

AN EXPLORATORY STUDY OF THE FORMATION AND IMPACT OF ELECTRONIC SERVICE FAILURES

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Appendix A

Summary of Extant Literature on Service Failure

Author(s)	Theoretical Frame of Reference	Scope of Application	Dimensions + [Sub-Dimensions]	Consequence(s)	Methodology	Findings/Proposition
Bitner (1990)	Attribution Theory and Expectation Disconfirmation Theory	Offline Service Failure	Unidimensional Failure Construct	Dissatisfaction	Field experimental study involving 145 participants respectively	<ul style="list-style-type: none"> • Consumers are likely to be dissatisfied when they deem that the service provider exercise greater control over the cause of a service failure, and when the failure was recurring <i>vis-à-vis</i> a rare event • Consumers tend to attribute service failure to a lack of control on the part of the service provider when an external explanation is offered for the failure • Consumers tend to view service failure as a rare event when the failure occurred in an organized service environment

Author(s)	Theoretical Frame of Reference	Scope of Application	Dimensions + [Sub-Dimensions]	Consequence(s)	Methodology	Findings/Proposition
Bitner et al. (1990)	None	Offline Service Encounter Failure	<ul style="list-style-type: none"> • Failure of Service Delivery System [unavailable service, unreasonably slow service, and other core service failure] • Failure to Meet Customer Needs and Requests [Failure to meet special needs customers, failure to meet customer preferences, failure to address admitted customer error, and failure to manage disruptive others] • Unprompted and Unsolicited Service Behaviors [Failure to pay attention to customer, failure due to out-of-the-ordinary service behavior, failure to be sensitive to cultural norms, gestalt evaluation failure, and failure to perform under adverse circumstances] 	None	Critical Incident Technique (CIT) involving 352 incidents of dissatisfied service encounters from service industries	<ul style="list-style-type: none"> • Inductively derive a classification system of service encounter failures comprising three categories (i.e., failure of service delivery system, failure to meet customer needs and requests as well as unprompted, and unsolicited service behaviors), each with its own set of constituent sub-dimensions
Bitner et al. (1994)	None	Offline Service Encounter Failure	<ul style="list-style-type: none"> • Failure of Service Delivery System [Unavailable service, unreasonably slow service, and other core service failure] • Failure to Meet Customer Needs and Requests [Failure to meet special needs customers, failure to meet customer preferences, failure to address admitted customer error, and failure to manage disruptive others] • Unprompted and Unsolicited Service Behaviors [Failure to pay attention to customer, failure due to out-of-the-ordinary service behavior, failure to be sensitive to cultural norms, gestalt evaluation failure, and failure to perform under adverse circumstances] • Failure to Address Problematic Customer Behavior [Failure to address drunken customers, failure to address verbal and physical abuse, failure to address customers breaking company laws or policies, and failure to address uncooperative customers] 	None	Critical Incident Technique (CIT) involving 774 incidents of dissatisfied service encounters from service industries	<ul style="list-style-type: none"> • Inductively derive a classification system of service encounter failures comprising four categories (i.e., failure of service delivery system, failure to meet customer needs and requests, unprompted and unsolicited service behaviors as well as failure to address problematic customer behavior), each with its own set of constituent sub-dimensions
Colgate and Norris (2001)	None	Offline Service Failure	Unidimensional Failure Construct	<ul style="list-style-type: none"> • Customer Exit • Customer Retention 	Face-to-face, in-depth interviews with 20 respondents	<ul style="list-style-type: none"> • In the absence of barriers of exit and customer loyalty, consumers are likely to exit when they are dissatisfied with recovery efforts on the part of the service provider upon encountering a service failure

Author(s)	Theoretical Frame of Reference	Scope of Application	Dimensions + [Sub-Dimensions]	Consequence(s)	Methodology	Findings/Proposition
DeWitt and Brady (2003)	None	Offline Service Failure	Unidimensional Failure Construct	<ul style="list-style-type: none"> • Post-failure Customer Satisfaction • Re-patronage Intentions • Word-of-mouth 	Four survey studies involving 291, 148, 40, and 126 respondents respectively	<ul style="list-style-type: none"> • Existing rapport between consumers and service providers culminates in increased post-failure customer satisfaction, increased re-patronage intentions and decreased negative word of mouth upon encountering service failure • Existing rapport between consumers and service providers does not lead to higher propensity for consumers to complain about service failure
Folkes (1984)	Attribution Theory	Product Failure	Unidimensional Failure Construct	<ul style="list-style-type: none"> • Expectancy Reactions • Marketplace Equity Reactions • Anger Reactions 	Two experimental studies involving 61 and 56 participants respectively	<ul style="list-style-type: none"> • Attribution of stability of product failure influences consumers' expectancy reactions in that consumers are likely to prefer refunds over exchanges when product failure is deemed to be stable • Attribution of locus of product failure influences consumers' marketplace equity reactions in that consumers are likely to feel deserving of not being charged and of receiving an apology when product failure is deemed to be caused by service providers • Attribution of controllability of product failure influences consumers' anger reactions in that consumers are likely to be angrier and vengeful when product failure is deemed to be controllable
Hess et al. (2007)	Stereotyping Theory	Offline Service Failure	Unidimensional Failure Construct – Interactional	Dissatisfaction	Two experimental studies involving 288 and 304 participants respectively	<ul style="list-style-type: none"> • Attribution of globality of service failure and dissatisfaction with the service provider could be lowered through excellent past service • Excellent past service increases dissatisfaction with the offending employee upon encountering service failure • Attribution of controllability influences consumers' generalization of service failure to the service provider in that consumers are likely to generalize a service failure to the service provider rather than the offending employee when the service failure is deemed to be controllable

Author(s)	Theoretical Frame of Reference	Scope of Application	Dimensions + [Sub-Dimensions]	Consequence(s)	Methodology	Findings/Proposition
Holloway and Beatty (2003)	None	Online Retail Failure	<ul style="list-style-type: none"> • Delivery Problems [Purchase arrived later than promised, purchase never delivered, wrong item delivered, wrong size product delivered, and purchase damaged during delivery] • Website Design Problems [Navigational problems at site, product poorly presented at site, insufficient information provided at site, products incorrectly listed at site as in stock, and incorrect information provided at site] • Customer Service Problems [Poor customer service support, poor communication with the company, unfair return policies, and unclear return policies] • Payment Problems [Credit card overcharged, website purchasing process confusing, difficulties experienced while paying, problems with product quality, and consumer dissatisfied with product quality] • Security Problems [Credit card fraud, misrepresented merchandise, and email address released to e-marketers] • Miscellaneous [Failure to address unintentional customer mistakes, retailer charged some customers more than others, and lack of personalized information at site] 	None	Interviews conducted with 30 individuals with prior experiences of e-commerce service failures before surveying another 295 online shoppers	<ul style="list-style-type: none"> • Inductively derive a classification system of online retail failures comprising seven categories (i.e., delivery problems, website design problems, customer service problems, payment problems, security problems, and miscellaneous), each with its own set of constituent sub-dimensions
Keaveney (1995)	None	Offline Service-Switching Failure	<ul style="list-style-type: none"> • Pricing [High price, price increase, unfair pricing, and deceptive pricing] • Inconvenience [Location/hours, wait for appointment, and wait for service] • Core Service Failure [Service mistakes, billing errors, and service catastrophe] • Service Encounter Failure [Uncaring, impolite, unresponsive, and unknowledgeable] • Response to Service Failure [Negative response, no response, and reluctant response] • Competition [Found better service] • Ethical Problems [Cheat, hard sell, unsafe, and conflict of interest] • Involuntary Switching [Customer moved and provider closed] 	Service Switching Behavior	Critical Incident Technique (CIT) involving 838 incidents of service-switching behaviors from service industries	Inductively derive a classification system of service-switching failures comprising eight categories (i.e., pricing, inconvenience, core service failure, service encounter failure, response to service failure, competition, ethical problems, and involuntary switching), each with its own set of constituent sub-dimensions

Author(s)	Theoretical Frame of Reference	Scope of Application	Dimensions + [Sub-Dimensions]	Consequence(s)	Methodology	Findings/Proposition
Kelley et al. (1993)	None	Offline Retail Failure	<ul style="list-style-type: none"> • Failure of Service Delivery System and/or Product [Policy failure, slow/unavailable service, system pricing failure, packaging errors, product defects, out-of-stock, hold disasters, alteration and repairs failure, and bad information] • Failure to Meet Customer Needs and Requests [Special order/request failure and failure to address admitted customer error] • Unprompted and Unsolicited Service Behaviors [Mischarging, wrongful accusation of customers, failure due to service-induced embarrassment, and attention failures] 	None	Critical Incident Technique (CIT) involving 661 incidents of service failures in general merchandise retailing	<ul style="list-style-type: none"> • Inductively derive a classification system of retail failures comprising three categories (i.e., failure of service delivery system and/or product, failure to meet customer needs and requests as well as unprompted, and unsolicited service behaviors), each with its own set of constituent sub-dimensions
Leong et al. (1997)	Attribution Theory	Offline Service Failure	Unidimensional Failure Construct	Dissatisfaction	Experimental study involving 108 participants	<ul style="list-style-type: none"> • Consumers are likely to be dissatisfied when they deem that the service provider exercise greater control over the cause of a service failure, and when the failure was recurring <i>vis-à-vis</i> a rare event • Consumers tend to attribute service failure to a lack of control on the part of the service provider when the failure occurred in a more pleasant environment
Maxham and Netemeyer (2002)	Attribution Theory, Expectation Disconfirmation Theory and Prospect Theory	Service Failure	Unidimensional Failure Construct	<ul style="list-style-type: none"> • Satisfaction • Repurchase Intent • Word of Mouth 	Repeated measures field survey study involving 1356 respondents	<ul style="list-style-type: none"> • Consumers are likely to rate satisfaction, repurchase intent, and word of mouth higher for satisfactory recovery upon encountering a service failure, but the effect diminishes after encountering more than one service failure • Consumers are likely to discount the effects of one service failure when the service provider has consistently provided satisfactory recovery • Consumer ratings of satisfaction, repurchase intent, and word of mouth tend to be influenced by the most recent recovery when inconsistent recovery efforts are practiced by the service provider for multiple service failures • Consumers are likely to rate the second service failure more severely than they rated the first • Consumers are likely to attribute multiple service failures to stable causes of the service provider • Consumers are likely to rate the satisfaction, repurchase intent, and word of mouth lower for satisfactory recovery when two similar service failures were to occur consecutively and in close time proximity

Author(s)	Theoretical Frame of Reference	Scope of Application	Dimensions + [Sub-Dimensions]	Consequence(s)	Methodology	Findings/Proposition
McColl-Kennedy and Sparks (2003)	Fairness Theory	Offline Service Failure	<ul style="list-style-type: none"> • Service [Unavailable service and unreasonably slow service] • Service Providers [Unprompted and unsolicited employee actions] • Outside the Service Provider's Control • Customer Related 	None	Five focus group studies involving 32 participants	<ul style="list-style-type: none"> • Service failure events trigger an emotional response in consumers, which in turn prompt them to commence an assessment of the situation, taking into account elements of procedural justice, interactional justice, and distributive justice, while engaging in counterfactual thinking and apportioning accountability
Smith et al. (1999)	Expectation Disconfirmation Theory and Justice Theory	Offline Service Failure	<ul style="list-style-type: none"> • Outcome Failure • Process Failure 	<ul style="list-style-type: none"> • Distributive Justice • Interactional Justice • Procedural Justice 	Two mixed experimental studies involving 375 and 602 participants respectively	<ul style="list-style-type: none"> • Consumers are likely to rate distributive justice, interactional justice, and procedural justice higher for satisfactory service encounters • Consumers are likely to rate distributive justice, interactional justice, and procedural justice higher when compensation, apology, and speedy response are offered respectively upon encountering service failure • Consumers are likely to rate distributive justice higher when compensation is offered upon encountering outcome failure • Consumers are likely to rate procedural justice higher when speedy response is offered upon encountering outcome failure • Consumers are likely to rate interactional justice higher when apology is offered upon encountering process failure • Consumers are likely to rate interactional justice higher when organization-initiated recovery is offered upon encountering process failure • Consumers are likely to rate distributive justice higher when compensation is offered upon encountering service failure of low magnitude • Consumers are likely to rate procedural justice higher when speedy response is offered upon encountering service failure of low magnitude • Consumers are likely to rate interactional justice higher when apology is offered upon encountering service failure of low magnitude • Consumers are likely to rate interactional justice higher when organization-initiated recovery is offered upon service failure of low magnitude

Appendix A References

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Appendix B

Inductive Categorization of E-Service Literature

Author(s)	Domain	Scope of Application	Dimensions + [Sub-Dimensions]	Information Attributes				Functional Attributes				System Attributes					
				ACC	COM	REL	TIM	NER	AID	ALE	ACQ	POP	AES	NAV	ADT	SPD	SEC
Agarwal and Venkatesh (2002)	Website Quality	Online Shopping and Content based Website	<ul style="list-style-type: none"> • Content [Relevance, media use, depth/breadth, and current information] • Ease of Use [Goals, structure, and feedback] • Promotion • Made-for-the-Medium [Community, personalization, and refinement] • Emotion [Challenge, plot, character strength, and pace] 		X	X	X	X					X	X	X	X	
Barnes and Vidgen (2001)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • Tangibles [Aesthetics and navigation] • Reliability [Reliability and competence] • Responsiveness [Responsiveness and access] • Assurance [Credibility and security] • Empathy [Communication and understanding the individual] 	X			X	X				X	X	X	X	X	X
Benlian et al. (2011)	Service Quality	Software-as-a-Service	<ul style="list-style-type: none"> • Rapport • Responsiveness • Reliability • Flexibility • Features • Security 	X		X	X	X			X	X			X	X	X
Cai and Jun (2003)	Service Quality	Online Shopping	<ul style="list-style-type: none"> • Website Design/Content • Trustworthiness • Prompt/Reliable Service • Communication 	X	X		X					X	X	X			
Cenfetelli et al. (2008)	Service Quality	B2C Online Shopping	<ul style="list-style-type: none"> • Requirements [Needing, specifying] • Acquisition [Sourcing, ordering, paying, obtaining, accepting] • Ownership [Training, monitoring, maintaining, upgrading] • Retirement [Accounting for, reselling/returning, replacing, evaluating] • Service Quality [Tangibles, reliability, responsiveness, assurance, empathy] 					X	X	X	X	X	X	X	X	X	
Childers et al. (2001)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • Navigation [Influence ease of use, and enjoyment] • Convenience [Influence usefulness, ease of use, and enjoyment] • Substitutability • Experience [Usefulness and enjoyment] 					X					X	X		X	

Author(s)	Domain	Scope of Application	Dimensions + [Sub-Dimensions]	Information Attributes				Functional Attributes				System Attributes					
				ACC	COM	REL	TIM	NER	AID	ALE	ACQ	POP	AES	NAV	ADT	SPD	SEC
Chiu et al. (2007)	Information Systems Quality	Web-Based Learning Systems	<ul style="list-style-type: none"> • Information Quality [Accuracy, completeness, ease of understanding, relevance] • System Quality [Availability, ease of use, reliability, response time] • Service Quality [Support] 	X	X	X							X	X	X	X	
Collier and Bienstock (2003, 2006)	Service Quality	Online Shopping	<ul style="list-style-type: none"> • Process Quality [Privacy, design, information accuracy, ease of use, functionality] • Outcome Quality [Order timeliness, order accuracy, order condition] • Recovery Quality [Interactive fairness, procedural fairness, outcome fairness] 	X	X		X					X	X	X	X		X
Connolly et al. (2010)	Service Quality	Electronic Government Services	<ul style="list-style-type: none"> • Efficiency • System Availability • Fulfilment • Privacy • Responsiveness • Compensation • Contact 				X	X			X	X	X	X		X	X
DeLone and McLean (2003)	Information Systems Quality	Information Systems	<ul style="list-style-type: none"> • System Quality [Adaptability, availability, reliability, response time, usability] • Information Quality [Completeness, ease of understanding, personalization, relevance, security] • Service Quality [Assurance, empathy, responsiveness] 		X	X						X	X	X	X	X	X
DeLone and McLean (2004)	Information Systems Quality	Online Shopping	<ul style="list-style-type: none"> • System Quality [Usability, availability, download time, ease of use] • Information Quality [Relevance, completeness] • Service Quality [Responsiveness] 		X	X							X	X	X	X	
Devaraj et al. (2002)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • Ease of Use • Usefulness • Asset Specificity • Uncertainty • Empathy • Reliability • Responsiveness • Assurance 	X			X	X		X		X	X	X	X	X	X
Douglas et al. (2003)	Website Quality	Websites of Legal Practices	<ul style="list-style-type: none"> • Presentation • Content • Accessibility • Reliability • Customer Support • Security 	X	X	X	X		X			X	X	X			X
Evanschitzky et al. (2004)	E-Satisfaction	Online Shopping	<ul style="list-style-type: none"> • Convenience • Product Offerings • Product Information • Site Design • Financial Security 	X	X				X	X			X	X		X	X

Author(s)	Domain	Scope of Application	Dimensions + [Sub-Dimensions]	Information Attributes				Functional Attributes				System Attributes						
				ACC	COM	REL	TIM	NER	AID	ALE	ACQ	POP	AES	NAV	ADT	SPD	SEC	
Fassnacht and Koese (2006)	Quality of Electronic Service (QES) – Degree to which an electronic service is able to efficiently and effectively fulfill relevant customer needs	All forms of Electronic Services	<ul style="list-style-type: none"> • Environment Quality [Graphic Quality, clarity of layout] • Delivery Quality [Attractiveness of selection, information quality, ease of use, technical quality] • Outcome Quality [Reliability, functional benefit, emotional benefit] 	X	X	X	X	X	X			X		X	X		X	X
Gefen (2002)	Service Quality	Online Shopping	<ul style="list-style-type: none"> • Tangibles • Reliability, Responsiveness, Assurance • Empathy 									X	X	X		X		X
Gounaris and Dimitriadis (2003)	Service Quality	Portal Sites	<ul style="list-style-type: none"> • Customer Care and Risk Reduction Benefit • Information Benefit • Interaction Facilitation Benefit 					X				X	X					X
Gummerus et al. (2004)	Service Quality	Content-based Websites	<ul style="list-style-type: none"> • User Interface • Responsiveness • Need Fulfillment • Security 					X						X	X			X
Janda et al. (2002)	Internet Retail Service Quality (IRSQ)	Online Shopping	<ul style="list-style-type: none"> • Performance • Access • Security • Sensation • Information 	X								X		X				X
Jiang et al. (2002)	Information Systems Quality	Information Systems	<ul style="list-style-type: none"> • Reliability • Responsiveness • Assurance • Empathy 									X	X		X			X
Kettinger and Lee (1997)	Service Quality	Information Systems	<ul style="list-style-type: none"> • Tangibles • Reliability • Responsiveness • Assurance • Empathy 	X		X	X	X				X					X	X
Kettinger and Lee (2005)	Zone of Tolerance Service Quality	Information Systems	<ul style="list-style-type: none"> • Reliability • Responsiveness • Rapport • Tangibles 	X	X	X	X	X				X		X	X	X	X	X
Kim and Lim (2001)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • Entertainment • Speed • Information Quality • Reliability 	X	X	X	X						X				X	
Kim and Stoel (2004)	Website Quality	Online Shopping for Apparel	<ul style="list-style-type: none"> • Web Appearance • Entertainment • Information Fit-to-Task • Transaction Capability • Response Time • Trust 			X						X		X		X	X	X

Author(s)	Domain	Scope of Application	Dimensions + [Sub-Dimensions]	Information Attributes				Functional Attributes				System Attributes						
				ACC	COM	REL	TIM	NER	AID	ALE	ACQ	POP	AES	NAV	ADT	SPD	SEC	
Kim et al. (2004)	Service and Website Quality	Online Shopping	<ul style="list-style-type: none"> • Service Quality [Reliability, responsiveness, assurance, and empathy] • Website Quality [Information quality and system quality] 	X				X	X		X	X	X	X	X		X	
Kim et al. (2006)	Service Quality	Online Shopping for Apparel	<ul style="list-style-type: none"> • Efficiency • Fulfillment • System Availability • Privacy • Responsiveness • Contact • Personalization • Information • Graphic Styles 	X				X			X	X	X	X	X	X	X	
Loiacono et al. (2002)	Website Quality [WebQual]	All manners of Websites but with no explicit reference to service delivery	<ul style="list-style-type: none"> • Usefulness [Information fit-to-task, interactivity, trust, response time] • Ease of Use [Ease of understanding, intuitive operations] • Entertainment [Visual appeal, innovativeness, flow] • Complementary Relationship [Consistent image, online completeness, better than alternative channels] 		X	X		X	X	X		X	X			X	X	
Loiacono et al. (2007)	Website Quality	Online Retail	<ul style="list-style-type: none"> • Information Fit-to-Task • Tailored Information • Trust • Response Time • Ease of Understanding • Intuitive Operations • Visual Appeal • Innovativeness • Emotional Appeal • Consistent Image • On-Line Completeness • Relative Advantage 	X	X	X		X			X		X	X	X	X	X	
Luo et al. (2012)	Website Quality	Online Retail	<ul style="list-style-type: none"> • Customer Support • Order Tracking • On-time Delivery • Product Met Expectation • Product Availability • Ease of Finding Product • Site Design • Clarity of Product Info • Product Selection 	X	X	X	X	X	X		X	X	X	X				
McKinney et al. (2002)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • IQ Expectations [Relevance, understandability, reliability, adequacy, scope, usefulness] • SQ Expectations [Access, usability, entertainment, hyperlinks, navigation, interactivity] 	X	X	X	X				X		X	X				
Meliàn-Alzola and Padron-Robaina (2006)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • Tangibility [Navigation, signposting, tools, and explanation] 					X	X		X			X				

Author(s)	Domain	Scope of Application	Dimensions + [Sub-Dimensions]	Information Attributes				Functional Attributes				System Attributes				
				ACC	COM	REL	TIM	NER	AID	ALE	ACQ	POP	AES	NAV	ADT	SPD
Nath and Singh (2010)	Website Quality	Web Service Electronic Marketplace	<ul style="list-style-type: none"> • Availability • Accessibility • Throughput • Latency • Environment Quality • Information Quality 	X	X		X					X	X	X	X	
O'Neill et al. (2001)	Service Quality	Online Service Websites	<ul style="list-style-type: none"> • Contact [Assurance, empathy + (reliability)] • Responsiveness • Reliability • Tangibles 									X	X	X	X	X
Oh and Teo (2010)	Service Quality	Online Retail	<ul style="list-style-type: none"> • Information Quality • Service Convenience 	X	X			X				X	X	X		X
Palmer (2002)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • Download Delay [Initial access speed, speed of display between pages] • Navigation/Organization [Arrangement, sequence, links, layout] • Interactivity [Customization, interactivity] • Responsiveness [Feedback, FAQ] • Information/Content [Amount of information, variety of information, word count, content quality] 	X	X			X				X	X	X	X	X
Parasuraman et al. (2005)	Service Quality [E-S-QUAL]	Online Shopping	<ul style="list-style-type: none"> • Efficiency • System Availability • Fulfillment • Privacy 									X		X		X
Petter et al. (2013)	Information Systems Quality	Information Systems	<ul style="list-style-type: none"> • System Quality [Ease of use, system flexibility, system reliability, ease of learning, intuitiveness, sophistication, flexibility, response time] • Information Quality [Relevance, understandability, accuracy, conciseness, completeness, currency, timeliness, usability] • Service Quality [Responsiveness, accuracy, reliability, technical competence, empathy of the personnel staff] 	X	X	X	X						X	X	X	X
Pitt et al. (1995)	Service Quality	Information Systems	<ul style="list-style-type: none"> • Tangibles • Reliability • Responsiveness • Assurance • Empathy 	X		X	X	X				X				X
Pitt et al. (1997)	Service Quality	Information Systems	<ul style="list-style-type: none"> • Tangibles • Reliability • Responsiveness • Assurance • Empathy 	X		X	X	X				X				X
Ribbink et al. (2004)	Service Quality	Online Shopping	<ul style="list-style-type: none"> • Ease of Use • Website Design • Customization • Responsiveness • Assurance 					X					X	X	X	X

Author(s)	Domain	Scope of Application	Dimensions + [Sub-Dimensions]	Information Attributes				Functional Attributes				System Attributes						
				ACC	COM	REL	TIM	NER	AID	ALE	ACQ	POP	AES	NAV	ADT	SPD	SEC	
Rosen and Purinton (2004)	Website Quality [Website Preference Scale (WSPS)]	Online Shopping	<ul style="list-style-type: none"> • Coherence • Complexity • Legibility • Mystery 							X			X	X				
Santos (2003)	Service Quality	Online Shopping	<ul style="list-style-type: none"> • Incubative Dimension [Likely to increase website's daily hit rates; ease of use, appearance, linkage, structure and layout, and content] • Active Dimension [Likely to increase customer retention and positive word of mouth referral; reliability, efficiency, support, communications, security, and incentives] 		X			X					X	X	X		X	X
Schubert (2002)	Website Quality [Extended Web Assessment Method (EWAN)]	Online Shopping	<ul style="list-style-type: none"> • Ease of Use Criteria • Usefulness Criteria • Trust Criteria 										X					X
Semeijn et al. (2005)	Service Quality	Online Shopping	<ul style="list-style-type: none"> • Assurance • Navigation • E-Scape • Accuracy • Responsiveness • Customization 	X				X							X	X		X
Shchiglik and Barnes (2004)	Website Quality [Perceived Airline Website Quality Instrument (PAWQI)]	Online Shopping	<ul style="list-style-type: none"> • Domain Specific Dimension • Web Information Quality • Web Interaction Quality • Web Design Quality 	X	X	X			X			X	X	X	X			
Shim et al. (2002)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • Ease of Contact • Customer Service Information • Ease of Access of Product Information 	X					X	X			X	X				
Singh (2002)	E-Services	Online Service Websites	<ul style="list-style-type: none"> • E-Search • E-Response • E-Transaction and E-Payment • E-Assurance and Trust • E-Help and E-Technologies 						X			X	X	X				X
Srinivasan et al. (2002)	E-Service Loyalty	Online Shopping	<ul style="list-style-type: none"> • Customization • Contact Interactivity • Care • Community • Convenience • Cultivation • Choice • Character of E-Retailer 					X		X			X	X		X		X

Author(s)	Domain	Scope of Application	Dimensions + [Sub-Dimensions]	Information Attributes				Functional Attributes				System Attributes						
				ACC	COM	REL	TIM	NER	AID	ALE	ACQ	POP	AES	NAV	ADT	SPD	SEC	
Surjadjaja et al. (2003)	Service Quality	Online Service Websites	<ul style="list-style-type: none"> • Service Marketing [Trusted services, internal communication, external communication, price, and return process] • Service Delivery [Real time assistance by CSR, fulfillment, and availability] • Service Design [Responsiveness, site effectiveness & functionality, up to date information, supply chain information, system integration, personalization, customization, navigability, security, interactivity, service recovery] 	X			X	X				X	X	X	X	X	X	
Tan et al. (2013)	Service Quality	Electronic Government Services	<ul style="list-style-type: none"> • Requirements [Needing, customizing] • Acquisition [Sourcing, trying, ordering, paying, tracking, accepting, authorizing] • Ownership [Training, monitoring, upgrading, scheduling, delegating, negotiating, evaluating] • Accessibility • Navigability • Interactivity • Interoperability • Adaptability • Security 						X	X	X	X	X	X	X	X	X	
Tate and Evermann (2010)	Service Quality	Information Systems	<ul style="list-style-type: none"> • Tangibles • Reliability • Responsiveness • Assurance • Empathy 	X		X	X	X				X	X	X		X	X	X
Teo et al. (2008)	Website Quality	Electronic Government Services	<ul style="list-style-type: none"> • Information Quality • System Quality • Service Quality 	X	X	X	X	X					X	X			X	
Van Dyke et al. (1997)	Service Quality	Information Systems	<ul style="list-style-type: none"> • Tangibles • Reliability • Responsiveness • Assurance • Empathy 	X		X	X	X				X					X	X
Wang (2008)	Website Quality	Online Shopping	<ul style="list-style-type: none"> • Information Quality • System Quality • Service Quality 	X	X	X	X	X					X	X	X			X
Watson et al. (1998)	Service Quality	Information Systems	<ul style="list-style-type: none"> • Tangibles • Reliability • Responsiveness • Assurance 	X		X	X	X				X					X	X
Wolfenbarger and Gilly (2003)	Service Quality [eTailQ]	Online Shopping	<ul style="list-style-type: none"> • Website Design • Fulfillment/Reliability • Security/Privacy • Customer Service 									X	X	X	X			X

Author(s)	Domain	Scope of Application	Dimensions + [Sub-Dimensions]	Information Attributes				Functional Attributes					System Attributes					
				ACC	COM	REL	TIM	NER	AID	ALE	ACQ	POP	AES	NAV	ADT	SPD	SEC	
Xu et al. (2013)	Service Quality	Electronic Services	<ul style="list-style-type: none"> • Information Quality [Completeness, accuracy, format, currency] • System Quality [Reliability, flexibility, accessibility, timeliness] • Service Quality [Tangibles, responsiveness, empathy, service reliability, assurance] 	X	X	X	X							X	X	X	X	X
Zeithaml (2002) Zeithaml et al. (2002)	Service Quality [e-SQ]	Online Shopping	<ul style="list-style-type: none"> • Information Availability and Content • Ease of Use or Usability • Privacy/Security • Graphic Style • Fulfillment 		X		X					X		X	X			X
Zhang et al. (2001)	Website Quality	News Content-based Website	<ul style="list-style-type: none"> • Basic [Features the support expected needs of users] • Performance [Features that enable the website to stay current to users' expectations] • Exciting [Features that are not expected but have the ability to excite and delight users] 			X	X	X	X			X						

ACC – Accuracy; COM – Completeness; REL – Relevance; TIM – Timely; NER – Needs Recognition; AID – Alternatives Identification; ALE – Alternatives Evaluation; ACQ – Acquisition; POP – Post-Purchase; AES – Accessibility; NAV – Navigability; ADT – Adaptability; SPD – Speed; SEC – Security

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Appendix C

Questionnaire Development and Survey Protocol

Because respondents having prior experiences with e-commerce service failures are likely to be Internet-savvy, we decided to elicit failure incidents via an online survey (Boyer et al. 2002; Stanton and Rogelberg 2001). A qualitative electronic survey questionnaire was carefully crafted for data collection. The questionnaire began with a statement on the purpose of the study and the characteristics of respondents we were recruiting.

*This research is an online questionnaire to aid us in understanding the different types of **negative** experiences with e-services (i.e., **online service failures**) that confront consumers when performing online transactions. Online service failures are problems you experienced with an e-commerce website that prevent you from achieving your purpose for visiting the website in the first place. A more detailed description of what constitutes online service failures will be provided on the next page.*

To participate in this study, you must have, at the very least, conducted online transactions via websites and experienced online service failures before. The results from this questionnaire will be utilized in subsequent tests to understand how various technological tools can alleviate these negative service experiences and improve upon the design of websites for consumers.

Study procedures were also outlined to give potential respondents an idea of what to expect from the questionnaire.

If you agree to participate in this study, you will first be asked several questions to determine your level of experience with online transactions and online service failures. You will then be presented with a series of open-ended questions relating to your experiences with online service failures when transacting via e-commerce websites.

*You will be expected to recall **THREE** separate instances of online service failures in answering the open-ended questions. For each open-ended question, a text box will be provided for you to input comments and opinions pertaining to certain aspects of your online website experiences. Please be as detailed as possible in describing these experiences.*

We anticipate that completing these tasks will require about 25 to 30 minutes of your time.

Respondents who consented to participating in the survey were presented with our definition of e-commerce service failure and some common examples. This was done not only to familiarize respondents with the phenomenon of interest, but also to ensure proper alignment between conceptualization and operationalization. Additionally, the choice of words like *necessary* and *essential* aid in anchoring respondents' thoughts on failure incidents that truly betray their expectations of minimum service standards (see Bitner et al. 1990).

*This survey is about your experiences with **online service failures** that you, the customer, may have encountered on e-commerce websites. An online service failure, in this survey questionnaire, refers to a **negative** experience that occurs whenever the website is incapable of offering the **necessary** technological capabilities **essential** for you to accomplish your transactional activities and/or objectives.*

Common examples include

- Search function fails when you are trying to locate a product
- Credit card rejected when you are paying for a transaction
- No confirmation of purchase after payment
- Takes an unreasonably long time to process your requests
- Online customer service does not respond to your query
- Charging you for products/services for which you did not request
- Payment process fails during submission of your personal information

Following which, respondents were requested to indicate their frequency of performing online transactions.

How frequently do you perform online transaction(s)?

- At least once daily*
- At least once per week*
- At least once per 2 weeks*
- At least once per month*
- At least once per 3 months*
- At least once per 6 months*
- At least once per year*
- Less than once per year*

Respondents were then asked to specify whether they have prior experience with e-commerce service failure. This single filtering question eliminated respondents with no prior experience of e-commerce service failure.

Have you experienced an online service failure?

- Yes*
- No*

To verify respondents' prior experience with e-commerce service failures, they were prompted to indicate the time that has elapsed since the occurrence of the failure.

When did the online service failure occur?

- Less than 1 month ago*
- Less than 3 months ago*
- Less than 6 months ago*
- Less than 1 year ago*
- More than 1 year ago*

Next, respondents were instructed to either choose from a variety of e-merchants on whose site a failure has occurred or provide a description of the website on which they have encountered the e-commerce service failure. In line with Keaveney's (1995) advice, such a question offers a certain degree of structure to the types of website for which e-commerce service failures may occur, without necessarily limiting respondents to the prespecified list.

*Which kind of website were you visiting when the online service failure occur? (Please pick or specify **ONLY ONE**)*

- Online book store*
- Online clothing store*
- Online electronics store*
- Online music/video store*
- Online game store*
- Online banking*
- Online travel*
- Online ticketing*
- Online news*
- Online auction*
- Other, please specify _____*

Respondents were then questioned on the purpose of their visit to the e-commerce website.

Please describe in detail your purpose for visiting the website on which you have experienced the online service failure

Stating the purpose of the visit is essential to discern respondents' transactional objectives because we do not presume that consumers transact online for the sole purpose of maximizing utility. By getting respondents to state the purpose of their visit to the e-commerce website, we gleaned valuable background information on the situational context within which the e-commerce service failure occurred.

The subsequent question touched on the actual phenomenon of interest by requesting respondents to elaborate on the e-commerce service failure experienced, with additional probes for details. Because our theory development is confined to transactional failures in order to generate prescriptions for web interface design, the probes were deliberately phrased to emphasize the recollection of problems related to web-enabled features on e-commerce websites.

Please describe in detail the online transaction you were conducting when you experienced the online service failure as well as the events leading to this failure. You should elaborate on the following:

1. *What you had managed to accomplish on the website prior to the occurrence of the online service failure*
2. *Details of the online service failure experienced [Please be specific on the website feature(s) involved and why you perceive these feature(s) to have failed]*

After describing the e-commerce service failure, respondents were further prompted to reveal any negative consequences they may have suffered due to the failure incident.

Please describe in detail the negative consequences you have suffered as a result of the online service failure you have experienced

As respondents may have been exposed to multiple episodes of e-commerce service failures, the same format of questioning was repeated twice to stimulate each respondent to recall a minimum of one and a maximum of three critical incidents. A diagrammatic flow of the online survey questionnaire is depicted in Figure C1.

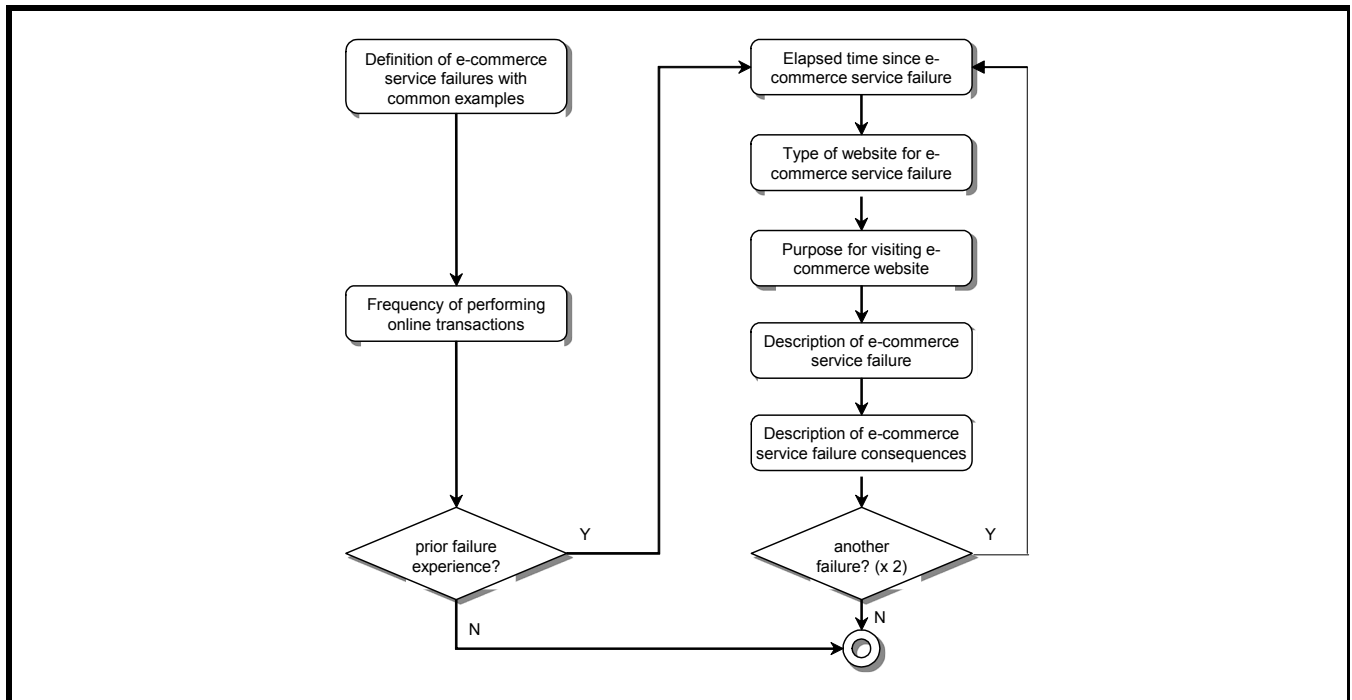


Figure C1. Diagrammatic Flow of Online Survey Questionnaire

In answering the questionnaire, it should be noted that respondents were never told to analyze why the failure incident(s) occurred. Rather, they were expected to merely narrate events that had transpired—something people do quite effortlessly (Bitner et al. 1990; Nyquist and Booms 1987).

Appendix C References

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Appendix D

Content Analytical Procedures for E-Commerce Service Failure Incidents

To begin, two judges were recruited to refine the wording of failure dimensions in our classification system. The two judges were postgraduate students pursuing a master's degree at a large North American university and had taken courses on topics related to e-business. We randomly extracted 77 (or ~20%) incidents from the sample and assigned to the two judges the task of sorting them into our classification system of e-commerce service failures. The entire sorting exercise was semi-structured. Judges were instructed to place each incident into one of the preexisting failure dimensions or to create an extra dimension if they were unsure of its placement. Because each incident contains descriptive accounts on the purpose of the online transaction as well as events that transpired before and during the occurrence of an e-commerce service failure, judges were coached on how to pinpoint the predominant cause of the failure. For instance, if inaccurate, incomplete, irrelevant, or untimely ordering information was displayed for an impending purchase, judges were told to classify the incident under one of the four constituent dimensions of information failure accordingly. Conversely, if orders could not be submitted for an impending purchase, we educated the judges on why the incident should be seen as an occurrence of acquisition functional failure. Finally, if it takes a long time for the order to be processed, judges were advised to view the incident as delayed system failure.

Upon the completion of the sorting exercise, the judges were consulted on the phrasing of the failure dimensions and modifications were made whenever necessary. Then, the judges were again presented with the same 77 incidents to be sorted into the refined failure dimensions. Two types of reliabilities were computed: (1) intra-judge (i.e., extent to which a single judge assigns an identical incident to the same failure dimension in both classification exercises) and (2) inter-judge (i.e., extent to which different judges assign an identical incident to the same failure dimension). This second sorting exercise of the 77 incidents yielded intra- and inter-reliabilities exceeding the recommended threshold of 0.70 (Boyatzis 1998), signifying both consistency in judges' interpretation of the failure dimensions and congruency between judges with regard to the classification of e-commerce service failure incidents.

Next, we split the remaining 297 (374-77) accounts of e-commerce service failures into subsamples of 77 and 220 accounts respectively. We followed the same sorting protocol twice more to classify these subsamples according to our classification system. Content analysis was divided into a series of steps to ensure that newly created dimension(s), if any, were identified progressively, thereby reducing fatigue on the part of the judges (see Figure D1).

Appendix D References

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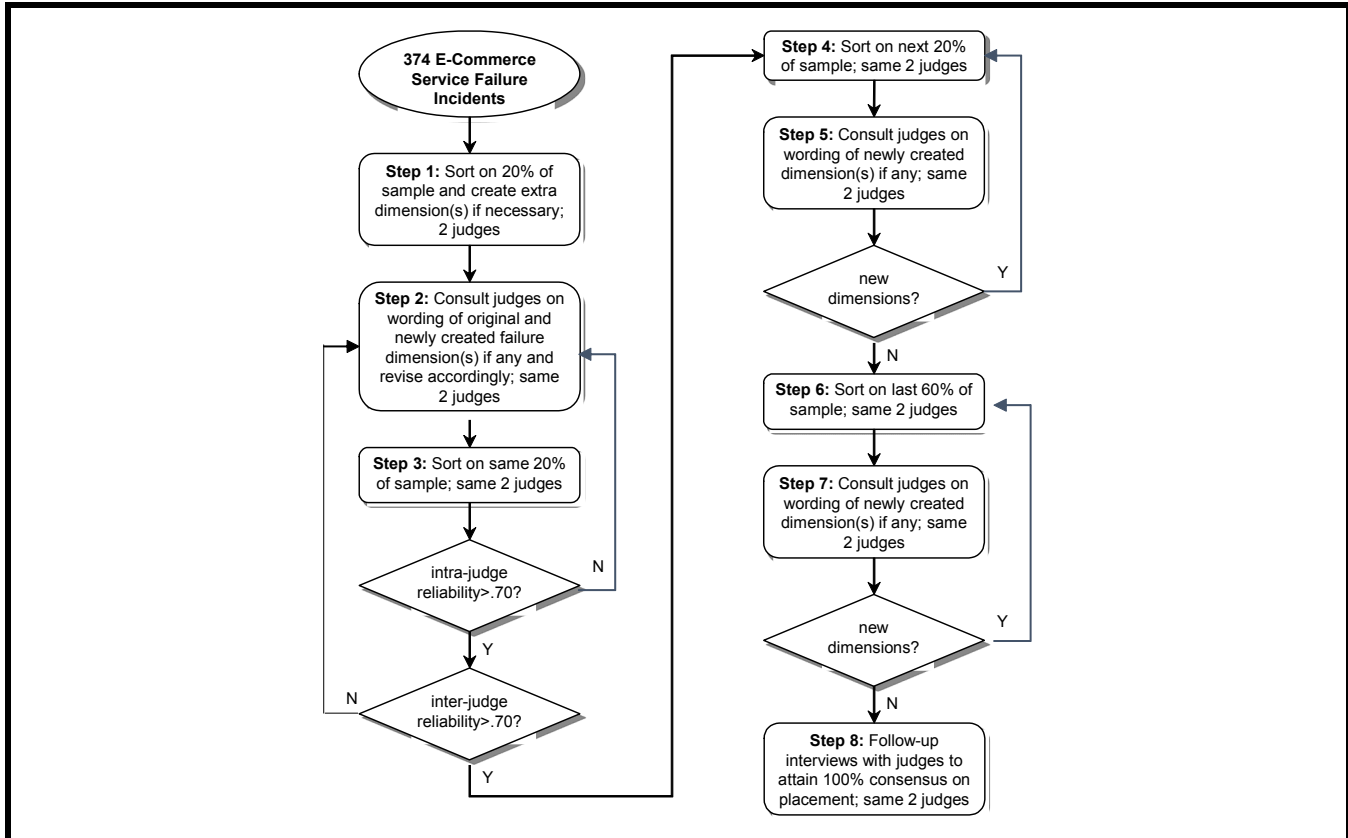


Figure D1. Diagrammatic Flow of Content Analytical Procedures for E-Commerce Service Failure Incidents

Appendix E

Detailed Breakdown of E-Commerce Service Failure Incidents

Construct	Definition (Event in which...)	Incident Coding		
		No. Unique Incidents* [%]	No. Common Incidents† [%]	Inter-Judge Reliability‡
Information Failures				
Inaccurate Information	Information provided on an e-commerce website contains errors that misinform consumers in making transactional decisions	37 [9.89%]	28 [7.49%]	0.76
Incomplete Information	Information provided on an e-commerce website is insufficient to aid consumers in making transactional decisions	27 [7.22%]	20 [5.35%]	0.74
Irrelevant Information	Information provided on an e-commerce website cannot be utilized by consumers in making transactional decisions	11 [2.94%]	9 [2.41%]	0.82
Untimely Information	Information provided on an e-commerce website is not updated to support consumers in making transactional decisions	25 [6.68%]	20 [5.35%]	0.80
Functional Failures				
Needs Recognition Failure	Functionalities of an e-commerce website are incapable of assisting consumers to formulate their needs and preferences for products and/or services	3 [0.80%]	3 [0.80%]	1.00
Alternatives Identification Failure	Functionalities of an e-commerce website are incapable of assisting consumers to gather information on and source for interested products and/or services	8 [2.14%]	8 [2.14%]	1.00
Alternatives Evaluation Failure	Functionalities of an e-commerce website are incapable of assisting consumers to draw comparisons among interested products and/or services	1 [0.27%]	1 [0.27%]	1.00
Acquisition Failure	Functionalities of an e-commerce website are incapable of assisting consumers to place orders for desired products and/or services	63 [16.84%]	52 [13.90%]	0.83
Post-Purchase Failure	Functionalities of an e-commerce website are incapable of assisting consumers to: (1) obtain purchased products and/or services; (2) solicit advice on ways to maximize the utility of purchased products and/or services, and; (3) dispose of unwanted products and/or services.	26 [6.95%]	21 [5.61%]	0.81
System Failures				
Inaccessibility	Services of an e-commerce website are not accessible	73 [19.52%]	64 [17.11%]	0.88
Non-Adaptability	Services of an e-commerce website are unable to accommodate diverse content and usage patterns	18 [4.81%]	17 [4.55%]	0.94
Non-Navigability	Services of an e-commerce website are difficult to navigate	28 [7.49%]	21 [5.61%]	0.75
Delay	Services of an e-commerce website are inordinately slow in access	33 [8.82%]	30 [8.02%]	0.91
Insecurity	Services of an e-commerce website are not safeguarded against unsanctioned access by unauthorized individuals	7 [1.87%]	7 [1.87%]	1.00
Nontechnological				
Mischarging	E-commerce website charges the consumer for unauthorized or unfulfilled purchases	9 [2.41%]	5 [1.34%]	0.56
Product Delivery Problems	Product(s) purchased on an e-commerce website is not delivered or damaged during delivery	31 [8.29%]	15 [4.01%]	0.48
Unresponsive to Customer Enquiries	Responses to online customer enquiries are not forthcoming	18 [4.81%]	9 [2.41%]	0.50

* Total number of unique incidents assigned to each category by both judges

† Total number of identical incidents assigned to each category by both judges

‡ Number of common incidents divided by number of unique incidents

Appendix F

Content Analytical Procedures for E-Commerce Service Failure Consequences

Like the classification of e-commerce service failure incidents, the ultimate aim of this content analysis is to unambiguously classify each account of negative consequence under one of the three expectation disconfirmation constructs (i.e., *disconfirmed outcome expectancy*, *disconfirmed process expectancy*, and *disconfirmed cost expectancy*). To prevent priming effects from contaminating the classification results, two new judges with similar qualification were recruited for sorting e-commerce service failure consequences. We randomly extracted 77 (or ~20%) accounts of negative consequences from the sample and assigned them to the two judges to be sorted. To clarify the failure context within which the negative consequences manifest, judges were not only presented with accounts of these negative consequences, but they were also given descriptions of corresponding e-commerce service failure incidents. Judges were instructed to place each account into one of the three disconfirmation constructs or to create an extra variable if they were unsure of its placement.

Once the sorting was completed, the judges were consulted on the phrasing of the disconfirmation constructs, with modifications made whenever necessary. Based on the revised wording of the disconfirmation constructs, the judges were again allocated the same 77 accounts to be sorted. This second sorting exercise yielded intra- and inter-reliabilities exceeding 0.70. The remaining 297 accounts of negative consequences were further divided into subsamples of 77 and 220 accounts respectively and identical sorting procedures were carried out twice more to classify these subsamples (see Figure F1).

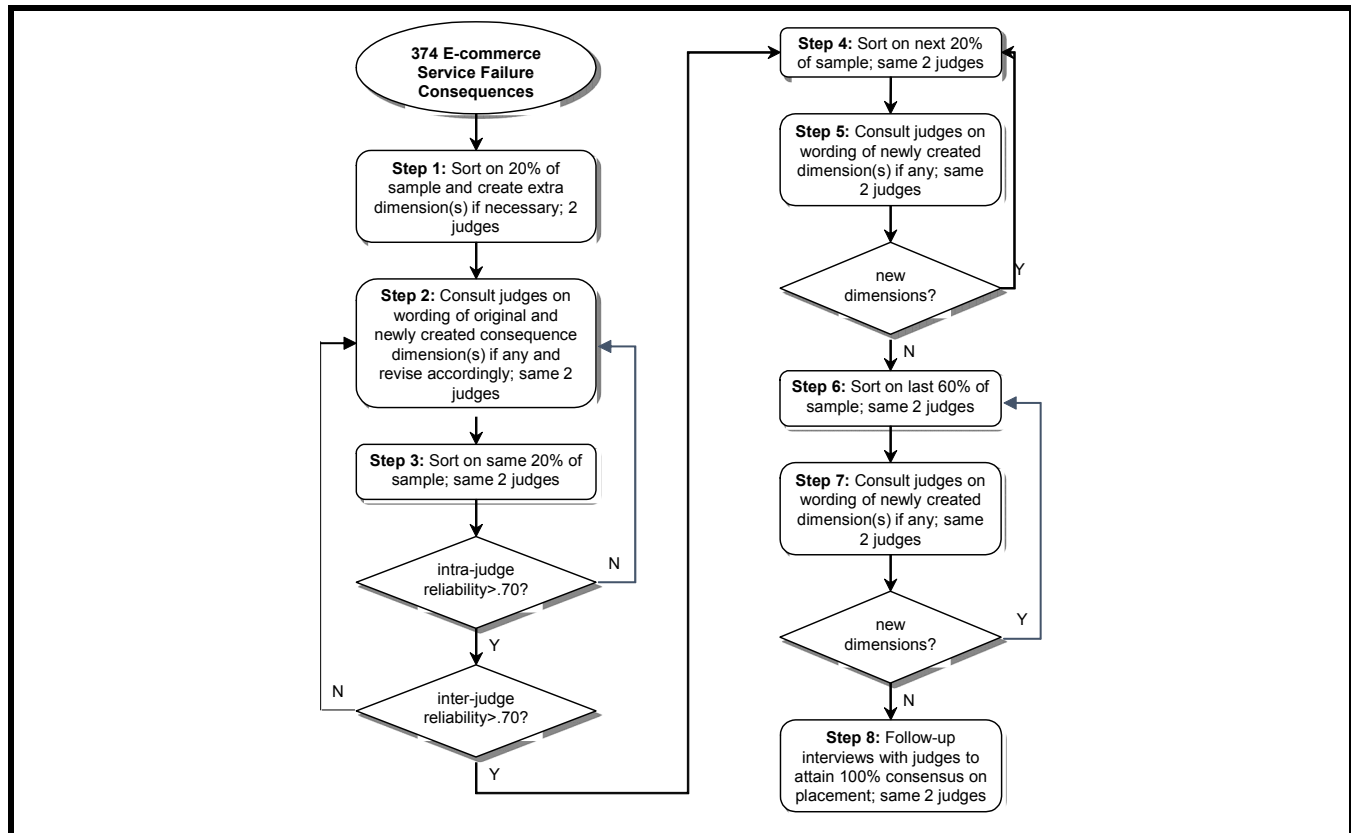


Figure F1. Diagrammatic Flow of Content Analytical Procedures for E-Commerce Service Failure Consequences

Appendix G

Classification of Exemplary E-Commerce Service Failure Consequences

Negative Consequence E-Service Failure Dimension	Disconfirmed Outcome Expectancy	Disconfirmed Process Expectancy	Disconfirmed Cost Expectancy	No Disconfirmed Expectancy
Information Failures				
Inaccurate Information	<p>[Failure] I was attempting to purchase a (fairly rare) music CD on the website. I located the item I wanted and was able to put it in my "shopping cart." The failure was that when I attempted to actually complete the transaction, I was notified at that point that the item was not in stock, so I was not able to buy it.</p> <p>[Consequence] I spent a small amount of time searching for and ordering the CD, and I was unable to purchase what I wanted.</p>	<p>[Failure] I clicked on the sweepstakes website and got the code. I then went to the rewards program to enter the code. I was told I had to register for the rewards program which I did. Then, I got a confirmation e-mail I had to click on to verify my registration, which I did. When I was finally allowed to enter my code, I was told it was NOT a valid code!</p> <p>[Consequence] I contacted the website hosting the sweeps. They said the code was valid and I must have entered it wrongly. I wrote back again and was told the sweeps was over and that there was nothing they could do about it!</p>	<p>[Failure] I was trying to find some good looking and stylish clothes on the website. However, what I have seen online is not what came in the mail; the style and color are different.</p> <p>[Consequence] I will just go to the store the next time because it wastes my time doing it online.</p>	N/A
Incomplete Information	<p>[Failure] A few times, I was looking to buy some hair products online. After spending a lot of time adding products to shopping carts and entering my contact information, I was informed that the companies did not mail orders to places outside of US. This was never made known to me before I initiated the transaction.</p> <p>[Consequence] The negative consequence was that I was not able to obtain the items that I wanted from the websites.</p>	<p>[Failure] I was trying to find out where the funds were going for a refund that I was getting. Online it said "refund issued," but not to what account.</p> <p>[Consequence] I quit using the services of that company because it was just too difficult to reach them. It was as if they had the website set up like that on purpose.</p>	<p>[Failure] I wanted to change the [programming] of my cell phone online, only to discover I had to call again to program the phone and waste another two hours on hold. The programming instructions could easily be put online to be more accessible.</p> <p>[Consequence] Having to contact customer service and waiting for untold amounts of time detracts from my employer and family.</p>	N/A
Irrelevant Information	<p>[Failure] When I call up the customer service to reset my [air miles] account, I was told to go online to do so. I tried it online and was faced with the same problem that can only be resolved by calling customer service. I finally gave up.</p> <p>[Consequence] I lost my air</p>	<p>[Failure] I sent an email to the website to confirm if my purchase was received. I received an email response from the Helpdesk that was of no help. They gave me a list of things to check that had no bearings on what had happened.</p> <p>[Consequence] It is very</p>	<p>[Failure] I have not been on the website before. I was trying to purchase the gift card, but couldn't find any option for Canadian purchasers and I don't know if Canadians can purchase them. I got frustrated and gave up!</p> <p>[Consequence] Wasted time</p>	N/A

<div style="text-align: center;">Negative Consequence</div> <div style="text-align: center;">E-Service Failure Dimension</div>	<div style="text-align: center;">Disconfirmed Outcome Expectancy</div>	<div style="text-align: center;">Disconfirmed Process Expectancy</div>	<div style="text-align: center;">Disconfirmed Cost Expectancy</div>	<div style="text-align: center;">No Disconfirmed Expectancy</div>
	<p>miles for that trip and since then I have given up on trying to travel by SIA.</p>	<p>frustrating, as I first try to understand what has happened and retrace the whole process. Most of the staff on the Helpdesk are of little use. What frustrates me is that they don't provide any valuable solutions. They just pass the buck. I have worked on Helpdesk before, so I understand the process.</p>	<p>on the site while at work and gave up. Left confused and frustrated.</p>	
<p>Untimely Information</p>	<p>[Failure] Only when I saw that the payment did not go through to my credit card statement, I became aware that the transaction was never recorded on their end.</p> <p>[Consequence] I had to repeat the whole transaction all over again.</p>	<p>[Failure] Transferred money from my chequing account to make a payment for a utility service. But, the chequing account balance did not reflect promptly the updated balance to indicate that the money has been debited.</p> <p>[Consequence] Confusion and doubt whether the bill has been settled before the due date.</p>	<p>[Failure] I wished to sign in after receiving the recovered user name and password. Having to re-register and being unable to do so when they claim I am already registered. The website will still not recognize and allow me to sign in after all that I have done.</p> <p>[Consequence] Waste of time and frustration.</p>	<p style="text-align: center;">N/A</p>
<p>Functional Failures</p>				
<p>Needs Recognition Failure</p>	<p style="text-align: center;">N/A</p>	<p>[Failure] Looking to buy something online and searching for the item I wanted, I can't find it because the website cannot help me to pinpoint the item I am looking for.</p> <p>[Consequence] I have to go through the whole product catalogue and check each item.</p>	<p style="text-align: center;">N/A</p>	<p style="text-align: center;">N/A</p>
<p>Alternatives Identification Failure</p>	<p>[Failure] There was no clear information as to which of the video cards would be appropriate. Since the site brands itself as being "user-friendly," I expected that I would be able to find more complete information there than was available. Since they had no on-line means to check what models of video card would work with what kinds of hardware, I view it as a service failure.</p> <p>[Consequence] When I eventually did get a new video card (which was compatible), it's possible I purchased a more expensive model than necessary to meet my needs.</p>	<p>[Failure] The online search function for the store did not work. I know the store carried the product I wanted but I kept getting no search results.</p> <p>[Consequence] I gave up searching for the product online.</p>	<p>[Failure] I visited Amazon.com to search for a DVD I wanted to purchase. I have often searched for and found things on Amazon.com successfully, but because this DVD turned out to be out of print, it made it harder to find at a decent price. The only DVDs for sale I could find were over \$50, which I was not willing to spend. I couldn't imagine that out of all the sellers on Amazon, there wasn't a used DVD for cheaper. After shuffling and searching around for a very long time, I was able to dig deeper than the first search results and find a DVD for \$30. I think the search function is poorly designed. I should have been able to find</p>	<p style="text-align: center;">N/A</p>

<p style="text-align: center;">Negative Consequence</p> <p>E-Service Failure Dimension</p>	<p>Disconfirmed Outcome Expectancy</p>	<p>Disconfirmed Process Expectancy</p>	<p>Disconfirmed Cost Expectancy</p>	<p>No Disconfirmed Expectancy</p>
			<p>the cheaper DVD without taking such a long time to search.</p> <p>[Consequence] Takes too long to search.</p>	
<p>Alternatives Evaluation Failure</p>	<p style="text-align: center;">N/A</p>	<p>[Failure] I recently tried to order several items from a retail store via their website, www.kohls.com. After choosing several products and entering the desired quantities, I decided to visit Overstock.com to compare prices for similar items before placing the order with Kohl's. Before switching websites, I created a username and password on the Kohl's website, assuming that my "basket" contents would be saved. However, after navigating to the Overstock website and then returning to Kohls.com, my basket contents had been cleared. Other shopping sites that I've used tend to be very sticky with my basket contents even when I am not logged in as a user. As long as I'm entering from the same IP address, my shopping basket contents are usually retained. But this was not the case on the Kohl's site. I did not recreate my online order with them.</p> <p>[Consequence] I was so frustrated with the process that I did not place any order.</p>	<p style="text-align: center;">N/A</p>	<p style="text-align: center;">N/A</p>
<p>Acquisition Failure</p>	<p>[Failure] I wanted to pre-order 2 video games. Everything seemed to be fine as I already have an account with the e-commerce website. I logged in and went about ordering the games I wanted. Nothing seemed to be amiss and I was able to successfully place order for the games. However, when one of the games was due to be shipped, I tried logging into the account to check the shipping status but was informed that my account has been suspended and no explanation was provided.</p>	<p>[Failure] I wanted to purchase several items online. However, the transaction failed and wouldn't process even though the items were accepted into the shopping cart.</p> <p>[Consequence] I have to go back and resubmit once I am sure my card has not been charged or the charges have been cleared from pending.</p>	<p>[Failure] I wanted to purchase cinema tickets online. I could find the movie, theatre, and time. However, when I got to the credit card payment, the (externally-powered) transaction module failed to validate my transactions. I pay with that card very often on other Websites so I don't think it was due to my card or me entering the wrong info. I tried 4 times to reprocess the payment but it never managed to process it.</p> <p>[Consequence] I lost time trying to complete the transaction many times. It</p>	<p>[Failure] I wanted to purchase a product online but I was denied when trying to make payment.</p> <p>[Consequence] No negative consequence.</p>

Negative Consequence E-Service Failure Dimension	Disconfirmed Outcome Expectancy	Disconfirmed Process Expectancy	Disconfirmed Cost Expectancy	No Disconfirmed Expectancy
	<p>[Consequence] Although I did not suffer any monetary losses, I was quite unhappy that my account was suspended without any notification and for no apparent reason. I find it extremely inconvenient to bother to even create a new account or to contact the customer service personnel to try to fight my case.</p>		<p>was not a very important purchase as I could buy the movie tickets at the theatre so I did not suffer much from this failure. Still it was a loss of time/effort + annoying to have the transaction failed.</p>	
<p>Post-Purchase Failure</p>	<p>[Failure] I wanted to order a video game through Amazon.ca, which I had successfully done. I was able to add the item to my cart and successfully check out. A couple hours later, I realized that I had forgotten to order another item. Amazon had the option to amend orders before they were processed, but when I returned to my account, my order had already been processed. My original order was over \$39, which qualified it for free shipping, but the second item that I wanted to order was not. I did not want to place another order and have to pay for shipping, when I could have just added the second item to go with the first, and get free shipping for both items. In the end, I decided not to order the second item.</p> <p>[Consequence] I decided not to order the second item. Ever.</p>	<p>[Failure] While I was searching around for dog bones on the website, everything was going well. My cart was filling up and I was ready to check out. As I checked out and entered my information into the system I anticipated that I would receive some kind of notification that I had made the purchase. I did not receive any confirmation about if my transaction was successful or completed until I received the dog bones.</p> <p>[Consequence] A simple nervousness and anxiety not knowing if I had been charged or not charged caused a bit of unnecessary emotion in my life for a period of time.</p>	<p>[Failure] I never had problems with this exercise regarding credit card info. This time, I was given a notice when I went to playing site, on head banner, that my card was about to expire. I then went into credit card info site to update/correct expiry date but it would not accept the update after numerous attempts. The difficulty was at their end since my info was correct.</p> <p>[Consequence] Having to spend a lot of time finally getting a hold of someone real-time on their customer service site and getting it corrected by them.</p>	<p>[Failure] No reply to my e-mail for additional services offered and so I have no idea what my balance is and, I refuse to conduct any further business with them until resolved.</p> <p>[Consequence] No negative consequence.</p>
<p>System Failures</p>				
<p>Inaccessibility</p>	<p>[Failure] I went to Amazon.com to purchase a present for my husband. I got almost the whole way through the checkout process before the website malfunctioned on my browser and I lost my order.</p> <p>[Consequence] I got frustrated and didn't fulfill the order.</p>	<p>[Failure] Transfer money from one account to another account. Click personal account, key in account number and password. After login, it says system is currently unavailable, go back later. So I cannot transfer money.</p> <p>[Consequence] As I cannot login, I am not sure if I have enough money in my Credit card to pay for purchases right before I went out that day. So I need to be careful</p>	<p>[Failure] To buy a pair of shoes but the website failed to work on several tries so I have to keep starting from scratch and finally made my purchase.</p> <p>[Consequence] Just a loss of time</p>	<p>[Failure] When I was bidding on an item online, the server failed and I lost my bid.</p> <p>[Consequence] No negative consequence.</p>

<p style="text-align: center;">Negative Consequence</p> <p>E-Service Failure Dimension</p>	<p>Disconfirmed Outcome Expectancy</p>	<p>Disconfirmed Process Expectancy</p>	<p>Disconfirmed Cost Expectancy</p>	<p>No Disconfirmed Expectancy</p>
		<p>not to use my credit card too much to exceed the limit.</p>		
<p>Non-Adaptability</p>	<p>[Failure] I found the product I was looking for, but was told the product could not be shipped to my address (American website would not send this particular item to Canada).</p> <p>[Consequence] I had to buy the product locally, used, and it cost me more than had I purchased it online, new.</p>	<p>[Failure] When I went to send an email to inquiry about my purchase order, the website asked for my name, address, account number, etc. I could not proceed further because when it came time to enter my STATE I couldn't because it was an American site and the STATE section could only be filled out from a pre-installed list. I am from Canada and I couldn't override it.</p> <p>[Consequence] I quit the purchase because it was just impossible to complete the transaction.</p>	<p>[Failure] I was trying to check my bank balance online. When I tried to log in, the website failed, possibly a java error. I've logged in hundreds of times before and this happens every once in a while.</p> <p>[Consequence] You have to wait 12 minutes for the bank to time out and log you off before you can log in again.</p>	<p>[Failure] Website timed out due to having long period of inactivity between transactions.</p> <p>[Consequence] No negative consequence.</p>
<p>Non-Navigability</p>	<p>[Failure] I had accessed the main page and navigated through it to the product I was interested in. At that point I tried to use the button allowing me to get more information but despite continued attempts using the button the required page failed to load and I got an error message stating the requested page was unavailable. I attempted several times to go back to the home page and renavigate to this spot but the requested page failed to load.</p> <p>[Consequence] I tried frequently that day and the next and then gave up. While not all that dire in consequence it was frustrating in that I was unable to get the information I was looking for.</p>	<p>[Failure] I was attempting to follow a link from another website. I received a message stating that this link was broken.</p> <p>[Consequence] I could not access the site. However, I did a Google search and was able to find the website.</p>	<p>[Failure] Having reached the Canadian government website I had found the section dealing with grants and loans for my region of the country. However, upon clicking the links that purported to lead to information on how to apply and to which agency to apply I found that these links simply led in circles back to themselves.</p> <p>[Consequence] I have had to deal directly with front line government workers which is a waste of both my and their time in obtaining documentation that should be readily available through the on line system.</p>	<p>[Failure] While I was trying to update status, checking mail, viewing pictures as well as other networking pages but I was unable to do those things.</p> <p>[Consequence] No negative consequence.</p>
<p>Delay</p>	<p>[Failure] I was bidding on something and was waiting till the end to put in a last bid and the site bogged down and I missed the bid.</p> <p>[Consequence] Not winning the item I was bidding on.</p>	<p>[Failure] I choose the laptop I wanted to buy. Then I was redirected on the site for the credit card payment. I entered my credit card information, number and expiry date, and clicked on PROCESS. Nothing happened. 5 minutes later I clicked again on PROCESS. Nothing happened again. I clicked again 5 minutes later and it worked.</p>	<p>[Failure] The site failed after I began my checkout. The site went real slow and then locked up. The only way I could clear it was to log off the site, go back and try again at which time the site worked.</p> <p>[Consequence] None other than waiting and re-entering information.</p>	<p>[Failure] When I clicked to pay for a purchase online, it just froze.</p> <p>[Consequence] No negative consequence.</p>

Negative Consequence E-Service Failure Dimension	Disconfirmed Outcome Expectancy	Disconfirmed Process Expectancy	Disconfirmed Cost Expectancy	No Disconfirmed Expectancy
		<p>[Consequence] The payment I made passed 3 times. So I paid 3 times the amount due. I called my credit card issuer and after explaining, I had to call the online retailer where I bought my laptop. I had a refund after 3 weeks.</p>		
<p>Insecurity</p>	<p>[Failure] I logged on to my account and was hijacked to a site to enter a sweepstakes instead that had the terms and conditions to participate in several levels of "reward programs." These seem to lead to endless and expensive participations.</p> <p>[Consequence] I have only tried to participate in such a survey once and it cost me shipping on Video Professor, a cancellation of a cell phone texting game, and the failure to complete the rewards programs.</p>	<p>[Failure] I had no problem with the service till I started getting junk from the website, and when you try to block it, the vendor won't let you.</p> <p>[Consequence] Trying to get information and it keeps dropping me out and I have to keep re- connecting in order to get my work done.</p>	<p>N/A</p>	<p>N/A</p>
<p>Nontechnological Failures</p>				
<p>Mischarging</p>	<p>[Failure] I was on bearshare.com wanting to join so I could download some music. I was to pay \$60 for the year after I put in the information and my card was charged, the page would not finish submitting and I received no membership to download music and was out by \$60 and have not heard from the web site. I have complained to the website and requested my money back.</p> <p>[Consequence] Having money withdrawn out of my accounts with nothing to show and not receiving a refund.</p>	<p>[Failure] I was buying an online game, and after giving out my credit card info, I was billed twice for the same order.</p> <p>[Consequence] Had to phone credit card company and game company.</p>	<p>[Failure] Failed transaction for a purchase made online and I got multiple charges on account.</p> <p>[Consequence] Had to wait for charges to clear and be fixed.</p>	<p>[Failure] I wished to withdraw my membership but I never got my refund. After several request, there is still no refund or payment.</p> <p>[Consequence] No negative consequences.</p>
<p>Product Delivery Problems</p>	<p>[Failure] I buy things from them several times a year and have done so for years. One of the items was meant to be a gift and according to the shipping estimate would have arrived in plenty of time. The week the item was scheduled to be delivered I received every other item I have ordered except the gift.</p>	<p>[Failure] The on-line site I was dealing with was Indigo Books. I had researched their home-site to find this bundle for the Eagles live concert, and found that they did indeed have 6 left. Having made an order for them, to date I have still never been contacted in regard to this purchase.</p>	<p>[Failure] Buy product online but it was not delivered to my address. I wrote to the company to advise that I do not receive the parcel. So they ship me another but the product I wanted was not in the parcel and the parcel was left in front of my door.</p> <p>[Consequence] Waste of</p>	<p>[Failure] I made a purchase for a product online but the package was not delivered properly.</p> <p>[Consequence] No negative consequences.</p>

Negative Consequence E-Service Failure Dimension	Disconfirmed Outcome Expectancy	Disconfirmed Process Expectancy	Disconfirmed Cost Expectancy	No Disconfirmed Expectancy
	<p>What failed was Amazon NOT informing that an item is being shipped or not available on the date promised.</p> <p>[Consequence] I had to pay full retail for the gift at a local store.</p>	<p>[Consequence] To date I have still never been contacted in regard to this purchase. I have been emailing them for about 5 months now with no real follow up as how I can purchase it on-line or direct payment via Pay-Pal. It is as if Indigo Book Store does not care to make money?</p>	<p>time and energy.</p>	
<p>Unresponsive to Customer Enquiries</p>	<p>[Failure] I was able to easily find the product that I wanted to purchase. I saw that there was an area on the website where I could ask a question to which I submitted my query. I submitted my query and after two days, had not received a response. I submitted another query, and waited an additional two days and still nothing.</p> <p>[Consequence] The negative consequences I experienced because of my query not being answered was that I decided not to order the product.</p>	<p>[Failure] I have bid for a chain online but did not receive it from the seller. E-Bay said they would look into the matter and get back to me with a resolution. It has been about a month now with NO resolution.</p> <p>[Consequence] The seller of the item received my payment via Pay-Pal (\$ 140.00), but has yet to send me the chain as expected.</p>	<p>[Failure] I contacted customer service regarding a refund for a defective product I ordered online. They never responded.</p> <p>[Consequence] Delay in receiving refund.</p>	<p>N/A</p>