ONLINE SERVICE FAILURE: DIAGNOSING CUSTOMER'S EVALUATION OF CRITICAL INCIDENTS OUTCOMES

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Abstract: The rapid propagation of the internet over the last decades has changed the way customers and service providers conducting business. This study focuses on customer's evaluation on service encounters within an online setting and its consequences. Critical incident technique (CIT) was conducted to gain understanding of customer's perception on 'satisfactory' and 'dissatisfactory' online service encounter and to explore the underlying antecedents of customer's evaluation following an online service failure. A total of 26 written accounts of these critical incidents were content analysed through data obtained from interviews and open ended questionnaires sampled from online service customers. Four categories of failure have been classified: (a) unavailable service, (b) slow service, (c) systems failure and (d) other core service failure, adding another dimension to Bitner et al.'s (1990) 3-category responses to service failure. In particular, responses to technical systems failure (Category C) account for the biggest number of incidents captured in this study (46.2%). Although the majority of customers within Category B and C evaluated the recovery efforts as satisfactory, majority of others in the other categories assessed otherwise. The dynamics of these findings can help service providers to understand the underlying events or incidents that lead to customer satisfaction and dissatisfaction and eventually to improve their online service strategies.

Keywords: customer's evaluation, service encounters, critical incident

INTRODUCTION

Over the last decades, internet has grown at an impressive rate and has changed the way customers and service providers conducted business. Internet offers various features like capacity, speed, precision and convenience that help firms or organization to attract attention of large number of potential customers (Khanh & Kandampully, 2002). Nowadays, customers have the opportunity and flexibility to perform business activity with a wide number of service providers globally without being restrained by their location and time of purchase. The Internet has allowed customers to access vast amount of information about the products and services across different service providers. However, customers will engage in

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service encounters with businesses by using the internet as a medium to purchase products and services. For instance customers will engage with service encounters during visiting while exploring the web site, navigating through it and searching for products and services information. During the process, customers will have the tendency to encounter problems or difficulty in communicating with customer service representatives. Studies on the service encounter and interaction between a service provider and customer has received much recent attention in the marketing and management. According to Surprenant and Solomon (1987) service encounter is defined as dyadic interaction between customer and service provider. While, Massad and Crowston (2003) describe that 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. This moments or event is essential in shaping the level of satisfaction experienced by the customers.

Purpose of the Study

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 (Gronroos, 1990; Mohr & Bitner, 1995; Collier & Meyer, 1998). Since customers evaluate the entire service encounter, the satisfaction or dissatisfaction of customers with service encounters is a combination of the customer satisfaction with the service outcome and the process of service delivery. Any failure during this interaction may influence customers' perception of the service performance provided by the service providers. Thus, Mohr and Bitner (1995) argue that many aspects of the service encounter may affect a customer's level of satisfaction to a greater degree than just service success.

Service encounters are shaped by individual behaviours as well as the nature and quality of interaction between customers and employees (Bitner, Booms & Tetreault, 1990). These service encounters are considered as the basis for building customer satisfaction. Hence, service providers need to have a better understanding of the attributes customers use to judge their performance in service encounters (Peyrot, Cooper & Schnapf, 1993). Furthermore, for online service, usually web based technologies have been used to computerize product distribution, payment system and call centres that may produce certain problem to the service providers and customers. Online service means that customers are fully or partially using or conducting the transaction with the internet that may sometime encounter certain unsatisfactory experience for them.

Although there have been a myriad of research investigating users' satisfaction and dissatisfaction in service encounters there are predominantly quantitative, and not useful in identifying the specific causes of such satisfaction or dissatisfaction over a particular service encounter (Aliah Hanim, Maisarah, Che Aniza & Nur

Sa'adah, 2011; Bitner *et al.*, 1990). In addition, previous quantitative studies on the subject focus on the technical aspects of the service, rather than the more important aspects of the human side of the service encounter, i.e. the psychological and social aspects such as the cognitive and affective components of the service encounter. To this end, incident-based measurement using qualitative methodology is useful for this purpose (Aliah Hanim *et al.*, 2011; Friman, Edvardsson & Garling, 2001; Friman & Garling, 2001). Also, while there are numbers of previous studies that have investigated the customer satisfaction related to the service encounter with the service providers using critical incidence technique, (Bitner *et al.* 1990; Noone, Matilla & Wirtz 2009; Butterfield, 2005), they are mostly industry-focused (e.g. Aliah Hanim *et al.*, 2011; Allery, Owen & Robling, 1997; Chell & Pittaway, 1998; Friman, *et al.*, 2001; Friman & Garling, 2001; Mallak, Lyth, Olson, Ulshafer & Sardone, 2003) and most of the incidents dealt with direct interactions between service providers and customers. As such, there are still few or little explanation about the customer's evaluation on 'satisfactory' and 'dissatisfactory' service encounters within an online setting where the interaction within the players are 'virtual'.

In this paper, we seek to fill these gaps and gain understanding of the customer's perception on 'satisfactory' and 'dissatisfactory' service encounter in an online service setting and to explore the underlying antecedents/experience of customer satisfaction. In particular, this study aims to answer the following research questions:

(a) How customers evaluate their experience in using an online service following a service failure? What are the underlying sources of events that lead to this satisfying and dissatisfying experience?

(b) Why these events are to be remembered positively or otherwise? How does this translate into customer's decision to continue to use the online service?

LITERATURE REVIEW

E-Service Experience

Szymanski and Hise (2000) found five elements in satisfying customer experience on online services, which are convenience, product information, product offerings, security and site design. From these five elements, customer rated convenience as the most important determinant and site design as the second important determinant in e-satisfaction experience while financial security ranked as the third important predictor of e-satisfaction. Evanschitzky, Iyerb, Hessea and Ahlert (2004) revisited the survey in 2004 and found similar result for Germans e-finance and e-shopping respondent, where convenience and site design are rated as the first and second most important determinants in e-service experience.

In understanding in-depth experience in e-services, a recent finding on Online Consumer Experience (OCE) model by Rose, Clark, Samoule & Hair (2012) discovered two experiential states that ensue in consumer online experience process. First, is cognitive experiential state (CES) and second is affective experiential state (AES). These experiential components will induce satisfaction and thrust in consumer's online experience, which then lead to repurchase intention. Rose *et al.* (2012) also found four antecedents influencing CES which are interactive speed, tele-presence, challenge and skill, while there are five antecedents underpin AES, which are ease of use, customization, connectedness, aesthetics and perceived benefits. Ease of use, customization and connectedness are mediated by perceived control.

Cognitive and Affective Components in Customer Purchasing Experience

Rokeach in Cohen (1972) defined attitude as sets of interrelated organizations of underlying cognitive, affective and behavioural beliefs that is enduring and persistent, formed through the process of learning predisposing a person to act on a situation or object. There are three important elements of attitude, which are (a) organized, (b) enduring and (c) directive cognitive structure. Rokeach further differentiated attitude through a concept of belief system organized in a several dimension of ideology, value and opinion, which will lead to the process of attitude and behavioural change.

Furthermore, Epstein (2003) in his Cognitive Experiential Self Theory (CEST) emphasized that people processed information by preconscious experiential system and conscious rational system, where experiential system is emotionally driven. In addition, this process also lies on four basic needs that are desire to maximize pleasure and minimize pain, the need for relatedness, the need to enhance self-esteem and the need to maintain stability and coherence with person's conceptual system.

In explaining customer's attitude judgement, Chaiken and Maheshwaran (1994) introduced the heuristic-systematic model (HSM) and Petty, Cacioppo and Schumann (1983) and introduced the elaboration likelihood model (ELM) to explain the content of persuasion and attitude judgement. The theory explained that systematic processing in (HSM) or central route processing in (ELM) requires high cognitive involvement, reasoning and rational thought while heuristic processing in (HSM) or peripheral route processing in (ELM) involve limited cognitive effort and driven from emotions, feelings and cues in attitude judgement. As systematic processing involved with high cognitive reasoning, it has been proven that heuristic processing is not affecting persuasive judgement. On a different experiment, Drake and Chaiken (2005) found that consumer tend to have self- interest bias in their attitude judgement and persuasion.

"Service-dominant logic (S-D logic)" was introduced by Vargo & Lush (2004, 2008), with the perspective of "new dominant-logic for marketing", where "service – that is the application of operant resources (knowledge and skills), is the basis for all exchange and goods are merely a distribution mechanism for service provision where the customer is always the co-creator of value." Payne, Storbacks and Frow (2008) found that co-creation induce emotion, cognition and behaviour. When two parties involved themselves in a service process, it will create the learning process and relationship experience. They believed co-creation could form strategic options for creating values based on knowledge accumulated through learning, thus creates interactive experience between firms and customers. Besides this, according to Madhavaram and Hunt (2008), co-creation also induces "customer response capability", which requires an organization to effectively and speedily meet customer's needs.

Service Failure, Service Recovery and Customer's Satisfaction

Service failure and recovery has been associated with customers expectation, perceived performance and the role of firm's justice (Maxham & Netemayer, 2002; Liao, 2007; Yim, Gu, Chan & Tse, 2003) in delivering the product and services. Expectation Confirmation Theory which was introduced by Oliver (1980), found that customer's satisfaction or dissatisfaction are derived from their expectation and perceived performance on the product or services purchased and utilized by them. If the product or services are perceived to be better than their expectation, it will establish positive disconfirmation thus lead to satisfaction. However if the product or services are perceived to be less than what expected from the customers, it will establish negative disconfirmation thus leash to dissatisfaction.

Dong, Evans & Zou (2008) in their study found that customer tend to feel more satisfied if they involved in taking action together with firms to overcome service failure that was caused by them. Later, Roggeveen, Tsiros and Grewal (2011) empirically tested the effect of co- creation between firms and consumer in dealing with service delay recovery. In their study, they found that co-creation and compensation improves the evaluation on severe service delay and lead to recovery process satisfaction and behavioural intention to repurchase the product. The relationship is mediated by equity where customer perceived balanced between what they expected in the product or services and what they received. However, if the situation is less severe, co-creation will not further improve the level of customer satisfaction in their decision to repurchase the products or services. Moreover, customer needs to view the co-creation process positively with the intention to recover the service delay.

Folkes (1984) theorised an attributional approach to product failure in consumer complaining behaviours. She conceptualizes three causal dimensions on consumer reaction to product failure that are stability, locus and controllability. If consumer

confirmed and confidence on the failure and lost their thrust on the product, they would aspect refund for the services or product they purchased. If there is still a hope on the product performance, they could accept a replacement or change to the product. If the firm creates the locus of cause/problem to the product purchased, consumer would aspect a refund and apology from the firm and if consumers perceive obvious negligence which firm could and supposed to avoid, consumer are predicted to be angry and incline to hurt firm's businesses.

In a later study, McColl-Kennedy, Patterson, Smith and Brady (2009) examined customer rage experience which associated with emotion, expression and behaviours caused by service failures. Applying cognitive appraisal theory related to stress and coping theory by Larazus and Folkman (1984), they found two types of rages that aroused from discrete emotions. They label the first type as rancorous rage, (characterized by intense feelings of ill will or animosity and by acrimonious, malevolent, anger) which inclined to be expressed non-verbally through face expression and body language. The second type is retaliatory rage, (characterized by feelings of fierceness, and by destructive, violent anger) which inclined to be expressed through physical and displaced expression. Besides this, rage could also be expressed verbally by cursing, yelling, insulting with high voice and constructively by getting over it, calm down and move on which relates to relatively more covert behavior.

In trying to win customer's heart, Maxham and Netemayer (2002) found, above all recovery attempt, the overall satisfaction towards the firm will strongly predict customer satisfaction and repurchase intention. Additionally, Liao (2007) states the importance of perceived justice at customer's end. The apology and courteous and prompt handling in trying to solve customer's problem will increase service recovery performance (SRP) and induce satisfaction and repurchase intention. On the other hand, Magnini, Ford and Markowski (2007) found service recovery paradox occurs when customer perceived the problems as less severe and the firm had little control over the incident, which the success in solving the problem will evoke more satisfaction to customers.

Critical incidents are not only experienced during or after the purchasing process. It could also happen during the search process of the product or services. According to Reynolds, Garretson and Jones (2006) search regret or post-searched dissonance is experience by a person during the process of searching the product. Failure to search the product or information on the product will evoke negative emotions and induce search regret. This regret will lead customer to blame the product, the store, themselves or other reasons that cause the failure. In more concealed manner, consumer may also find solution and cope with the regret. On a different experiment, applying Lazarus's theory of emotion, Luce, Payne and Bettman (1999) also found that consumer are willing to absorb emotional trade-off difficulty in their decision choice for quality product or services. The non-

compensatory choice heuristics will influence customer to avoid the trade-off and choose the other alternatives.

METHODOLOGY

The Critical Incident Technique

Critical incident technique (CIT) is a flexible, systematic and inductive grouping procedure for recording and analyzing events and behaviours that lead to a success/failure on a specific task; or a negative/positive result; or a satisfactory/ dissatisfactory outcome as well an effective/ineffective action (Bitner, et al., 1994; Bitner, Booms & Mohr, 1990; Flanagan, 1954; Gremler, 2004; Urquhart et al., 2003). Although the origin of CIT can be traced back to 1940s (Butterfield, 2005), it was Flanagan's (1954) landmark article that first set the guidelines of the research method systematically. Flanagan (1954, p. 327) defines the critical incident technique as "...a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles". CIT focuses on the specific reasons for an action or behaviour through the analysis of the participants' factual accounts of important ('critical') events in which the purposes and consequences of such actions or behaviour are manifest.

CIT has been considered by researchers both as a methodology (Aliah Hanim *et al.*, 2011; Bitner *et al.*, 1990, 1994; Flanagan, 1954) as well a tool for data analysis (Atkinson, 2007; Chell & Pittaway, 1998). Although some researchers have combined CIT with quantitative data analyses (e.g. Friman *et al.*, 2001; Friman & Garling, 2001; van Doorn & Verhoef, 2008) CIT is more profound as a qualitative research methodology (for a review of the 50-year literatures on CIT, see Butterfield, 2005). As CIT is generally a useful exploratory and investigative tool, qualitative methods of analysis are considered most appropriate (Butterfield, 2005; Chell & Pittaway, 1998; Serenko, 2006; Urquhart *et al.*, 2003). This is also consistent with Flanagan's (1954) description of the fundamentals of the CIT, among others, it revolves around expert's (participant) observation of a certain event (Butterfield, 2005).

CIT has been deemed useful across various social sciences such as organizational psychology (e.g. Flanagan, 1954), organizational culture (Gundry, 1994; Mallak *et al.*, 2003), entrepreneurship (Chell & Pittaway, 1998), as well as marketing (Bitner *et al.*, 1994, 1990; Gremler, 2004; Tax, Brown, & Chandrashekaran, 1998), to name a few.

In particular, CIT approach is deemed a relevant tool for managing services (Bitner *et al.*, 1994, 1990; Edvardsson & Roos, 2001). CIT may contribute to improving understanding of the activity or phenomenon of the events that make up a specific

experience by the person or persons involved. Taken together, we view that CIT is the most appropriate means to derive the answers to our research objectives.

This paper considers incidents as 'critical' if they are highly relevant to the issues under discussion (Atkinson, 2007) and that the participants can recall them so strongly (Aliah Hanim *et al.*, 2011) and able to describe them in detail. Consequently, the participants are able to judge them as either positive or negative (Serenko, 2006) or whether they are particularly satisfying or dissatisfying (Aliah Hanim et al. 2011; Bitner *et al.*, 1994, 1990). For the purpose of our analysis, we only captured incidents of service encounters where a service failure has occurred *and* an attempt has been made by the service personnel to recover the failure (Aliah Hanim *et al.*, 2011). The incidents were categorized to identify the specific events and outcomes as well as the underlying reasons for the experience to be perceived as particularly satisfying or dissatisfying.

Data Collection and Analysis Procedure

The data were gathered through written accounts of the relevant critical incidents as described by the participants. Incidents were sampled from customers who have had experience of using online services across various industries such as retailing, banking, and telecommunications. The participants were briefed on the necessary information and the nature of the study and were invited to complete the designated set of questionnaires on voluntary basis. Apart from interviews, the use of open-ended questionnaires is deemed appropriate in CIT (Aliah Hanim *et al.*, 2011; Flanagan, 1954; Serenko, 2006), in which the experiences are recorded in the respondents' own words. As it is the researcher's responsibility to perform the abstraction (Aliah Hanim *et al.,* 2011), the respondents were only made to describe the incidents and not to identify the underlying meanings of their experience. The sorting scheme (Figure 1) and definitions of categories developed by Bitner *et al.* (1990) were utilized in this study. Consistent with our research objective, we focused only on incidents where a service failure had occurred (referred as 'Group 1' in Bitner, *et al.*, 1990). To ensure the validity and reliability of our inter-judgments of the incidents in this study, we adhere to the fundamentals of CIT and the appropriate art of interviewing (Aliah Hanim *et al.*, 2011). To this end, we consider only responses that fit our definition of 'critical incidents'. Each researcher carefully read, re-read and independently classified each incident into one of the pre-defined incident categories and judgementally labelled it as either 'satisfactory' or 'dissatisfactory' based on the customer's perception. Then, we test the inter-judge reliability of these individual categorizations and make a consensus as to which category each incident best fits into. The analysis of the findings is the outcome of this consensus verifying and modifying the classification.

Each questionnaire contains the following questions (adapted from Bitner et al., 1990; Aliah Hanim *et al.*, 2011):

(1) *Think of a time when you had an experience of using an online service in this country where you encountered a service failure and the service personnel tried to correct the poor but made a poor or good job in solving/correcting that failure. Please describe the nature of that incident*

(2) *What happened?*

(3) *What did the service personnel do or say in order to solve the problem?*

(4) *What resulted that made you feel the interaction was satisfying or dissatisfying?*

KEY FINDING AND DISCUSSIONS

There are a total of 26 incidents analyzed in our study (out of 27 original responses, one incident that did not meet our criteria was excluded). Demographically, the participants were predominantly Malays in the student category, aged between 30-39 years and were holders of a Master' degree and/or pursuing education on post-graduate level. Following the classification procedure and incident sorting process (Figure 1), we report the summary of findings and categories that emerge from this study in Table 1. Table 2 shows the breakdown in the number of incidents by incident outcome (satisfactory/dissatisfactory) and whether the customers have intention to continue to patronize the service after the particular incidents have occurred. Table 3 shows samples of incidents recorded according to the pre-defined categories.

Sources of Failures that Lead to Satisfying and Dissatisfying Experience in Online Service Encounter

Table 1 shows the category of response and the frequency of occurrence for satisfactory and dissatisfactory outcomes in each category. The initial categorization of service failure is based on 'Group 1' in Bitner et al. (1990). From this study, we classified four categories of failures: (a) unavailable service, (b) slow service, (c) systems failure and (d) other core service failure such as misrepresentation, poor

Figure 1: Incident Sorting Process (adapted from Bitner *et al.*, 1990)
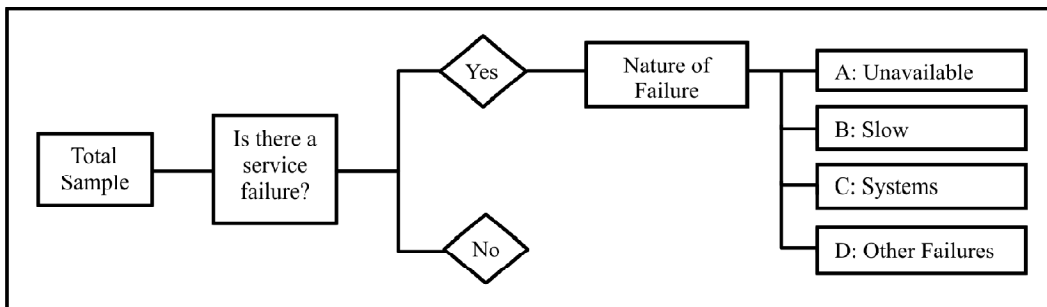
Note: * Category C: Systems Failure is developed from findings of this study.

Table 1
Service Failure Category by Incident Outcome

| | Incident Outcome | | | | | | Total | |
| | Satisfactory | | | Dissatisfactory | | | | |
Category (n = 26)	Count	% within category	% within incident outcome	Count	% within category	% within incident outcome	Count	% within category
A. Response to unavailable service	0	0.0	0.0	7	46.7	100.0	7	26.9
B. Response to unreasonably slow service	2	18.2	66.7	1	6.7	33.3	3	15.4
C. Response to technical systems failure	8	72.7	66.7	4	26.7	33.3	12	46.2
D. Response to other core service failures	1	9.1	25.0	3	20.0	75.0	4	15.4
Total	11	100.0	42.3	15	100.0	57.7	26	100.0

Table 2
Post-Critical Incident's Intention to Patronize the Online Service

| | Incident Outcome | | | |
| | Satisfactory | | Dissatisfactory | |
Incident Category	Frequency	Continue Patronage	Frequency	Continue Patronage
A. Response to unavailable service	0	0	7	2
B. Response to unreasonably slow service	2	2	1	0
C. .Response to technical systems failure	8	5	4	3
D. Response to other core service failures	1	1	3	1
Total	11	10	15	7

quality of service and negligence by service provider or their representatives, adding another dimension to Bitner *et al.* (1990) 3-category responses to service failure.

    A. *Response to unavailable service.* This category refers to non-existing service or existing service that was unavailable for use. For instance, an online system was shut down during maintenance, or a method of payment was

Table 3
Sample Incident and Employee Response to Service Failure

Category	Incident Outcome	
	Satisfied	*Dissatisfied*
(A) Response to Unavailable Service		I've encountered problem during payment of a flight. They informed me that the method of payment (direct debit from bank account) is no longer available. If it is no longer available, why the company has the info in their website? That means there was no action taken to solve this problem. (*No. 16*)
(B) Response to Unreasonably Slow Service	I bought a computer from an online website. The delivery was delayed for two months. Their explanation for the late delivery is acceptable. The call centre is very efficient and I did not have to wait for long to get in touch with the customer service. (*No. 1*)	I purchased a mobile top-up, however after several hours the amount was not credited into my mobile account. Quite dissatisfying because it took many hours to solve the problem. (*No. 13*)
(C) Response to Systems Failure	During the payment process, the online ticketing system went idle and cannot be refreshed. I called up the customer centre but the operators were busy. On the second call I managed to talk with an employee. Not long afterwards I received a call from the service centre. Although in the end I solved the problem myself, they did try to help me. They also called me to follow up which is good. The interaction was satisfying because the employees were polite and they apologized for the inconvenience. (*No. 15*)	I subscribed to an internet hosting service. My user profile was missing when the service provider upgraded their system. They just told to re-create another account. All my history of transactions was gone. This was the second time it happened. (*No. 25*)
(D) Response to Other Core Service Failure	The package was supposed to be delivered by hand. Instead, they just left my package by the gate and the box was totally drenched because of heavy	I bought a limited edition book from an online shopping website based in Hong Kong. However, I received another (also limited edition) version of the book. I had

Category	Incident Outcome	
	Satisfied	*Dissatisfied*
	rain. On top of that, their online tracking showed that the package was received and signed by 'a maid' which was clearly made up. I complained to both the seller and the courier company for the unscrupulous service. The seller expressed shocked and promised to evaluate the delivery service. The courier representative also admitted responsibility and will issue the employee a stern warning. I feel satisfied mainly because the goods were not damaged as they were adequately plastic-wrapped. I just want them to take note of the incident. (*No. 4*)	to argue with them that the description of the product on the website was not accurate. Finally they acknowledged the mistake, changed the description on their website and offered a full refund. I was rather dissatisfied since I requested for some compensation or discount. It would cause more inconvenience for me to return the book since they would not cover the return shipping fee. (*No. 2*)

Note: The wordings have been modified for grammatical errors and/or simplified for the purpose of reporting. Nevertheless, the essences of the responses are kept intact.

made temporarily unavailable. We did not find an incident under this category with a satisfactory outcome (all seven incidents or 26.9% of the total incidents led to dissatisfactions). It is important for service providers to take a serious note of this category as it may translate into loss of prospective customers or negative word of mouth.

B. *Response to unreasonably slow service.* This category of response refers to the incidents where customers perceived the service as being too slow or the slow feedback/recovery effort from the service provider. In this case, the customers find the waiting time intolerable. There are 3 incidents or 15.5% of the total response within this category. Out of three, two were satisfied with the outcome of the incident. Among the reasons cited for this was the attitude of the employers who were nice and polite in explaining or solving their problems.

C. *Response to the technical systems failure.* Due to the high number of incidents found fitting under this category, we added this emerging category separate from other online service failures. 46.2% or 12 of the participants in this study report an incident under this category. This category reflects customer's encountering problems due to technological or technical errors

(or other supporting systems that help to deliver the service), outdated system or simply internet glitch. Surprisingly, the majority of the participants in this category (72.7%) were satisfied with the incident outcome. Among the reasons mentioned:

"I am satisfied since internet glitch is normal" (No. 7).

"I was satisfied with the service because they respond very fast and

 help me to solve the problem" (No. 10).

D.   *Response to other core service failure.* This category refers to other core failures online in service encounter. Our data shows some examples of misinterpretation, poor quality or even a mistake made by the service providers that led the customers feel satisfied or dissatisfied with the interaction with the service providers. Only four of the incidents fall into this category – two for misrepresentation and one each for poor quality and mistake.

Underlying Causes and Events that Lead to Satisfactory and Dissatisfactory Critical Incident Outcomes

When service failure was referred to service providers, consumer always expected the problems be resolved by them. All failures that have been perceived as promptly, efficiently and empathically solved by the service providers led to positive disconfirmation and satisfactory experience by the customers, as illustrated by our respondents as below:

"I am satisfied with the service. … at their end, the booking has been completed" *(No. 3).*

"The company have responded promptly and emphatically and although did not offer any compensation, I feel satisfied. …I just want to have the incident recorded by them and hopefully it won't happen again in future." *(No. 4).*

"I was satisfied with the service because they respond very fast and help me to solve the problem." *(No. 10).* en

"… I feel satisfied about it and feel obligated to make a new order. Doesn't really feel good to eat for free even though i know, it is totally not my fault." *(No. 24).*

The concern and effort shown by service providers in correcting the service will in the end induce customer's trust towards service providers. This experience will even make them perceive the problem as normal and tolerable, and makes them willing to patronize the service.

However, failures that have been perceived by customers as being ignored by the service providers or there is almost no or less than expected effort being made to rectify the problem, will direct to customer's negative perception. Customers tend to judge service providers as irresponsible. As illustrated by the following incidents:

"They are not even trying to follow up. I just give up on the company and decided to use another bank instead." *(No. 11).*

"I was rather dissatisfied since I requested for some compensation/discount. It would cause more inconvenience for me to return the book since they would not cover the return shipping fee" *(No. 12).*

"Dissatisfying, they blame the system rather than actually trying to solve the matter. They are not   sensitive to customers' perception of (their) overall service" *(No. 18).*

"Extremely dissatisfied because it didn't look anything as advertised and seller refused to compensate. Clearly the seller was planning to cheat. I didn't pursue the matter since I didn't lose much (it was cheap buy)" *(No. 19).*

"the contact person didn't want to accept responsibility" *(No. 20).*

This is especially true, where all incidents in Category A, (the event that service is unavailable) indicated little or no effort at all from service providers to recover the failure. It resulted to 100% customer's dissatisfaction (Incident *No. 11, 14, 16, 20, 21, 22, 26*). Customers tend to perceive service providers as ignoring and uninterested to entertain them. The unavailability of the services at the end of the process together with the perception of unconcerned services providers led to low tolerance from customers in this category that directed to their dissatisfaction in the overall services. This is consistent with Madhavaram and Hunt (2008), where co-creation also induces 'customer response capability', which requires an organization to effectively and speedily meet customer's needs.

From the findings, customer seems to be able to tolerate on slow services in Category B (15.4%) as compared to Category A and C. In the end, 66.7% satisfied with the service. This indicates, even though the service is slow, but if there is a response and effort from service provider to solve the issue, it could lead to satisfaction at customers end.

Systems failure in category C found to be the incident that is assume as critical and easily remembered by the respondent. Interestingly, satisfactory outcome from this incident is higher (66.7%) as compared to dissatisfactory outcome (33.3%). This implies that it is relatively easier for employees to recover the failure if it is perceive as being promptly, efficiently and emphatically solved by the service providers as responded by customer in their answers in incidents Nos. *3, 10,* and *24* above. We also found that, even though the response has been resolved by the customer themselves, they tend to feel satisfied with the effort and politeness shown by service providers. The apology made by service provider is recognized as positive input to customer as shown in response below:

"Although in the end I solved the problem myself, they did try to help me with the issue. They also called me back to follow up which is good. The interaction was satisfying because the employee was polite and apologized for the inconvenience" *(No. 25).*

Besides perceiving efforts made by service provider, consistent with cognitive appraisal theory related to stress and coping by Larazus and Folkman (1984), customer may also react in a more covert manner and try to constructively get over from the problem as example from the following incident:

> "It was unfortunate but nothing can be done about it...and it was definitely better than nothing. I try to keep positive about it" *(No. 27).*

In the case of where customer assume misrepresentation on the product in which the quality or the features of the product is not as expected by customers, they tend to distrusts service providers. This is consistent with attributional approach found by Folkes (1984), where customer would hope to get compensation or discount and apology from service providers as stated by respondent in incidents No. *12* and *19* above.

In harmony with previous literature, customers also concern about the security of their transaction as mentioned by respondent below:

> "You know...when your money is gone but the booking is not secured" *(No. 13).*

> "Payment did not went through but amount has been deducted from my card" *(No. 12).*

We also found that almost all satisfied customers have the intention to continue patronizing the service except for one respondent who decided not to continue patronizing because it was just a "one off purchase". This confirms that ample efforts from service providers are good to maintain consumers trust and perceived justice on the service rendered and in the perception of value co-creation. However it is also interesting to note that there are also dissatisfied customers who would still be willing to continue to use the service. For instance, in one incident (*No. 17*) where the respondent regarded the severity of the failure as high and perceived the recovery efforts as low, but still prefer to continue patronizing the service. This is due to service recovery paradox, where their trust and loyalty on the previous services are rendered by service providers. 'Less important' commitments may have influence on customer's perception of the service encounter; a customer is likely to more forgiving if the 'loss' are not so severe. For instance, to receive different version of book (*No. 2*); to re-create the account (*No. 15*); or to have delay in receiving (*No. 18*) or flight ticket (*No. 22*) are remembered by the participants negatively, but they chose to continue to patronize the service since the trade off is higher (such as the convenience of using the online service).

IMPLICATIONS AND CONCLUSION

This study supports our conceptualization of the customer's satisfaction and dissatisfaction with online service encounters and empirically verifies the usefulness of Bitner *et al.'s* (1990) scheme on the sources of such perceptions within an online setting. Taking refund for a movie ticket it further, we contribute to the

knowledge by proposing one additional category of most prominent service failure which is highly relevant for online services. Overall, this study fills the gaps in the literature and provides deeper understandings of customer's evaluation on service encounters within an online setting and its consequences.

Getting an understanding on the customer's perception relating to their satisfaction and dissatisfaction on service encounters are important for service providers to improve business and services to the customers. Customers often consider any service failure seriously. So it is crucial for any service provider to know and understand the events that may give dissatisfaction to the customers. With the exception of Category B, our data shows that customers generally were not satisfied with the outcomes of a service failure (57.7% of overall responses), implying that the service recovery efforts from the service providers were not adequate to turn the customers to be satisfied. This is evidence of the need for the service providers to increase the quality of their services to meet with their customers' expectations.

Furthermore, the success of online service is highly dependent on customers' satisfaction of the quality of the service provided, in particular, the technical systems (illustrated by the outcomes of Category C in this study) in which failures the customers remember most. Service providers should take this seriously as a cue to improve their service delivery by investing in properly working technical and technological systems that characterize the nature of online service. Although our data suggests that it is relatively easier to satisfy customers in this category, most incidents captured in our study invoke relatively 'small losses' to the customers (e.g. small monetary loss), thus may account for their higher degree of tolerance in evaluating the service failures and recovery efforts.

There are some limitations to this study. Although there is no hard rule on the sample size in CIT (Butterfield, 2005; Flanagan, 1954), we note the relatively small sample incidents captured in our study, and thus care should be taken in interpreting its findings. With more incidents to be diagnosed, perhaps more categories will emerge and the one missing category in our study may be found. Nevertheless, given that the study is focused on only one specific aspect of service failure as proposed by Bitner *et al.* (1990), we believe our data is rich enough to capture the essence of our theorizations. Our study also explores the online service encounters across various industries. Future research may consider zooming in into specific industries within the online atmosphere such as online retailing, online banking and other industries where online facilities are considered necessary, or especially when failures can be most detrimental to the customers. This will further enrich the understanding of the issue and provide more relevant and meaningful implications to the theory and practice.

Suitable and reliable measures of type of service encounters are appropriate both to assist service providers in their improvement of the service as well as to

ensure the customers will be satisfied with their products or services and increase company performance. This study helps service providers to determine events or incidents that make a customer satisfied or dissatisfied with the online service encounter. It helps service providers to better address the needs and wants of their customers and to define their online service strategies.

Acknowledgments

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