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FRUSTRATED INCORPORATED: AN EXPLORATION OF THE INHIBITORS OF IT-MEDIATED CUSTOMER SERVICE

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Abstract

There has been a great deal of focus on the customer service provided online and its impact upon customer satisfaction and loyalty. Such IT-mediated customer service (ITMCS) is an important research topic because IT may be the sole link between a company and its customers and the only means by which a company can differentiate itself from the competition. While the research attention has focused on what facilitates *online service, little attention has been given to what* inhibits *such service. It will be argued that this lapse misses potentially important e-business factors that will drive customers away, rather than towards, an online business channel. For example, web advertisement has become increasing intrusive and frustrating through the use of "pop-under" browser windows. This study investigated the specific website attributes that lead to frustrated, disgruntled and dissatisfied customers. We will provide the results of a qualitative study of 36 e-Commerce consumers, a preliminary typology of ITMCS inhibitors, and the potential behavioral responses to the presence of those inhibitors. Emotions were used as a key construct to assist in the discovering of these service inhibitors and the study found that frustration is a very common experience for online customers. The results of this study are intended to guide further theoretical development and empirical testing of ITMCS inhibitors and their consequences.*

Keywords: E-commerce, e-business, e-service, customer service inhibitors, IT-mediated customer service, satisfaction, dissatisfaction

Introduction

Customer service provided via a website is an essential e-Business phenomenon. Consumer websites are more than just mechanisms for conducting an estimated $72 billion in annual US retail transactions (Hirsh 2002). They are also a means to deliver service to, and build a relationship with, customers. In some cases, a website may well be the only interface between the company and the customer (Benbasat and DeSanctis 2001; Piccoli et al. 2003) and therefore the sole basis of a customer's perception of the company and its service. Consider Amazon as an example. To the customer, Amazon is *exclusively virtual* with all interactions mediated by a browser. It is with this in mind that we define the term Information Technology Mediated Customer Service (ITMCS): service provided directly to a customer through a technology interface such as a web browser. Such service includes reliability, usability, trust, care-taking and a host of other features provided to the customer via the website. These services add value to the customer beyond the core transaction (Cenfetelli and Benbasat 2002; Piccoli et al. 2003; Straub and Watson 2001). Although similar to such concepts as Network-based Customer Service System (NCSS, Piccoli et al. 2003) or Customer Relationship Management (CRM), ITMCS differs by focusing exclusively on the *mediating* aspect. NCSS, CRM and other related concepts encompass the use of IT for *enabling* service provided by employees who, in turn, interface directly with their customers.

Regardless of the relative focus, technology is infusing itself into all types of customer service (Bitner et al. 2000). In fact, technology may well be the most important influence on current and future interactions between buyers and sellers (Parasuraman and Grewal 2000). The interaction of technology and service has lead to extensive research, from a micro perspective, such as page download times (Rose and Straub 2001), to a more strategic focus, such as how firms can use electronic networks to

differentiate products and services (Straub and Watson 2001). As consequent constructs, the field has focused upon success (DeLone and McLean 1992), satisfaction (Szymanski and Hise 2000), trust (Gefen et al. 2003), customer value (Wheeler 2002) and competitive advantage (Straub and Watson 2001), to name a few. What all of this research has thus far focused on is what *facilitates* online service and its consequent benefits. However, little attention has been given to what *inhibits* such service and its consequent disadvantages. The antecedents of dissatisfaction are presumed to be the opposite of satisfaction, such as, if you provide fast speed and good information, the customer is satisfied, if slow and poor, the customer is dissatisfied (Johnston 1995). There is support in both the marketing research and the social psychology literature to indicate that this is a naïve view. The antecedents of dissatisfaction may be qualitatively different from something that simply does not satisfy. If a website "crashes", that's dissatisfying, the lack of such failure, however, does not make you satisfied. Furthermore, the presence of an inhibitor may lead the customer to make an active and conscious choice to forever turn their back on a company, something all the easier to do online. Thus the purpose of this study is to address the following:

- What are the inhibitors of service, specific to ITMCS?
- Are these inhibitors unique and qualitatively different from facilitating online service dimensions?
- What impact do inhibitors have upon customer perceptions of websites and possible rejection of those sites?

Why ITMCS Inhibitors Are Important

It is estimated that 60% of online shopping carts are abandoned primarily due to design issues (Pastore 2002). In a study by Socratic Technologies Inc., 38% of online shoppers abandoned a shopping cart when important information was lacking and 72% decided not to return if the service was poor (Sullivan 2001). Further practitioner research is showing that many websites are failing to provide basic services (Hill 2002), even in the midst of growing online revenue. Beyond lacking features, some websites seem intent on actively frustrating their customers with such things as more and more "pop-up/under" ads (Manjoo 2002; Miles 2002). As if to add salt to the wound, pop-up ads are now increasingly incorporating sound (Jesdanun 2003). While companies may be blasé about website service issues, they may be forgetting that there are low "barriers to exit" for their customers. A customer is only a mouse click away from leaving forever.

Prior Research into Service Inhibitors

From a broad marketing perspective, every firm presumably strives to create satisfied customers but it is of equal if not greater importance to avoid dissatisfied customers (Dube and Maute 1996). Likewise, Oliver (1999) proposes that it is of greater importance to avoid disloyalty than to achieve loyalty. These ideas are similar to a phenomenon recently introduced into the social psychology literature proposing that "bad is stronger than good" (Baumeister et al. 2001). Baumeister and his colleagues parse a large variety of research streams to support that negative experiences are more powerful and negative information more thoroughly processed than the positive. Typologies of negative emotions typically outnumber positive, such as Izard's DES-II scale consisting of seven negative and two positive emotions (Izard 1977; Oliver 1993). In some cases, no positive peer mirrors a negative construct, trauma for example. This disproportionate impact is seen in economics as well in the form of prospect theory in that humans are more sensitive to losses as opposed to like-magnitude gains (Kahneman and Tversky 1979).

Despite the powerful influences that the negative can have upon a customer and the anecdotal evidence that websites are stumbling with regards to service, there has been little research into discovering the inhibitors of ITMCS. One exception is the work of Zhang and von Dran (2000). They studied hygiene and motivator factors of websites based upon the Herzberg (1966) dual-factor satisfaction model. A hygienic factor is one that is necessary but insufficient for satisfaction whereas a motivational factor is sufficient for satisfaction. This study provided a useful typology of 44 website design features that showed certain features such as website stability were hygiene-related and others, such as humor and multimedia, were motivator-related. However, these design features pertained to a single website (CNN) and were derived by the authors, rather than customers. In contrast, we are interested in broad retail-oriented e-Business service attributes that inhibit service delivery as perceived by the customer.

Research into the consequences of service inhibitors is minimal as well, whether in the online environment or in general marketing. Certainly service failure is widely studied (Dube and Maute 1996; Smith et al. 1999) but this is more in the context of how service provides recovery from such failure. Pertaining more to technology usage, Parthasarathy and Bhattacherjee (1998) explore the reasons behind active discontinuance of online services (e.g. AOL). They discuss that it is important to not only consider initial adoption, but whether and why customers choose to discontinue service. Diffusion of innovation factors such as usefulness and compatibility were shown to be important in discriminating between continuers and non-continuers. Carroll et

al. (2002) also consider non-adoption and discontinuance in why young people do not use or stop using mobile phones with rational factors such as excessive cost playing a role. The importance of these two latter studies is the consideration of what inhibits and repels customers leading them to make a choice to not adopt or, post-adoption, discontinue usage. However, this has not been a consideration taken within the online environment. We are not aware of any research that considers why people discontinue using a consumer website. What remains unexplored are the specific attributes of an e-Commerce website that inhibit service, dissatisfy customers and discourage their use of a site, perhaps forever.

Conceptual Foundations for this Research

This study focuses upon customer satisfaction with an e-Commerce website as a means of both uncovering inhibitors and determining the consequent effects on usage. Satisfaction has been defined as a final post-choice judgment (Westbrook and Oliver 1991) and closely studied with service quality. In fact, service quality has at times been defined by satisfaction (Cronin and Taylor 1992). Satisfaction is generally considered as a bipolar, unidimensional construct evaluated along a continuum of unfavorable to favorable (Westbrook and Oliver 1991). Satisfaction remains a key and commonly used measure of information system success (DeLone and McLean 1992) and has received considerable attention in e-Commerce because of the unique combination of both marketing and IT aspects (McKinney et al. 2002). Satisfaction is also important as it influences post-purchase attitude, loyalty and repurchase intentions (Boulding et al. 1993; Rust et al. 1995; Zeithaml et al. 1996). Satisfaction[1] is then of interest in regards to inhibitors as a means of determining a customer's likelihood to continue, or discontinue, usage of an e-Commerce website – an obvious matter of interest to companies with a website presence.

Although many technology adoption perspectives tend to take a rational perspective relying on cognitive appraisals of usefulness, ease of use, reliability and so forth (Davis 1989; Devaraj et al. 2002; Venkatesh and Davis 1996), it is also important to consider the customer's *emotional* perspective as well (Koufaris 2002). Emotion is an important correlate of satisfaction (Oliver 1993). Emotions play a central role in a customer's evaluation of service, in addition to a cognitive evaluation (Bagozzi et al. 1999). In his description of the two-appraisal theory of satisfaction Oliver (1994) notes that *both* emotional and cognitive appraisals make significant and *independent* contributions to satisfaction. A customer can rely either on emotions, attribute performance or both as determinants of their satisfaction.

Not only are emotions an independent influence separate from cognition, positive and negative emotions are themselves independent (Westbrook 1987; Westbrook and Oliver 1991). This can mean that even if positive emotions are elicited, negative emotions may be concurrently elicited with consequent impacts on satisfaction. Westbrook (1987) found that positive and negative emotions were a stronger predictor of satisfaction than the expectancy-disconfirmation beliefs which are commonly used to assess satisfaction. Westbrook and Oliver (Westbrook and Oliver 1991) used post-consumption emotions to explain approximately 40-45% of the variance in various satisfaction measures. Overall, this stream of research supports the use of emotions as an important "trigger" to study the service inhibitor antecedents of dissatisfaction.

Method

The initial purpose of this study is exploratory and thus the method will be qualitative. As stated by Pinsonneault and Kraemer (1993, p. 79) "…the purpose of an exploratory survey is to elicit a wide variety of responses from individuals with varying viewpoints in a loosely structured manner as the basis of a design for a more careful survey." We made use of the critical incident technique (CIT, Flanagan 1954) to investigate ITMCS inhibitors. Given the dearth of literature regarding online inhibitors, it was essential to take a rich, qualitative approach to uncover factors that degrade the company/customer relationship online. Bitner, Booms and Tetreault (1990, p. 73) describe the CIT as: "…a set of specifically defined procedures for collecting observations of human behavior and classifying them in such a way as to make them useful in addressing practical problems." The data to be collected consist of stories, which are subsequently content analyzed. For the purposes of this study, the data collection was performed via an open-ended survey that was used to ask e-Business shoppers about their online shopping experiences that were both satisfying and dissatisfying. Details were sought on the incidents encountered by the customer and there was follow-on questioning of the resulting outcomes of the incident. Although the focus of the study is on service inhibitors, positive experiences were also sought so as to control for response bias and expectancy effects. Respondents were also asked to indicate what emotions

[1]Although the term *dissatisfaction* may be more appropriate, we will use the term *satisfaction* to identify a construct inclusive of dissatisfaction, in keeping with the construct's unidimensional, biploar nature.

they felt during these experiences. The Izard (1977) DES-II emotional scale was the basis for measuring these emotions and one frequently used in marketing (Oliver 1994; Westbrook and Oliver 1991). The Izard scale consists of interest, joy, surprise, sadness, anger, disgust, contempt, fear, shame, and guilt with the latter seven emotions having negative valence.

The questionnaire instructed that the focus was to be on the aspects of the e-Commerce website itself and not the product or service being sought. Respondents were asked the following open-ended questions:

- Do you recall an e-commerce website experience or experiences that left you dissatisfied or that failed to meet your expectations?
- For each experience, what did this lead you to do? How did you express your dissatisfaction? Did it change your behavior?
- Have you had an e-commerce experience(s) that left you feeling one of these emotions? [emotions checklist]
- Please describe the experience(s) associated with the above negative emotions and what happened.
- Have you had an experience with an e-commerce website that left you satisfied or otherwise exceeded your expectations?
- Have you had an e-commerce experience(s) that left you feeling one of these emotions? [emotions checklist]
- Please describe the experience(s) associated with the above positive emotions and what happened.

Results

A sample pool of 36 e-commerce customers provided responses to the questionnaire. Ten of the respondents were graduate students within the university and asked to participate in exchange for a 1 in 5 chance for a $25 cash prize. The remaining 26 respondents were drawn from a pool of online shoppers who had previously responded to a separate e-Business study several months before and were provided with the same incentive. These customers reported spending on average $350 online in the prior 6 months and had shopped from an average of 5 websites. The modal age of the sample was between 18 and 35 with 46% possessing a four-year degree or above. Customer responses varied from single sentence answers to several paragraphs. These responses were analyzed and coded with the goal of simplifying key concepts that broadly covered a generic retail e-Business website. Although positive service experiences were gathered, the focus was on identifying the negative aspects of online service. Coding was facilitated through the use of AQUAD 5.0 (Huber 1997). A total of 248 incidents were coded. A listing of identified ITMCS inhibitors, descriptions and frequencies with which incidents were reported is shown in Table 1.

Customers also indicated (via binary checklist) any or all of ten emotions that they felt during their reported e-Commerce experiences. Table 2 provides a frequency distribution for the emotions reported and the percentage of respondents who reported that emotion.

Table 1. ITMCS Inhibitors

Inhibitor	Frequency	Description
Brochureware	2	The website provides product information but lacks purchase capability.
Choice complexity	3	Information overload, feeling of being overwhelmed
Clutter	2	Too many links, unnecessary graphics, distractions
Dead links	2	Hyperlinks are out of date and no longer exist
Design volatility	1	Website interface design changes significantly within a short period of time
Excessive advertising	1	Taking advantage of customer's attention
False intimacy	1	Attempts by the site to be concerned for the customer are recognized by her as insincere and automated.
Inefficiency	5	Use of the site is cumbersome, particularly in comparison to offline methods like shopping in a store.
Inflexible programming	1	The site isn't flexible to a user's specific needs.
Information uncertainty	2	The site does make clear why information is being requested
Loss of work	4	The website loses data provided earlier forcing reentry or forces repetition of steps already performed
Personal intrusiveness	3	Being asked for personal information not directly relevant to the transaction
Physical intrusiveness	1	Invasion of a user's system through things such as "cookies"
Pop-up ads	5	Frustration from feeling invaded. Lack of control. Disturbed by content of ads.
Price obscurity	10	Direct or indirect costs are not clear or remain hidden until the very end of the order
Process uncertainty	6	The site doesn't provide confirmation of a process (e.g. payment accepted)
System unresponsiveness	19	The site is slow in loading or tools on the site are slow to respond.
Technology failure	8	System "hangs" or "crashes"
Unrecovered service failure	2	The site offers no explanation when something goes wrong

Table 2. Frequency Distribution of Website Shopping Emotions

Negative Emotions									
	Angry	Contempt	Disgusted	Displeased	Frustrated	Guilt	Shame	Terrible	Unpleasant surprise
Frequency	16	3	6	26	32	1	2	1	10
% of respondents	44%	8%	17%	72%	89%	3%	6%	3%	28%
Positive Emotions									
	Joy	Pleasant surprise	Interest						
Frequency	11	18	16						
% of respondents	31%	50%	44%						

The findings point to a number of ITMCS features that lead to frustration, anger, displeasure and general dissatisfaction. Some of the identified inhibitor attributes have a positive counter part. For example, *inefficiency* and *unresponsiveness* have their antithesis in studies of reliability and responsiveness, two of the five dimensions of SERVQUAL. Others, however, are more difficult to tie to a facilitating service feature such as *intrusiveness*, *uncertainty* and *clutter*. There were only two reports of a breach of trust, surprising given the extent of research on that topic within the domain of e-Commerce. Another relative surprise

is that even for popular websites, otherwise positive features may still be interpreted negatively. For example, one customer reported "I think the website is so comprehensive sometimes it is hard to find what I want." This was the basis for the *complexity* inhibitor. In addition, the results support that e-Commerce customer frustration is a very common service experience. Frustration was the most commonly cited emotion, reported by 89% of respondents. The next most frequently cited *positive* emotion was pleasant surprise reported by 50% of respondents. In fact, there was a statistically significant difference between the number of reported occurrences of frustration compared to pleasant surprise (t-statistic = 4.04, $p < 0.05$, Glass and Hopkins 1996).

Inhibitors appeared to have a large impact upon customer website perceptions as well as subsequent behavior. In keeping with the theory that bad is stronger than good, *disloyalty* was the most commonly reported concept accounting for 21 of the 248 coded responses. The following customer comments provide a useful picture of this phenomenon:

- "If a site is confusing and I can't find what I am looking for or it crashes, I won't go back to it again. I will find what I am looking for somewhere else".
- "[Company] did not send a email receipt after purchase, even though it stated it would on the site. It was the main reason why I decided to buy from [a second company] instead."
- "I have stopped using [company] website. I find the website to be too cumbersome… the way that they display the information is too confusing."
- [The website] takes so long to download (even with a LAN connection)…I just go somewhere else.
- "I have stopped using [the] website...they don't update their information regularly (or frequently enough to keep up), and often there are a lot of dead links on the pages."

Conclusions and Future Research

This study developed a list of consumer website attributes that inhibit the service provided to a customer online. These are features inherent to the design of the website as its own service delivery mechanism, separate from other services potentially offered by the company. In many cases, these inhibitors have no mirrored feature captured by previous studies of positively oriented online service quality. Beyond identifying these inhibitors, this study supported the premise that inhibitors may lead to complete rejection of a website by a customer. It would be difficult to make the opposite claim: that facilitating service features will lead to a customer always using a site. Online customers appear to have no qualms about never using a website again as a result of a service inhibitor. Given the relative ease with which customers can switch from one website to the other, the results provide a note of caution to companies with a website presence. It is important to be cognizant not only of building a good website, but in avoiding design features that will frustrate and anger your customers.

Data collection continues and final results of the qualitative survey will be used as the basis for item generation. Previously published theoretical and empirical investigations of ITMCS will also be reviewed to further capture the domain of inhibitors. The end result is expected to be a typology that can act as a basis for a set of instrument items to evaluate inhibitors within a theoretical context. Inhibitors may act as an antecedent to a customer's decision to discontinue usage of a website with both emotional and cognitive evaluations playing a mediating role. Future research will involve testing this theory as well as evaluating whether inhibitors play a greater role than facilitators in customer website usage.

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