TANGLED WEB OR TIDY KNOT?
ASSESSING FAILURE AND RECOVERY IN A SERVICE NETWORK

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ABSTRACT

Service has been described as being about “making, enabling and keeping promises.” However, firms are increasingly outsourcing service activities and forming networks to deliver elements of the service experience, thus relying on others to keep the promises that they make. This research examines these more complex yet common occurrences where multiple organizations play a role in shaping customer experiences. We examine the situation where one member of a network (a travel consultant) makes a promise regarding the rate offered by a partner (hotel) which the partner didn’t agree to and must determine how to respond. To comport with network language we refer to the travel consultant as the primary node (PN) and the hotel as the recovery node (RC).

The key manipulation involves the strategy the RC implements to deal with the situation. In one case they adopt an “explain and sustain” approach whereby they explain to the customer that it was the PN’s fault and they can’t provide the lower rate. In the second case, an “explain and compensate” approach is used such that the hotel provides the same external cause but offers the lower rate. We use justice, emotion, satisfaction and attribution theories to examine the models.

With respect to overall satisfaction with the PN, there is no direct impact of justice or positive emotions. Negative emotions and perceptions of controllability and stability lower satisfaction scores. In general, the PN does not benefit from the hotel recovery effort as much as may be expected.

Perceptions of justice and positive emotions increase satisfaction for the RN, while negative emotions lower satisfaction. Perceptions of controllability over the failure lower satisfaction. The results clearly show that a service provider cannot merely show they are not at fault to remove responsibility for resolving the problem.
INTRODUCTION

Research over the course of the past three decades has led to models that explain progressively more about customer evaluations of service quality, satisfaction with service encounters, and reactions to service failure and recovery (Rust and Chung 2006). A critical assumption underlying much of this research is that a service encounter is dyadic, delivered by one firm which is entirely responsible for the value that customers receive (e.g., Shostack 1985). In practice, there is a dramatic movement away from firms delivering complete solutions towards networks of service providers being responsible for achieving that goal (Business Week, January 30, 2006, p. 122-126). As firms become more specialized and focused on their core activities, they increasingly rely on outsourcing and developing alliances to deliver key elements of the service experience (Achrol and Kotler 1999; Gronroos 2004; Vargo and Lusch 2004). Service may be all about “making, enabling and keeping promises” (Bitner 1995), but firms are now frequently making promises that they are relying on others to keep.

There is evidence that outsourcing customer service and related activities is having a negative impact on many firms’ relationships with their customers. A 2005 Gartner study predicts that 60% of firms that retain partners to deliver key services to their customers will see a significant number of dissatisfied customers switch providers (Pfeffer 2006). The same research observes that 80% of companies that distribute customer-service activities do not meet their goals for cost-savings. Such findings make the management of these partner relationships a more significant success factor than ever before (Gummesson 2002; Hakansson and Ford 2002; Wilkinson 2008). When an organization participates either formally or informally in a network of providers to deliver a complete customer experience, its performance (and consequently, its evaluations by customers) may become “linked” with that of the other members of the network.
The influence of these network members on the focal firm is likely to become very evident after a service failure.

While much has been learned about how organizations should handle their own service failures and firms are becoming more aware of how to manage service failures caused by customers, very little is known about how to address failures that are caused by a third-party in a service network. This research examines this more complex, yet common situation, where multiple organizations play a role in shaping the customer experience. Thus, while networks represent a very broad and diverse field of study; we focus our attention on the situation where one member of a network makes a promise that the partner didn’t agree to and must determine how to respond. In particular, we look at the question of the responsibility of a firm to atone for a mistake it did not cause. Consider the following situation:

You hire a Travel Consultant (TC) to arrange a flight and hotel. The cost of the hotel is $100/night for 3 nights and you pay a $40 fee for the TC’s services. When you arrive at hotel you are informed that the rate is $120/night. The hotel manager effectively explains and documents that the TC made an error in the rate quote. You agree with the cause of the error.

This example of a relatively simple network illustrates how members can be placed in difficult situations through the errors of partners. In the context of the scenario described above, the research questions focus on:

1. How will the customer’s relationship with the hotel be influenced by the TC’s service failure?
2. How will the customer’s attitude toward the TC be impacted by the hotel’s response to the problem?
3. What other factors influence customer evaluations of each of the network members?
By developing models to explain how the actions of one network partner influences subsequent customer assessments of other network members, this research provides novel insight into evaluations of more complex exchange relationships. This is important given the evolution and direction of marketing thought and practice (Vargo and Lusch 2004). It also represents an effort to view networks from the consumers’ perspective rather than the traditional research approach of examining them from the point of view of the firm (Wilkinson and Young 2002). Taking the customer-driven approach has important implications for how firms should manage network relationships and allows us to examine the reciprocal impact of the performance of members in a service network on customer relations with each firm. Finally, the research addresses calls to examine failure and recovery in situations where the focal firm is not responsible for the service breakdown (McCollough, Berry and Yadav 2000). In this case we investigate how current theory on service recovery performs when the recovering party did not commit the failure.

The paper proceeds with an overview of networks. Next we explore the services literature and examine the current modeling of service recovery which highlights how customers evaluate firm reactions to failures. We then use the theoretical insights to develop our experiment which is described next. This is followed by an analysis of the results and discussion of the implications for researchers and managers. The paper concludes with limitations and future research directions

**SERVICE NETWORKS**

Networks are a set of nodes (actors) and the set of ties representing some relationship or lack of relationship, between them (Brass et al 2004). The actors may be individuals, work-units,
or organizations. The network perspective argues that actors are embedded within a network of interconnected relationships that provide opportunities and constraints on behavior.

Networks distribute activities among entities that are functionally specialized (Achrol and Kotler 1999). This differs from traditional perspectives in marketing and organizational studies in that the focus is on relations rather than attributes and on patterns of interaction rather than isolated individual actors (Anderson, Hakansson and Johanson 1994). While traditional service encounter research examines, “a period of time during which a consumer directly interacts with a service,” (Shostack 1985, p.243), more consideration needs to be directed at the relationships between the set of specialist providers and the relationships each has with the customer during a service encounter (Gummesson 2002; Vargo and Lusch 2004).

Despite the lack of attention, managing networks is central to marketing as marketing is “…in essence about the management of the external relations of the firm and the marrying of this with internal operations,” (Wilkinson and Young 2002, p. 123). Marketing has examined networks predominately from strategic and social network perspectives. The focus has been on channel and supply chain management, the growth of information-based intermediaries, coordination and competition involving intra-firm networks and social networks (e.g., Achrol and Kotler 1999; Anderson, Hakansson and Johanson 1994; Iacobucci 1996; Palmatier 2008; Wilkinson 2008)

Two related aspects of networks often associated with effective performance are cooperation and coordination in achieving goals.

- Networks are purposeful social systems aiming at **coordinating** a range of disparate resources to deliver particular types of services targeted at specific social problems (Van de Ven 1976)
• Firms also, “…develop cooperative relations with counterparts such as customers and suppliers that are beneficial in order to create competitive advantage in creating value for final customers” (Wilkinson and Young 2002).

Services frequently require the coordination and integration of key processes within and across organizations (Hoffer-Gittell 2002; Stuart and Tax 2004). Like other service production activities, recovering from a failure often requires interdependent actions to achieve a positive result for all parties. Coordination and cooperation are particularly important given the need to avoid excessive waiting time for recovery (Kelley and Davis 1994; Taylor 1994).

While cooperation and coordination are important for success; it has been observed that both internal and external networks frequently lack coordination and members often compete rather than cooperate (Jones et al 1998; Luo, Slotegraaf and Pan 2006). This “coopetition” is often cited in cases of a failure where firms view it in their best interests to attempt to deflect blame onto other network members (Jones et al 1998). This, in turn, may also contribute to poor coordination in solving the problem. Thus, firms must learn to collaborate and compete at the same time (Day 1994).

We largely depart from the traditional network focus of directly examining the relationships of the firms involved in the network. Instead our interest is on understanding how customers view the performance of networks during a service encounter and the subsequent updating of their beliefs about the network members. This will allow us to better understand how the exchange relationships between service providers influence subsequent relationships with customers (Anderson, Hakansson and Johansson 1994).

Networks can take on a variety of forms that may differ in terms of the level of formality, structure, and dependence between the participating members. We found over twenty different
terms related to networks including, but not limited to, social networks, joint ventures, alliances, inter-organizational fields, constellations, partnerships, collaborations, supply chains, outsourcing, and virtual firms (Borgatti and Foster 2003).

In developing the concept of service networks, we adapt the perspective of organizational researchers who studied non-profit and public agencies and more recently businesses in the context of acquiring resources to deliver services efficiently and effectively (Alter and Hage 1993; Araujo and Easton 1996; Provan and Milward 1995). Each firm in the network is perceived to have its own independent operations but there is an expectation on the part of customers that the firms share communications and are aware of each others roles. In terms of governance structure we are looking at situations involving relational governance based on normative and social structure and trust (Ferguson, Paulin and Bergeron 2005).

**FAILURE AND RECOVERY IN A SERVICE NETWORK**

March (1996, p.283) observes: “An organization reacts to the actions of others that are reacting to it. Much of what happens is attributable to those interactions and thus is not easily explicable as the consequence of autonomous action. As a result, firms have limited control and limited ability to predict the outcomes of their actions.” In the context of service failure and recovery this requires that firms understand and are capable of reacting to the actions taken by members of the network that may cause or contribute to a service failure.

While we endeavor to explain how network failures and recoveries unfold, our approach differs from traditional approaches and reflects a more exploratory analysis. To understand the network model we first present a framework of how recovery has been modeled in a single firm failure context. We then test it in a network failure setting and explore the differences in the models for the network parties compared to the single firm situation. In order to gain insights
into how service failure and recovery efforts are viewed by customers in a network setting, we create a straightforward and simple network situation in which the effects related to customer evaluations of two different members operating in a network can be isolated while also controlling for other extraneous factors. Examining how these effects operate in a simple network scenario provides a necessary and important first step towards understanding how customer judgments are influenced by interactions in more complex service network settings.

**Conventional Service Failure and Recovery Model**

While other variables have been associated with effective recovery, the variables discussed below provide both a parsimonious and highly predictive view of the key relationships. The focus of the model is justice theory. Considerable research in service recovery has demonstrated that consumers evaluate the fairness of the interactions, procedures, and outcomes in assessing whether justice was served in the resolution of their complaint (e.g., Hess, Ganesan and Klein 2002; Homburg and Furst 2005; Smith, Bolton and Wagner 1999; Tax, Brown and Chandrashekaran 1998). We include customers’ emotional responses to service failure and recovery encounters as they have been shown to influence post-recovery evaluations and satisfaction judgments (Chebat and Slusarczyk 2005; Smith and Bolton 2002).

**Causal Attributions**

When failures occur, people seek to understand the cause of the problem (e.g., Folkes 1984; Sparks and Callan 1996). Attributions represent the causal inferences consumers make for failures (Folkes 1984). These attributions are often made despite limited and/or incorrect information. Attributions are comprised of three dimensions: locus, stability and controllability. Locus refers to whether the cause of the failure rests with the consumer, the business, or another
party. Stability concerns whether the cause is fairly permanent or relatively temporary, while controllability examines whether a firm or the consumer could have prevented the failure. Traditional service recovery models begin with the assumption that the service provider has failed (Hess, Ganesan and Klein 2003), thus the locus of the failure in the model is the service provider.

**Explanations and Controllability Attributions**

Firms must choose whether or not to accept responsibility (an apology form of explanation) and take appropriate action or to provide an “excuse” form of explanation to alter attributions regarding their responsibility for and/or their control over the failure (Conlon and Murray 1996). It has been argued that attributions of control over the situation are a precondition for judgments of unfairness so that successfully deflecting control may be seen as a way to avoid having to recover (Daly 1995). However, to be effective, such explanations must be credible and believable (Conlon and Murray 1996). Overall, there is support for the relationship between explanations and customer attributions over control of the failure.

**Justice and Attributions**

Service recovery is an important signal of quality and effective recovery reduces customer perceptions that the cause of the failure is stable (Tax and Chandrashekaran 1992). In part, customers may reason that firms who compensate when they fail could not afford to do so if they failed frequently (Bitner 1990). Effective recovery also involves identifying the root cause of failures and implementing procedures to prevent them from reoccurring (Lovelock and Wirtz 2004; Tax and Brown 1998). This makes effective service recovery central to reducing the stability of failures.

**Justice and Emotions**
Emotions are mental states of readiness that arise from cognitive appraisals of events or one’s own thoughts (Bagozzi, Gopinath and Nyer 1999). Emotions typically have a specific cause. It has been argued the conflict often associated with service failure and recovery episodes frequently lead to emotional responses (Smith and Bolton 2002; Zeithaml, Berry and Parasuraman 1993). This may be partly explained from a prospect theory perspective in that effective recovery may eliminate a potential loss, while poor recovery increases the loss (e.g., Novemsky and Kahneman 2005). Justice has been found to influence emotions in a variety of organizational research noting that people react with such emotions as anger and disappointment when they perceive that they are treated unfairly (e.g., Hegtvedt ad Killian 1999; Weiss, Suckow and Cropanzano 1999). While few studies have examined the impact, justice evaluations have been shown to influence both positive and negative emotions in service settings including service recovery (Chebat and Slusarczyk 2005; Maute and Dube 1999; Smith and Bolton 2002).

**Attributions and Overall Satisfaction**

Attributions theory has played an important role in service recovery, quality and satisfaction research. In particular, research has found that beliefs that failures are likely to be *stable* lower overall perceptions of firm quality (Parasuraman, Zeithaml and Berry 1994). Customers who perceive failures to have persistent underlying causes are inclined to be less satisfied with the organization (Bitner 1990). Research has found stability to be inversely related to repurchase intention and satisfaction (Folkes, Koletsky and Graham 1987; Tax and Chandrashekaran 1992). Hess, Ganesan and Klein (2003) found support for the notion that customer expectations to continue a relationship after a service problem are negatively related to stability attributions for the failure. Folkes, Koletsky and Graham (1987), in a study of air travel, found that the more an airline was perceived to have control over a flight delay, the greater the
disappointment customers had with the airline. This points to a negative relationship between controllability for a service failure and overall satisfaction.

**Emotions and Satisfaction**

Postpurchase research recognizes both cognitive and emotional drivers of satisfaction (Mano and Oliver 1993). Oliver (1997, p.319) observes that, “emotions coexist alongside various cognitive judgments in producing satisfaction.” Emotions have been linked to service assessments across a variety of settings (e.g., Mattila and Enz 2002; Menon and Dube 2000; Liljander and Strandvik 1997; Price, Arnould and Deibler 1995). Zeelenberg and Pieters (2004) find that negative emotions following a failed service experience strongly influenced dissatisfaction. Similarly, Smith and Bolton (2002) found that emotional responses to service failures significantly impacted post recovery service encounter satisfaction.

Emotions have also been directly linked to post service recovery actions. Both positive and negative emotions impact post-purchase loyalty following a service recovery episode (Chebat and Slusarczyk 2005). It has been observed that emotional reactions to service recovery influence loyalty and exit decisions (Scher and Heise 1993).

**Service Recovery Justice and Satisfaction**

Service failures represent particularly critical incidents in the relationship between customers and service providers. The effective resolution of customer complaints has been linked to maintaining customer trust and sustaining overall satisfaction (Smith, Bolton and Wagner 1999; Homburg and Furst 2005). Justice theory has been the dominant conceptual foundation explaining overall customer satisfaction following a failure and recovery (Homburg and Furst 2005; Maxham and Netemeyer 2003; Smith, Bolton and Wagner 1999; Tax, Brown
and Chandrashekaran 1998). In those studies, justice explained a high level of the variance and was by far the single most important contributor to overall firm satisfaction.

The Role of Prior Experience

A few studies have considered the past experience/relationship a customer has with an organization in terms of the influence of the reaction to service recovery and subsequent satisfaction with the firm. While results vary to some extent, we find growing support for past positive experiences providing some buffer for a poor service recovery and effective service recovery serving to strengthen overall satisfaction (e.g., Berry 1995; Hess, Ganesan and Klein 2003; Tax, Brown and Chandrashekaran 1998). This is consistent with other satisfaction and quality research that has found that firms who have delivered superior service are protected from a single failure (Anderson and Sullivan 1993; Boulding, Kalra, Staelin and Zeithaml 1993; Oliva, Oliver and MacMillan 1992). Thus, our model includes the moderating impact of prior relationships on the justice, emotional and attribution influences on overall satisfaction.

RESEARCH DESIGN & METHODOLOGY

This research involves an empirical study in a travel industry setting. The study employs a 2x2x2 quasi-experimental design using a paper and pencil questionnaire where subjects read a scenario describing a hypothetical service failure and recovery encounter that involves two service providers in a network (a travel consultant and a hotel) and then respond to a battery of structured questions about their evaluations of how the situation was handled by the service providers. The experimental approach is consistent with many service recovery studies as it makes it possible to test for causal relationships, to isolate the particular effects that are the focus of the study and to control for other elements surrounding the service failure and recovery encounter (e.g., Hess, Ganesan and Klein 2003; Smith, Bolton and Wagner 1999).
Furthermore, scenarios eliminate difficulties associated with observing or enacting service failure and recovery incidents in the field (e.g., low incidence rates, ethical considerations) and that they reduce biases from memory lapses, rationalization tendencies, and consistency factors, which are common in results based on retrospective self-reports.

Sample and Data Collection Method

The participants consisted of 307 adult subjects in the U.S. and Canada who were members of various organizations including two parent-teacher organizations at elementary schools, a parent-teacher organization at a junior high school, a marching band booster organization at a senior high school, a regional canine rescue volunteer organization, and four adult co-ed soccer teams. Data were collected via individually completed questionnaires in groups ranging from 16 to 60 subjects. The researchers collected the data during a regularly scheduled meeting of the organization’s members at each group’s usual public gathering place within the local community. Group members filled out a uniform number of instruments from each cell of the experiment. Thus a group of twenty-four filled out three questionnaires from each of the eight experimental cells.

A $10.00 donation was given directly to the organizations as a “thank you” for each completed questionnaire. Of the 307 subjects who participated, 293 were deemed usable for data analysis. A total of 14 were determined to be unusable due to unacceptable levels of item non-response.

Experimental Design and Task

The experiment involved a 2x2x2 between-subjects design which manipulated the customer’s relationship with the hotel (strong versus weak), the customer’s relationship with the travel consultant (strong versus weak), and the service recovery strategy implemented by the
hotel in response to the failure caused by the travel consultant. Each respondent was randomly assigned and subsequently exposed to one of the eight possible scenarios and was instructed to imagine that all of the experiences described in the scenario actually happened to him/her.

After reading the scenario, the subject responded to a set of manipulation checks and a series of measures regarding their evaluations of the service providers and service encounters including attributions, perceived justice, emotions, satisfaction, trust, and behavioral intentions. Detailed descriptions of the scenario manipulations are provided in Appendix A.

**Setting and Manipulations**

The travel industry was chosen as the setting for this study because it provides an appropriate context in which to examine customer evaluations of more complex relationships, particularly in service failure and recovery situations where the actions of one network partner influences subsequent customer assessments of another network member (Kandampully and Promsivapallop 2005). Based on discussion with hotel managers, we developed a service failure and recovery situation that was a realistic, common, and a familiar context in which customers could evaluate an incident involving two independent providers that are participating in a service network. The scenario described a service encounter in which the customer paid a fee for the services of a travel consultant to make flight and hotel arrangements for a three-day weekend vacation (Part 1) and subsequently arrived and checked in at the hotel (Part 2). The final content and wording of the scenarios were based on the results of extensive pre-testing.
In the scenario we manipulate the customer’s existing relationship with the travel consultant (strong versus weak) by varying the length (5 years versus 6 months) and nature of the relationship (very good past performance and high level of personalization versus inconsistent past performance and no personalization). We also manipulate the customer’s relationship with the hotel by varying frequency of use (frequent use of hotel chain and several prior stays at the particular focal hotel versus infrequent use of hotel chain and one prior stay at particular focal hotel), past performance and the level of personalization (hotel manager recognizes and engages guest in a personal conversation versus hotel manager does not recognize guest and provides a general welcome to the hotel).

Next, the scenario describes a situation in which it becomes clear to the customer, based on the explanation and evidence provided by the hotel, that the travel consultant has made an error in communicating the correct room rate and discovers that the total charge for the hotel room will be $60 more than expected. Here we introduce the third manipulation- the two recovery strategies used by the hotel. In the “explain and sustain” approach the hotel explains that the travel consultant is responsible for the mistake in price quotes and the hotel will stay with the higher rate. The hotel staff and manager are pleasant, concerned and provide documentation to the customer should s/he wish to try to recoup the difference from the travel consultant. In the “explain and compensate” approach the customer is told that even though it is the travel consultant’s error the hotel will charge the lower rate. The hotel staff and management are similarly concerned and empathetic. We developed these approaches in consultation with members of the hotel industry. We are interested in how the different strategies are viewed by customers in terms of the overall justice perceptions and the impact on emotional and cognitive reactions.
Measures

Subjects responded to multiple items for each dependent variable as presented in Appendix B. Measurement scales were adapted from previous studies of service encounters, customer satisfaction, and perceived justice. Specifically, measures of distributive, procedural, and interactional justice consisted of 5-point Likert scales (anchored at middle and end points by Strongly Disagree/Neither/Strongly Agree) adapted from prior research on service failure and recovery encounters by Smith, Bolton, and Wagner (1999) and Tax, Brown and Chandrashekaran (1998). Positive and negative emotions were measured using 5-point bipolar adjective scales (anchored at end points by Not At All/Very Much) that were adapted from Richins’ (1997) Consumption Emotions Set (CES) Scale. Items measuring overall satisfaction with both the travel consultant and the hotel were 5-point Likert scales adapted from prior work by Oliver and Swan (1989), Oliver (1997). Measures of controllability and stability attributions were adapted from Folkes (1984) and Hess, Ganesan and Klein (2003).

The measures displayed high levels of reliability with Cronbach alphas ranging from 0.79 to 0.93, exceeding the recommended guideline of 0.70 by Nunnally (1978). Convergent and discriminant validity were supported based on conventional assessment procedures (Anderson and Gerbing 1988; Churchill 1979). Individual items loaded on the proper factors for the three perceived justice constructs, and correlations among the dependent variables representing different types of evaluations are much smaller than the associated reliabilities.

Data Analysis and Model Estimation Procedure

In this section we examine the relationships proposed in the traditional model for the two members of the network. We first present the overall model results that capture the consequences of the recovery strategy employed. To bring the terminology in line with network
concepts we refer to the travel consultant as the Primary Node (PN) and the hotel as the Recovery Node (RN). We then present the results for the satisfaction with the PN and RN.
Consequences of Recovery Strategy

Regression analysis was used to assess the impact of the two strategic options available to the recovery node for responding to the service failure. The focus of this set of results was the relationship between recovery strategy and the formulation of justice perceptions, emotional responses and attribution judgments.

First we considered how the justice strategy impacted overall justice perceptions. The recovery strategy (explain-sustain versus explain-compensate) influenced the perceptions of overall justice ($R^2 = .37, F_{1, 291} = 171.51, p < .0001$), with the explain & compensate strategy being perceived more favorably than the explain & sustain strategy (beta = 1.49, t = 13.096, p < .0001).

Next we tested the impact of the three justice components on overall justice perceptions. The three justice dimensions (interpersonal, procedural and distributive) and interactions among these dimensions captured a major portion of the variance in overall justice ($R^2 = .81, F_{6, 286} = 206.34, p < .0001$).

The next step involved testing the relationship between overall justice and emotions. Overall justice increased positive emotions (beta = .64, t = 14.11, p < .0001), and decreased negative emotions (beta = -21, t = -4.83, p < .0001).

The model for stability attributions towards the PN was significant ($F_{3, 290} = 4.72, p < .01$), and revealed that stability attributions towards the PN were decreased by favorable prior experiences with the PN (beta = -.22, t = -3.37, p < .001) and increased by the perceived adequacy of the explanation offered by the RN (beta = .14, t = 2.08, p < .05). Perceptions of overall justice did not influence stability attributions towards the PN (beta = -.04, t = -.68, ns.).
The model for controllability attributions towards the PN was significant ($F_{3,290} = 6.37, p < .001$) and revealed that controllability attributions towards the PN were largely influenced by the perceived adequacy of the explanation offered by the RN – as the adequacy of the explanation offered by the RN increased, customers perceived the PN to have had more control in creating the service failure ($\beta = .19, t = 4.06, p < .0001$). Neither overall justice nor prior experiences influenced controllability attribution towards the PN ($\beta = -.038, t = -.939, ns$, and $\beta = 0.04, t = .804, ns$, respectively).

The model for controllability attributions towards the RN was significant ($F_{3,290} = 8.88, p < .0001$) and revealed that controllability attributions towards the RN decreased as overall justice increased ($\beta = -.10, t = -1.844, p < .07$) and decreased as the perceived adequacy of the explanation offered by the RN increased ($\beta = -.23, t = -3.71, p < .01$). Prior experience with the RN did not influence controllability attributions towards the RN ($\beta = .073, t = 1.297, ns$).

**Satisfaction with the Primary Node.** Table 1 presents the results of the analysis. In a significant model ($R^2 = .44, F_{8,284} = 27.8, p < .0001$), the key variables that shape the satisfaction with the PN are a main effect of negative emotions ($p < .001$), a main effect of stability attributions ($p < .0001$), and an interaction of negative emotions and prior experience ($p < .001$). No significant effect of overall justice, positive emotions, controllability attributions emerge.

**Table 1. Drivers of Satisfaction with Primary Node**

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Variable</th>
<th>Parameter Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall justice</td>
<td>OVJ</td>
<td>-.137</td>
<td>.141</td>
</tr>
<tr>
<td>Positive emotions</td>
<td>POSEMO</td>
<td>.201</td>
<td>.162</td>
</tr>
<tr>
<td>Negative emotions</td>
<td>NEGEMO</td>
<td>-.496</td>
<td>.145*</td>
</tr>
<tr>
<td>Attributions towards</td>
<td>Controllability (PNCONT)</td>
<td>-.202</td>
<td>.178</td>
</tr>
<tr>
<td>Primary Node</td>
<td>Stability (PNSTAB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>--------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Interactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall justice x prior relationship</td>
<td>OVJ x PNREL</td>
<td>.106</td>
<td>.108</td>
</tr>
<tr>
<td>Positive emotions x prior relationship</td>
<td>POSEMO x PNREL</td>
<td>-.027</td>
<td>.112</td>
</tr>
<tr>
<td>Negative emotions x prior relationship</td>
<td>NEMTREL</td>
<td>.213</td>
<td>.059*</td>
</tr>
</tbody>
</table>

| R²                      | 0.44               |
| Model fit              | F(8,284) = 27.8** |

*: p < .01; ** p < 0.0001
The pattern of the coefficients reveals that as stability attributions increase, satisfaction decreases. In turn, an increase in negative emotions impairs satisfaction. This effect of negative emotions, however, is moderated by prior experience with the PN. To shed light on the pattern of the interaction, we computed and tested (using Wald tests), the net effect of negative emotions at different levels of prior experience. The following findings emerge:

- At the 25\textsuperscript{th} percentile of prior experience (i.e., neutral prior experience), the effect of negative emotions is significant and negative (coefficient = -.42, p < .01).
- At the 50\textsuperscript{th} percentile value of prior experience, the impact of negative emotions is reduced by 33\% (coefficient = -.28, p < .05).
- By the time prior experience reaches its 75\% percentile value, the effect of negative emotions is rendered non-significant (coefficient = -.14, t = -1.011, \textit{ns}).

\textbf{Satisfaction with the Recovery Node.} Table 2 presents the results of the analysis. In a significant model ($R^2 = .69$, F\textsubscript{7, 285} = 93.4, p < .0001), remarkable differences emerge in the analysis of satisfaction with the RN. In contrast to the case of the PN, the satisfaction with the RN is shaped by overall justice (p < .0001), positive emotions (p < .0001), controllability attributions (p < .01), in addition to negative emotions (p < .01) and a two-way interaction of negative emotions and prior experience (p < .0001).
Table 2. Drivers of Satisfaction with Recovery Node

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Variable</th>
<th>Parameter Estimate</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall justice</td>
<td>OVJ</td>
<td>0.881</td>
<td>.096**</td>
</tr>
<tr>
<td>Positive emotions</td>
<td>POSEMO</td>
<td>.439</td>
<td>.104**</td>
</tr>
<tr>
<td>Negative emotions</td>
<td>NEGEMO</td>
<td>-0.244</td>
<td>.093*</td>
</tr>
<tr>
<td>Attributions towards Recovery Node</td>
<td>Controllability (RNCONT)</td>
<td>-0.217</td>
<td>.072*</td>
</tr>
<tr>
<td>Interactions</td>
<td>Overall justice x prior relationship</td>
<td>OVJ x PNREL</td>
<td>.032</td>
</tr>
<tr>
<td></td>
<td>Positive emotions x prior relationship</td>
<td>POSEMO x PNREL</td>
<td>-0.063</td>
</tr>
<tr>
<td></td>
<td>Negative emotions x prior relationship</td>
<td>NEMTREL</td>
<td>0.162</td>
</tr>
<tr>
<td></td>
<td>R²</td>
<td></td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>Model fit</td>
<td></td>
<td>F(7,285) = 93.43**</td>
</tr>
</tbody>
</table>

*: p < .01; **: p < 0.001

In terms of direction of impact, all effects are consistent with theoretical expectations: overall justice and positive emotions increase satisfaction, and controllability attributions and negative emotions impair satisfaction. To examine the pattern of the interaction of negative emotions and prior experience, we once again focused on the net effect of negative emotions at different levels of prior experience (and tested the computed effects via Wald tests). The following findings emerge:

- At the 25th percentile of prior experience (i.e., neutral prior experience), the effect of negative emotions is significant and negative (coefficient = -.24, p < .01).
- At and above the 50th percentile value of prior experience, the impact of negative emotions is non-significant (at the 50th percentile value, the net effect is reduced by almost 50% but is non-significant; coefficient = -.13, p = .14).
DISCUSSION & MANAGERIAL IMPLICATIONS

The discussion of the model results is organized around theoretical advances in the understanding of customer assessments of the performance of service networks in the context of a service failure and recovery. First, we consider the reciprocal influence of network member actions on the overall satisfaction of each member. While trends in outsourcing and strategic service alignments have made networks prevalent in practice, the overwhelming focus of research has been on the single firm service encounter. This study makes important contributions to our understanding of customer satisfaction in a network system. Second, we answer the call for research examining service recovery in a context where a firm that is not responsible for causing a failure is put in the position of having to solve the problem (Nadav and Berry 2002). This has implications for the advancement of service recovery theory as well as identifying potential challenges to existing views on attribution theory. Finally, we view networks from the perspective of the customer rather than the standpoint of the member firms. This customer-centric orientation is novel and has significant implications for the understanding of strategic alliances and research on business development.

The Role of Recovery Strategy

The implementation of the explain & compensate strategy had a positive impact on justice perceptions. This suggests that respondents believe that network partners have a duty to respond to problems in the network even if they may not be directly at fault. The results clearly demonstrate that the actions of the Primary Node influence perceptions of the Recovery Node, the nature of that impact being dependent on the strategy used to respond to the failure. This challenges the traditional attribution view that one will not be held accountable if they are not responsible for a failure. Responsibility for recovery in a network context is shared.
Justice Influences

As expected, perceptions of justice influenced negative and positive emotions in the appropriate directions. A very interesting result concerns the impact of justice perceptions on attributions. For the RN, the perceptions of justice reduced controllability attributions, however, in the case of the PN, there was no impact of justice on stability or controllability attributions. Justice also had a direct impact on satisfaction with the RN but no direct influence on PN satisfaction. This clearly shows that the RN is judged by the manner in which they respond to the failure caused by their partner. The PN does not share in the benefits associated with perceptions of justice in recovery.

Explanation and Attribution Decisions

The explanation offered by the RN set in process the impact of attributions on both PN and RN satisfaction. When the explanation that the PN was responsible for the failure was accepted, stability and controllability attributions for the PN increased and controllability attributions for the RN decreased. The more stable the perception of the failure the lower the satisfaction with the PN. The lower the perceived controllability for failure placed on the RN, the higher the score for satisfaction. These results illustrate how network members may view it in their best interests to compete rather than cooperate with partners in the case of service failures. The RN is better off when customers view the problem as having been caused by the PN and can utilize the power of the explanation to help generate that attribution.

The results differ in some respect from expectations set out in the single-firm failure case. The extant literature places importance on firms’ accepting responsibility for failure and moving from there to redressing the problem (Tax et al 1998). In the network case there appears to be a
benefit from blaming others while still responding effectively to the problem. Further research is needed to clarify the nature of this effect.

Impact of Emotions and the Role of Relationships

The results shed light on the role of emotions in network contexts. The positive emotions associated with perceptions of fair treatment only influenced overall satisfaction with the Recovery Node. This is a valuable finding as it clearly points out that the positive emotion generated by partners responding to failures does not contribute to satisfaction with the party that created the problem and had no role in the recovery. One explanation for this is that customers may feel some sympathy for the party who pays for the mistake of a partner and respect that they took the initiative to save the customer the time and effort to seek redress from the Primary Node.

The impact of existing relationships on service recovery evaluations and subsequent organization satisfaction evaluations has rarely been examined in the literature. We found a powerful effect of strong relationships on alleviating the impact of negative emotions on overall satisfaction with both nodes. For the PN, relationship strength lowers stability attributions making it less likely the customer would switch or leave the service provider. Building equity with customers is clearly one way to help mitigate failures and protect against network members performance. It also points to the need for service failure and recovery research to include relationship status in modeling.

MANAGERIAL IMPLICATIONS

The results of the study provide a rich set of direct and indirect implications for the management of service failures in a network context. These implications challenge current
assumptions managers may hold regarding customer evaluations of network member assessment.

Below, we discuss three major repercussions of the research.

First, the research makes it clear that not being responsible for a failure does not absolve the organization from expectations that it will participate in the recovery. Even when managers are able to successfully deflect attributions of failure to other members of a network, customers expect them to either fix the problem or work directly with the partner responsible to solve the matter immediately. In short, customers expect network partners to behave as partners not competitors and take responsibility for jointly solving problems quickly rather than pushing the problem back to the customer. This makes clear the need for greater relational coordination and communication among network partners when it comes to resolving service failures.

Second, if a firm is not part of the solution, it does not get credit for the recovery. This is particularly challenging for managers as they may assume that having network partners take care of failures would reflect positively on both firm’s performance. Our findings challenge that view. Firms that cause failures get the blame and the negative emotional reaction even when the partner firm resolves the problem. The implication is that managers need to be aware of any failures that their firm commits, or is accused of committing, and deal with the customer directly. Deloitte and Touche uses the term “being inside the bubble” when referring to their desire to have clients call them first when an issue arises with a member of the clients network of advisors. This allows them to understand the problem, manage attributions and take advantage of the benefits associated with solving the problem. It helps strengthen relationships and gives them a more central role in the network, from the client’s perspective.

Third, and related to the above two points, is the need for firms to “own their customer relationships,” and not rely on partners to be in control of the most critical moments of truth.
Given the trends in outsourcing and other forms of partnerships this will require changes to
customer relationship management. To that end, Travelocity recently revised their service
guarantee to address this issue. Included in their guarantee is the following “...it is our
commitment to you that everything about your booking will be right, or we'll work with our
partners to make it right, right away.” They put this into practice by simply having the customer
call them toll-free from the hotel when the problem was identified. This reflects that they not
only want to make sure that they are part of the recovery, but that they also recognize that the
partner (hotel) may not perceive it in their best interests to solve the problem if they can deflect
the blame to Travelocity. This could be done to get the customer to book directly the next time,
an example of a competing rather than a cooperative network.

LIMITATIONS AND FUTURE RESEARCH AGENDA

A number of limitations point to the need for additional research to investigate the issues
emerging from this research. The experimental design in a simulated, scenario-based setting
provided the opportunity to control and manipulate key variables to assess the relationships of
interest. While we made sure that the scenario we tested was consistent with experiences in the
business environment, to gain further insights and test the generalizability of the findings, studies
in natural settings examining real network relationships would be very valuable. Also tests in a
variety of industries and settings would help identify characteristics of networks and
relationships that influence service recovery evaluations and general satisfaction with service
providers in an alliance.

The research examined a relatively simple network with two central players. This limits
the contribution of the findings in explaining how customers’ assess more complex sets of
service providers. Future research exploring the relationships between customers/clients in
networks characterized by many members with varying levels of coordination would be very valuable in understanding complex service provision. This would also allow for the use of social networking methods to be used to explore these connections

Additional research focusing on how customers view network performance and comparing that with organizational understanding of the customer perspective would shed light on any gaps in those outlooks. Examining situations where the relationship amongst the network members varies would expand our understanding of customer assessment of firm performance in the context of a networked delivery model.
REFERENCES


APPENDIX A: SCENARIO MANIPULATIONS

Part 1
After deciding to take a three-day weekend vacation you call the company that has been providing you travel services to arrange a flight and hotel.

Prior Relationship with the Travel Consultant

**Strong**
Your travel consultant has been assisting you for over five years and has done a very good, reliable job in making arrangements and you have come to rely on the consultant to keep you informed of excellent deals and travel opportunities based on your interests.

**Weak**
Your travel consultant has been assisting you for 6 months and while the performance was good initially, lately some errors have been made.

Once you outline your needs, the consultant investigates the possibilities and, following further discussion with you, books the flight and hotel.

Prior Relationship with the Hotel

**Strong**
You note that it is a hotel chain you use frequently, and you have stayed at that particular property several times. You have always been very satisfied with the hotel and you have even recommended it to friends.

**Weak**
You note that it is a hotel chain you have stayed at only few times and you had been at this particular hotel once before. The service was satisfactory on that occasion.

To complete matters, your travel consultant faxes you a confirmation note with the dates, the room rate of $100 per night, and puts the airline ticket charge and a $40.00 fee for performing the hotel and airline arrangements on your credit card.

*********************************************************************************************************************************************************
Upon arriving at the hotel, you immediately proceed to the check-in desk. The hotel manager happens to be at the front desk when you arrive, and

**Prior Relationship with the Hotel (continued)**

<table>
<thead>
<tr>
<th>Strong</th>
<th>she greets you and asks how things have been since your last visit.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak</td>
<td>she greets you and welcomes you to the hotel.</td>
</tr>
</tbody>
</table>

During registration, you notice that the room rate is $20.00 more per night than your travel consultant said it would be, and you bring this discrepancy to the manager's attention. She pulls out your file and hands you the e-mail sent by the hotel to your travel firm and your travel consultant’s return confirmation of the rate and dates. The e-mail clearly states that the rate is $120.00 per night, and not the expected $100.00 per night.

You examine the fax your travel consultant sent you and notice that it is not a photocopy of the hotel e-mail, but rather a note on the travel service letterhead. Therefore, you conclude that your travel consultant must have incorrectly transcribed the rate information. You say to the hotel manager, "It's not your fault; my travel consultant must have made a mistake when transcribing the information from your e-mail to the fax." The hotel manager concurs and mentions that this happens periodically. You then explain to the manager that this will end up costing you an additional $60.00. She says that she is very sorry about the error and,

**Recovery Strategy**

<table>
<thead>
<tr>
<th>Explain &amp; Compensate</th>
<th>even though it is not the hotel’s fault, she will give you the lower rate (i.e., she will charge you the room rate of $100 per night).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explain &amp; Sustain</td>
<td>but since it is not the hotel’s fault, she can’t provide the lower ($100.00 per night) rate.</td>
</tr>
</tbody>
</table>