newman & Werbel, 1973; Bearden & Teel, 1983; Oliver & Swan, 1989). All things being equal, there is evidence that suggest that service providers with higher customer satisfaction can expect higher profits than service providers with lower customer satisfaction (e.g., Anderson et al., 1994, 1997; Bernhardt et al., 2000).

Furthermore, after a series of discrete satisfying experiences with a service provider, a customer crosses into what is referred to as the loyalty stage (Oliver, 1997, 1999). Once a consumer reaches this loyalty state, a service provider is considered to have built a continuing association or bond (i.e., relationship) with the customer. Building and maintaining relationships with existing customers is very important for service providers. It is more cost effective for service providers to retain existing customers than to acquire new ones. Online service providers lose $20 to $80 on each customer the first year because of the high cost of acquiring a customer, but can make up for the loss in the long run by retaining loyal customers (Reichheld & Schefter, 2000). Online service providers can spend up to 2.5 times more than their bricks-and-mortar counterparts to acquire new customers (Kenny & Marshall, 2000). Furthermore, loyal customers engage in positive word-of-mouth communication and repurchase behavior, which means more revenue for
Realizing the importance of satisfying customers, businesses have devised mechanisms to elicit customer feedback on the products and services offered to them. Feedback of customer satisfaction/dissatisfaction allows service providers to tailor their products and services to meet their customers’ preferences and wants. Meeting customers’ preferences and wants definitely plays a role in the service provider’s ability to stay in business. Customer satisfaction has been recognized as an important concept in the bricks-and-mortar environment, and it is perhaps more vital for the survival of online businesses.

3. Literature Review

In one of the earliest studies of service encounters, Bitner and colleagues (1990) sought to identify the antecedents of customer satisfaction with service encounters in the airline, hotel, and restaurant industries from the customer’s perspective. They identify three major categories and 12 subcategories as antecedents of customer satisfaction with the airline, hotel, and restaurant industries. These categories were tested for robustness and validity across different industries: auto care/repair, financial services, educational services, health care, real estate (Gremler & Bitner, 1992), retail setting (Kelley et al., 1993), information technology help desks (Heckman & Guskey, 1998), and the gaming industry (Johnson, 1999).

Table 1: Antecedents of Customer Satisfaction with Service Encounters (Bitner et al., 1990).

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employee response to service delivery</td>
<td>A. Response to unavailable service</td>
</tr>
<tr>
<td>delivery system failures</td>
<td>B. Response to unreasonably slow service</td>
</tr>
<tr>
<td></td>
<td>C. Response to other core service failures</td>
</tr>
<tr>
<td>2. Employee response to customer needs and</td>
<td>A. Response to &quot;special needs&quot; customers</td>
</tr>
<tr>
<td>requests</td>
<td>B. Response to customer preferences</td>
</tr>
<tr>
<td></td>
<td>C. Response to admitted customer error</td>
</tr>
<tr>
<td></td>
<td>D. Response to potentially disruptive others</td>
</tr>
<tr>
<td>3. Unprompted and unsolicited employee</td>
<td>A. Attention paid to customer</td>
</tr>
<tr>
<td>actions</td>
<td>B. Truly out-of-the-ordinary employee behavior</td>
</tr>
<tr>
<td></td>
<td>C. Employee behaviors in the context of cultural norms</td>
</tr>
<tr>
<td></td>
<td>D. Gestalt evaluation</td>
</tr>
<tr>
<td></td>
<td>E. Performance under adverse circumstances</td>
</tr>
</tbody>
</table>

The taxonomy has also been tested across respondents: the employee’s perspective as opposed to the customer’s perspective (Mohr & Bitner, 1995). The taxonomy has also been tested using a different classification scheme from the one used in the original study (Heckman & Guskey, 1998). The findings of these studies support the validity and robustness of the three major categories in the taxonomy. The subcategories, however, have been different and dependent on the context. The following table presents the
general categories and subcategories of the antecedents of customer satisfaction with service encounters.

Analysis of pretest data showed the potential of the service encounter model to enhance our understanding of the transactions between customers and service providers on the Web. The three major categories can be used as a preliminary taxonomy to investigate the antecedents of customer satisfaction with electronic service encounters. The categories, however, are not comprehensive, and the subcategories need to be refined to account for the electronic context. Pretest data analysis, for instance, showed that the design and features of a retailer's Web site have an influence on customers' experience. Furthermore, the factor of trust appears to influence customers' experience. These two categories, Web site design and trust, are not accounted for in the taxonomy.

4. Method and Procedure

Service encounter studies have traditionally collected data using the critical incident elicitation technique. The critical incident technique is a systematic procedure for collecting events and behaviors that lead to the success or failure of a specific task (Flanagan, 1954; Ronan & Lathan, 1974; Bitner et al., 1990; Grove & Fisk, 1997). An incident is defined as an activity that is sufficiently complete in itself as to allow predictions and inferences about the person performing the act (Flanagan, 1954; Woolsey, 1986; Bitner et al., 1990). A critical incident is one that contributes significantly, positively or negatively, to the general aim of the activity (Flanagan, 1954; Bitner et al., 1990; Grove & Fisk, 1997). Data collected using the critical incident technique has proven to be valid and reliable (e.g., Andersson & Nilsson, 1964; Cormack, 1983; Housego & Boldt, 1985; Schmelzer et al., 1987; Placek & Dodds, 1988; Piercy et al., 1994; Bendtsen et al., 1999; Mallalieu, 1999; Meuter et al., 2000).

The critical incident technique has inherent qualities that make it well suited to provide explanations to the research problem expressed in this paper. The critical incident technique uses content analysis to analyze people's rich stories about favorable and unfavorable experiences. Since respondents use their own terms and language in describing specific events of their experiences, the researcher catches a glimpse of how respondents think. Nyquist and Booms (1987) call it "pure" consumer data as opposed to forcing respondents into a given framework or leading them in a given direction.

Furthermore, the critical incident technique allows the researcher to explore the complexities of the transactions between customers and service providers where it is difficult to predetermine all the variables affecting the phenomenon. In other words, the critical incident technique allows a holistic approach to collecting data that are very context dependent (Walker & Truly, 1992).

The critical incident technique also takes advantage of the fact that respondents recall more vividly incidents that were particularly satisfying or unsatisfying than incidents that were more mundane in nature. This is supported by empirical evidence (Flanagan, 1954; Stauss & Hentschel, 1992). In their study of German car dealer service, Stauss and Hentschel (1992) learned that respondents were able to recall critical incidents with dealers that dated back more than 10 years.
4.1 Questionnaire Format

The aim of the critical incident technique is to collect very detailed descriptions or stories from respondents about a memorable experience. Researchers consequently situate their respondents in a recent memorable experience that they themselves have experienced. Researchers start by asking respondents to think of a time when they have had what they believe to be a particularly satisfying or unsatisfying experience in the last three months with a [Web site, online purchasing, online auction, online banking, and so forth].

Researchers then ask respondents the following questions:

1. How did the respondent evaluate the incident? [satisfying or unsatisfying]
2. When did the incident occur?
3. Describe the circumstances leading to the incident.
4. What happened exactly?
5. Who was involved?
6. How did the incident end?
7. Why did the respondent believe the incident to be satisfying or unsatisfying?

The purpose of the above questions is to get the respondent to provide a rich description of the incident. The respondents focus on describing the events and details of the incidents. All inferences, abstractions, and conclusions are done by the researcher (e.g., Bitner et al., 1994; Keaveney, 1995).

4.2 Mode of Data Collection

In the service encounter studies, critical incidents have generally been collected through face-to-face interviews (e.g., Bitner et al., 1994; Mohr & Bitner, 1995; Keaveney, 1995; Heckman & Guskey, 1998). Furthermore, the sample size has ranged from 500 to 700 critical incidents. Collecting critical incidents through face-to-face interviews provide researchers the ability of probing respondents in order to collect very rich and detailed data. This method of collecting data, however, requires significant resources to conduct 500-700 face-to-face interviews, including the cost and the time required to transcribe the interviews.

Alternatively, researchers can implement a self-administered Web survey in order to collect 500-700 critical incidents. Similar to the verbal accounts of critical incidents, written descriptions of critical incidents have been proven to be valid and reliable data (Andersson & Nilsson, 1964; Timpka et al., 1995; Hensing et al., 1997; Bendtsen et al., 1999). This method of collecting data may be less demanding for the researcher in terms of resources, cost, and time.

Respondents, however, tend to generate shorter and less developed written accounts as compared to verbal accounts of critical incidents (Andersson & Nilsson, 1964). To address the potential problem of shorter descriptions per respondent, researchers can increase the sample size. Researchers have access to a large target population on the Internet, given the numerous mailing lists (approximately 30,000), newsgroups (approximately 90,000), commercially available email lists, available email extractor software, and so forth.

A drawback of collecting critical incidents through self-administered questionnaire is the inability of the researcher to ask follow-up questions to obtain in-depth accounts of respondents' stories. Consequently, the potential for ambiguity and misunderstanding in interpreting the incidents may be greater than in face-to-face/telephone interviews. However, the researcher makes every attempt to design questions that are clear and capable of capturing as rich a description of customers' stories as possible.
4.3 Data Analysis

An analytical framework for data analysis as outlined by Miles and Huberman (1994) can be used. They explain that the framework begins by identifying the data to be analyzed, coding or tagging the data, and identifying patterns in order to provide an explanatory framework. The preliminary taxonomy drawn from the service encounter literature (see Table 1) is used as a guide in analyzing the data. Through a deductive/inductive iterative process, the researcher generates and refines categories and subcategories in the taxonomy.

The process consists of the following overlapping phases:

- An initial deductive approach to determine if each behavior, feature, event, situation, perception, and so forth described in each critical incident fits into a category of the preliminary taxonomy identified from the literature.
- An inductive approach as new categories appear and irrelevant categories will be discarded from the taxonomy as critical incidents are collected and analyzed.
- The deductive/inductive iterations will continue until saturation of categories is reached.

In order to determine that a saturation of categories or adequate coverage has occurred, Flanagan’s (1954) recommendations will be followed. The researcher extracts all discrete behaviors, features, events, situations, perceptions, and so forth from a random selection of 100 incidents. If all of the behaviors, features, events, situations, perceptions, and so forth in the 100 critical incidents fit into the taxonomy, the researcher can assume that adequate coverage has been reached. If a behavior, feature, event, situation, perception, and so forth from a critical incident does not fit in any category identified in the developing taxonomy, the researcher will modify the taxonomy to accommodate the critical incident. Then, 100 new critical incidents will be randomly selected and tested on the developing taxonomy again. The researcher will repeat this process until new critical incidents do not modify or enhance the taxonomy.

5. Implications of Proposed Framework

The proposed framework attempts to identify antecedents of customer satisfaction with electronic service encounters, leading to theoretical and practical implications. From a theoretical perspective, this model provides a deeper understanding of the online transactions between customers and service providers. The well-established taxonomy in the bricks-and-mortar environment can be enhanced to account for the electronic context. This enhanced taxonomy can be tested for validity and robustness by investigating various types of online services. Once a valid and robust taxonomy is achieved, it will specifically identify events and behaviors that are the sources of satisfaction or dissatisfaction with online service providers.

Moreover, this framework has the potential to contribute to the area of customer relationship management. By identifying the antecedents of customer satisfaction with electronic service encounters, online service providers will be able to consistently satisfy their customers in order to establish and maintain enduring relationships.

From a practical perspective, the specific events and behaviors identified in the taxonomy can be used by online service providers to design better online systems. Respondents will
describe desirable and undesirable features of a retailer's Web site. The online service provider can then improve their Web site to enhance customers' experience. Furthermore, online service providers can implement appropriate procedures and policies capable of dealing with a variety of specific situations. Empirical studies (Bitner et al., 1990; Bitner et al., 1994; Mohr & Bitner, 1995), for example, have shown that unsatisfactory encounters due to service delivery failures can be transformed into satisfactory ones given the proper employee response. By implementing the proper policies and procedures to deal with these kinds of situations, employees can have the freedom to act in order to transform unsatisfactory encounters into satisfactory ones.

Online service providers will also be able to improve their employee training programs. Service providers may, for example, provide employees with hypothetical situations based on the taxonomy. These situations will allow employees to build the skills and knowledge necessary to deal with realistic scenarios and to take the necessary actions to satisfy their customers.

References


technologies: Understanding customer satisfaction with technology-based service
encounters. *Journal of Marketing, 64*(3), 50-64.


*Journal of Marketing, 58*(July), 20-38.

household appliances. *Journal of Marketing Research, 10*(November), 404-409.


perspective. In C. Surprentant (Ed.), *Add Value to Your Service* (pp. 13-16). San


Oliver, R., & Swan, J. (1989). Consumer perceptions of interpersonal equity and
satisfaction in transactions: A field survey approach. *Journal of Marketing,
53*(April), 21-35.

prolific family therapists: A qualitative critical incident study. *Journal of Marital
and Family Therapy, 20*(3), 231-245.

about teaching success and nonsuccess. *Research Quarterly for Exercise and
Sport, 59*(4), 351-358.


Press.

*Journal of Retailing, 47*(Winter), 68-78.

technique: A closer look. *Studies in Personnel Psychology, 6*(1), 53-64.

technique to determine the reasons for success and failure of university students.
*Journal of College Student Development, 28*(3), 261-266.


Surprentant (Eds.), *The Service Encounter* (pp. 243-254). Lexington, MA: Lexington Books.


