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KEEPING IT ALL TOGETHER: THE CHALLENGE OF COMPLEXITY, REPUTATION, AND SUPPLY CHAIN CRISES

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KEEPING IT ALL TOGETHER: THE CHALLENGE OF

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THESIS

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By

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ABSTRACT OF THESIS

KEEPING IT ALL TOGETHER: THE CHALLENGE OF
COMPLEXITY, REPUTATION, AND SUPPLY CHAIN CRISES

Supply chains are developed to reduce business expenses and increase efficiency. However, a disruption in the supply chain, or a failure in one of the links, can expose organizations to crises that can severely impact short-term bottom line and long-term corporate reputation. This study examines the communication challenges inherent in supply chain crises using Samsung's 2016 Galaxy Note 7 phone crisis as a case study. Results of this study show, in a supply chain crisis, stakeholders hold the organization responsible, regardless of where in the supply chain the break occurred. This study also examines the impact of complexity inherent to supply chain crises and the challenges organizations face during a crisis when organizational reputation is impacted by links in the supply chain outside the organization's direct control.

KEYWORDS: Supply Chain Crisis, Crisis Communication, Reputation
                Management, SCCT, Samsung

Kathleen L. Ambrose
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April 25, 2018
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Date

KEEPING IT ALL TOGETHER: THE CHALLENGE OF COMPLEXITY,
REPUTATION, AND SUPPLY CHAIN CRISES

By

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April 25, 2018

To my Mama Chris, the life of the party, the woman who danced when the music was good, read incessantly, and encouraged me to be uniquely myself. And to my Pop Pops. Thank you for loving me so and letting me be your shadow. I miss you both so much and am grateful to feel you always with me.

Table of Contents

Chapter One: Introduction

Current business trends show growing reliance on supply chains to meet consumer demands (Natarajarathinam, Capar, & Narayanan, 2009). While supply chains reduce lead-time and inventory costs, they also open organizations to risk, as direct control is lost over product manufacturing and outcomes (Campi, 2013). Reliance on supply chains make businesses more vulnerable to crises and loss of revenue (Masullo, 2017; Powell, 2011). A recent survey conducted with senior supply chain professionals found that over half of the business crises were directly linked to supply chain disruptions and were predicted to continually increase (Masullo, 2017). Powell (2011) found supply chain disruptions to be the most dangerous risk to an organization's revenue drivers. The fragility of a supply chain is due to the already thin margin and schedule suppliers face - any delay or disruption has serious ramifications for organizations several steps down the chain, as well as the end users (Fisher, 2011; Manuj & Mentzer, 2008a; Manuj & Mentzer, 2008b).

Managing supply chain risk is growing in importance as organizations recognize the interdependent nature of supply chain operations and the domino effect of one disruption in the supply chain (Faisal, 2009; Ritchie & Brindley, 2009; Zsidisin & Ritchie, 2009). Long supply chains, including global supply chains, further increase supply chain complexity and risk (Manuj & Mentzer, 2008a; Manuj & Sahin, 2008; Norrman & Jansson, 2004) and can limit organization flexibility in a crisis (Natarajarathinam et al., 2009). Identifying exactly where product failure occurred in a complicated supply chain can be challenging and time consuming.

While supply chains are developed to reduce business expenses and increase efficiency, a disruption to that supply chain or a failure in one of the links can expose organizations to crises that can severely impact short-term bottom line and long-term corporate reputation.

Organizational reputation, or the perception of the organization held by stakeholders, is a valuable resource that is threatened during a crisis (Coombs & Holladay, 2002; Seeger & Ulmer, 2001). Stakeholders are "any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984, p. 46). Positive interactions lead to favorable reputations while negative interactions, such as a crisis, threaten positive reputation and can lead to unfavorable reputation (Coombs & Holladay, 2006; Davies, Chun, Da Silva & Roper, 2003; Dilenschneider, 2000).

Due to the varying perceptions of responsibility by both the stakeholder and organization, crisis response strategies must be structured to seek understanding of both perceived and actual responsibility. Despite an organization's level of control over the practices and timelines of suppliers, stakeholders will hold the organization selling the end product responsible for any product failings. Organizations must balance communicating to stakeholders regarding responsibility while determining the cause of the supply chain issue internally.

The number of organizations with supply chains is steadily increasing (Natarajarathinam et al., 2009) and the differences in supply chain crises versus other organizational crises have not yet been examined in a communication context. Literature on supply chains originates mostly from business and management journals. Current

literature offers insight into proper management of supply chains (Blackhurst & Wu, 2009; Powell, 2011; Slack, Brandon-Jones, & Johnston, 2013; Zsidisin & Ritchie, 2009; Zuckerman, 2002), risks inherent in the use of supply chains (Chapman, Christopher, Jüttner, Peck & Wilding, 2002; Liu & Wang, 2011; Ritchie & Brindley, 2009; Natarajarathinam et al., 2009), and other internal organizational objectives regarding supply chain management (Blackhurst & Wu, 2009; Gaudenzi & Borghesi, 2006; Ritchie & Brindley, 2009; Zuckerman, 2002) but fails to account for the external perception of an organization from a stakeholder perspective. Organizations utilizing supply chains and outsourcing control must be prepared to rationalize the stakeholder's dissonance in the event of a crisis. Stakeholders will hold the organization responsible for supply chain crises regardless of the number of agencies involved within the supply chain. In managing reputation and crisis response, organizations must acknowledge stakeholder perceptions of responsibility, which may be at odds with actual responsibility. Supply chain crises are pertinent for crisis communicators to study because they uniquely challenge stakeholder attributions of responsibility during a crisis.

Supply chain crises also uniquely challenge organizational reputation through complexity. With the rise of supply chain outsourcing, organizations now entail multiple entities, complicating the level of control an organization has over its end product as well as the stakeholder's perception of what constitutes the organization. Where organizations once controlled all elements of production, agency is now more commonly externalized as organizations increasingly rely on supply chains for their products. While theorizations of reputation originally only relied, inclusively, on the organization's own actions, recent crises have involved supply chain members constructing organizational reputation

(Coombs, 2006; Coombs & Holladay, 2002; Fombrun & van Riel, 2003; Newsom et al., 2012). Winkleman (1999) states "For wherever the reputation goes, so goes the company-its profits, its stock price, its hold on the market, its hold on employees…" (p. 80). The organizational response must take into account the impacted organizational reputation in a complex and fragmented organizational makeup. Key to this complex environment is the increasing widespread distribution of labor (outsourcing) and, in effect, the distribution of control through increasing organizational members. Ultimately, utilization of a supply chain introduces complexity and shared accountability, increasing the challenge organizations face during crisis when reputation is dependent on members outside the organization's direct control.

The organizational response must take into account the impacted organizational reputation as a result of conflicting perception of organizational responsibility and control as organizations simultaneously manage at-fault suppliers while answering the stakeholders' demand for an explanation of the crisis. The unique attributions of responsibility require an adapted approach to crisis response strategies. Hittle and Leonard (2011) call for further examination of supply chain crisis management to improve organizational functioning and stakeholder relations. This study answers that call by examining the communication challenges inherent in supply chain crises due to the dissonance of actual and perceived responsibility.

To begin, literature regarding stakeholder perceptions of crises and the pursuit of identifying a responsible party is offered. In the next chapter, stakeholder theory and attribution theory support the idea that in a supply chain crisis, organizations must understand the varying stakeholder perspectives regarding the crisis, particularly

regarding attribution of responsibility and control. Situational crisis communication theory (SCCT), a potential crisis response framework for supply chain crises, is examined within the context of a supply chain crisis. The challenge of establishing organizational reputation when incorporating multiple entities within the organization is explored and reconciled with the tenets of SCCT. Finally, literature on supply chain and supply chain risk management is offered in order to contextualize the characteristics and risks associated with this type of organizational model, as well as offer insight into the challenges unique to a supply chain crisis.

A notable and recent supply chain crisis, Samsung's Galaxy Note 7 phone crisis, is examined to highlight the complexities inherent in this distinct crisis type and to study the organizational handlings of a past supply chain crisis, as well as media response. The study concludes by providing theoretical implications and outlining future research on supply chain crisis communication.

Chapter Two: Theoretical Framework

Stakeholder Perceptions of Crises

Crisis communication research explores the role of communication before, during and after a crisis to better understand the impact of organizational response and engagement on the onset of and recovery from a crisis (Coffelt, Smith, Sollitto, & Payne, 2010). Effective crisis management involves operational recovery or sustainment, minimizing stakeholder and organizational losses, and learning from past experiences (Miller & Horsley, 2009; Pearson & Clair, 1988). In times of crisis, an organization must respond to publics and understand that organizational crises create crises for individuals (Milburn, Schuler, & Waterman, 1983). Heath and Millar (2004) discuss the importance

of individual perception regarding crises stating, "each crisis has an actual dimension and a perceived dimension" (p. 6). Interpretation and perception is the way that the individual is linked to the collective formation and actualization of crises: individual perceptions of publics are important to consider during a crisis from an organizational point of view.

Stakeholder theory. Stakeholder theory supports this suggested importance of the individual, positing that in the midst of a crisis, organizations should not remain narrowly focused on stockholder's needs, but rather consider the effects of the crisis on individual stakeholders (Freeman & Gilbert, 1987). For an organization to successfully manage a crisis, it must consider critical relationships to include stakeholders, or publics with an actual or perceived tie to the organization (Freeman & Gilbert, 1987; Ulmer, 2001). Such a perspective can "mean the difference between continued organizational successes and organizational failures" (Pearson & Clair, 1998, p. 71).

Waymer and Heath (2007) suggest a greater focus on the "voices of the affected publics, those whose interests are part or most of the reason why the subject organization is suffering a crisis and in need of responding to public and media inquiry" (p. 88). Stakeholder theory offers this shifted focus, assigning all stakeholders intrinsic value and going against the conventional assumption of the shareholder model which places focus only on stakeholders that have a significant influence on shareholder value (Alpaslan, Green, & Mitroff, 2009; Laplume, Sonpar, & Litz, 2008). Crisis managers operating under this framework prioritize establishing mutually trusting and cooperative relationships with stakeholders, put in the effort to best understand how different stakeholders could be affected by and respond to a crisis, and are more cooperative in

attending to individual stakeholder interests during a crisis, past the point of legal or contractual obligation (Alpaslan et al., 2009; Jones, 1995). This approach is utilized for both strategic and moral reasons. Strategically, consideration of all stakeholders cognizant can lead to better crisis outcomes. Morally, a consideration of all stakeholders, not just those recognized as impactful to the bottom line, is a more ethically strong organizational practice. Alpaslan et al. (2009) propose crisis managers who utilize stakeholder theory over the shareholder model have more successful outcomes, such as faster crisis recovery time.

Organizations facing supply chain crises could benefit from a stakeholder oriented perspective when deciding how to address the supply chain crisis and its skewed levels of responsibility. An understanding of stakeholder perceptions regarding the attribution of responsibility and control in the crisis is important to the creation of a successful crisis response.

Attribution theory. Attribution theory helps us understand and anticipate how people cope with events based on the amount of responsibility people attribute to the individual or group responsible (Heider, 1958). Attribution theory is a useful framework for crisis management (Coombs, 1995). Heider (1958) offers that individuals are active in interpreting the interactions and events that occur and engage in logical and consistent processes of sensemaking when interpreting. The process of interpretation is done in order to both garner understanding, as well as establish control of the environment in which the individual exists. In the instance of an organizational crisis, impacted stakeholders are likely to engage in interpretation to make sense of the changing environment and determine at-fault parties (Coombs, 2007).

Heider (1958) developed attribution theory to examine the human tendency to attach meaning to individual behaviors both within oneself and others. When an individual deems a cause to their own or others' behaviors, they determine an attribution (Littlejohn, Foss & Oetzel, 2017). Attribution is an internal process, of thinking, as well as an external process, of talking, to engage in interpretation and understanding of the roots of causality for individual behavior and other's behavior. The perceived cause of the action in question can be attributed to that of dispositional or situational factors (Dainton & Zelley, 2015). Dispositional factors are unique to the individual and are relatively unchanging personal features such as personality or biological traits. Situational factors are those that can be applied to organizations in crisis. These factors are uncontrollable and established by the environment or specific circumstance, and are contextually driven (Heider, 1958; Dainton & Zelley, 2015).

The process of attribution has been elaborated on to also include control, or whether or not we believe the party in question was able or unable to alter the cause of the action (Manusov & Spitzberg, 2008). Control attribution could occur when an organization faces a supply chain crisis and cannot meet stakeholder demands. The stakeholder engages in the process of attribution to determine whether the organization is facing the supply chain crisis because of a circumstance that was able to be altered, such as a lack of proper management of the supply chain, or lack of planning and preparing for supply chain incidents, or unable to be altered, such as a natural disaster shutting down elements of the supply chain.

A focus on attribution of responsibility deviates from the perceiver seeking cause of an action and focuses more on the human desire to assign responsibility for the behavior

or outcome (Manusov & Spitzberg, 2008). Attributions of responsibility are important to studies of stakeholder sympathy in regard to corporate responsibility in crises. The more responsibility an organization is perceived to have in regard to the crisis the greater the negative stakeholder perception of the organization (Coombs, 2007; Manusov & Spitzberg, 2008).

McAuley, Duncan, and Russell (1992) developed a measure of attribution of responsibility based on (1) isolated stability, if the individual or group is frequently involved in similar events; (2) external control, if outside sources or agents other than the individual or group involved had some responsibility for the event; and (3) locus/personal control, if the individual or group in question could have done something to prevent the event

In a supply chain crisis, organizations should consider stakeholder attributions of both control and responsibility. The stakeholder's perception regarding the level of organizational control over the supply chain crisis is more important for crisis response strategies than the actual level of organizational control. Stakeholder's perceptions of organizational control will inform assessments of responsibility.

Organizational reputation. Reputation is an important resource for organizations that affects publics' behavioral intentions and attitudes toward the organization (Coombs & Holladay, 2002; Coombs & Holladay, 2006; Newsom, Turk & Kruckeberg, 2012; Seeger & Ulmer, 2001; Winkleman, 1999). An organization's reputation is established by understood values developed between the organization and its stakeholders (Coombs & Holladay, 2006; Fombrun & van Riel, 2003; Newsom et al., 2012). Reputation is a result of "what [organizations] do, what [they] say and what others say about [them]" (Newsom

9

et al., 2012 p. 3). In other words, stakeholders form a reputation with organizations through direct interactions, mediated interactions (such as media reports and advertising), and word of mouth from other stakeholders (both in person and online) (Coombs, 2007). Reputation is "widely recognized as a valuable, intangible asset" (Coombs, 2007, p. 164) that can improve organizational standing. Coombs (2007) states "Most of the information stakeholders collect about organizations is derived from the news media," which is why media reports are an important element of reputation management (p. 164).

The complexity of supply chains can complicate organizational reputation, particularly at a time of crisis. Reputation is formed through "interactions and communication between organizations and stakeholders" (Coombs & Holladay, 2006, p. 124; Fombrun & van Riel, 2003), but if an organization is not forthcoming regarding their reliance on a supply chain, stakeholders may not include suppliers in their perception of organizational reputation. In a supply chain crisis, however, suppliers are actively involved and impacting the organization's reputation. Supply chain crises can further complicate reputation by introducing multiple organizational members that must be incorporated into the mutually understood values of the organization at a time of crisis.

Current research has not yet fully developed impacts of complexity on organizational reputation; although stakeholders perceive organizations as singular, the realities of an increasingly outsourced world translate to theoretical inconsistencies for research and damaging consequences for organizations in crisis. Reliance on suppliers and outsourcing of labor introduces greater potential for skewed perceptions of

organizational reputation; in a supply chain crisis, organizations must answer as the sole responsible party for multiple entities' actions impacting reputation.

Barnett and Hoffman (2008) made a call for further research regarding reputation past the traditional definition of corporate action alone impacting reputation. They examined reputation in relation to other organizations under the notion of "the company you keep affects the company you keep," asserting the actions of surrounding, unrelated organizations have an impact on the separate organization's reputation (p. 1). Veil, Dillingham and Sloan (2016) had similar findings proposing a spillover crisis, or when "events in an external organization create concern, uncertainty, or perceptions of harm for another organization" (p. 317). In a spillover crisis, an unrelated organization potentially receives reputational damage, or negative spillover, due to a similar organization's crisis.

While both supply chain crises and spillover crises deal with stakeholder perception of organizational responsibility, it is important to note a key distinguishing factor between the two, the element of control. In a spillover crisis an organization is unable to control the happenings of an outside but related organization. A supply chain crisis, on the other hand, is directly related to the organization as a member of its supply chain has caused the crisis.

Responding to crises that involve supply chains and multiple identities creating negative spillover complicates theory predicated on central organizational reputation and requires new considerations of crisis response strategies to account for the complexity.

Crisis Response Strategy

As a function of public relations, the purpose of crisis communication response is to prevent or lessen the negative outcomes of a crisis and primarily to protect the interests of

the organization at the heart of the crisis (Coombs, 2012). Responses include instructional information for physical protection, adjusting information to help stakeholders cope psychologically with the crisis, and reputation management responses to protect the reputation of the organization both during and following the crisis (Sturges, 1994).

Instructing and adjusting information "represents what stakeholders need and want to know after a crisis hits" and are crucial elements of crisis management (Coombs, 2006, p. 246; Sturges, 1994). Instructional information describes what happened during the crisis, or the crisis basics, and what, if anything, stakeholders must do to protect themselves. Adjusting information includes the actions the organization is taking to fix the problem and prevent the crisis from happening again (Coombs, 1999; Coombs, 2006; Sturges, 1994). While organizations may not have all the information regarding the crisis, what information the organization can offer should be given to stakeholders immediately following the crisis (Coombs, 2006).

Coombs (1999) states instructing information can communicate organizational control during a crisis to stakeholders. If an organization presents information regarding the crisis basics, what stakeholders should do and how the organization is correcting the crisis, stakeholders perceive the organization as more in control. Whether or not an organization provides adequate instructing and adjusting information "also could affect the organization's reputation" (Coombs, 1999, p. 127) either positively or negatively.

Eisenberg (1984) argued for the use of strategically ambiguous communication within organizations to allow for differing, individual perspectives regarding organizational statements and values. Strategic ambiguity can also be used in crisis response (Coombs & Holladay, 1996; Ulmer & Sellnow, 1997). When used ethically and

effectively ambiguity can allow for multiple interpretations of the crisis if "through the exchange of complete and unbiased information, ambiguity enhances the stakeholders' understanding of the situation's complexity" (Ulmer & Sellnow, 1997, p. 229).

Situational crisis communication theory. Following a crisis, organizations can engage in crisis response strategies to: frame attributions of the crisis, influence perceptions of the organization in crisis, and reduce the negative effects generated by the crisis (Coombs, 1995; Coombs, 2007). SCCT, grounded in attribution theory, offers a communication framework to best manage reputational affects of crises on an organization. SCCT requires analysis of organizational standing and the current crisis situation in order to predict likely stakeholder perceptions of the organization. Once perceptions of the organization, its stakeholder relations, and climate of crisis are clear, the best crisis response strategy to protect the organization's reputation can be determined (Coombs, 2007).

According to SCCT, individuals consider an organization's crisis history, prior relational reputation, and initial crisis responsibility when attributing crisis responsibility to organizations (Coombs, 2007). Initial crisis responsibility "is a function of stakeholder attributions of personal control for the crisis by the organization" or how much stakeholders perceive the organization to have caused the crisis (Coombs, 1995; Coombs & Holladay, 2002, p. 166). The greater the level of responsibility attributed to the organization by stakeholders, the more damaging the crisis will be to organizational reputation (Coombs, 1995; Coombs, 2006). A poor prior relational reputation with the organization and/or a history of similar crises will intensify attributions of responsibility and further increase reputational threat (Coombs, 2007).

SCCT identifies three crisis types (victim, accidental, intentional) and corresponding crisis response strategies (denial, diminish, rebuild). The response strategies are aligned with the crisis types based on the amount of responsibility attributed. The greater the attribution of responsibility in regards to the crisis, the greater the crisis response accommodation to stakeholders.

Crisis type is assigned by how stakeholder perceptions are framing the crisis and is the first step in determining perceptions of crisis responsibility (Coombs, 2007; Coombs & Holladay, 2002). The framing of the crisis impacts the framing of the message, which "shapes how people define problems, causes of problems, attributions of responsibility, and solutions to problems" (Coombs, 2007, p. 167; Coombs, 2015; Cooper, 2002). The victim crisis type has very low attribution levels of responsibility such as a natural disaster or product tampering. Accidental crisis types have minimal levels of crisis responsibility and include such events as technical-error accident or technical-error product harm. In this crisis type, stakeholders perceive the event to be uncontrollable or unintentional by the organization (Coombs, 2007; Coombs, 2015). The intentional crisis type attributes the highest level of responsibility to the organization and includes human-error accidents, human-error product harm, and organizational misdeeds. In this crisis framing, stakeholders perceive the crisis to be purposeful (Coombs, 2007; Coombs, 2015).

Crisis response strategies, or what the organization does and says following a crisis, "are used to repair the reputation, to reduce negative affect, and to prevent negative behavioral intentions" (Coombs, 2007, p. 170). Following a crisis, an organization must accept the appropriate level of responsibility for the crisis and answer for the crisis'

impact on stakeholders. Organizations can deny, diminish, or rebuild for the primary

crisis response strategy. The deny response is utilized when the organization either has no

responsibility for the crisis or seeks to demonstrate no crisis exists (Coombs, 2006). The

diminishing crisis response option acknowledges the existence of a crisis but argues the

level of responsibility of the organization is lower than stakeholders believe. Utilizing a

diminishing crisis response an organization can assume minimal responsibility or attempt

to persuade stakeholders the crisis is not as severe as originally presumed. When

assuming minimal responsibility, organizations express no intention to do harm or that

there was no way to prevent the crisis. If organizations attempt to minimize the harm of

the crisis, an explanation of why the crisis is less severe than stakeholders perceived it to

be should be offered (Coombs, 2006; Coombs, 2015). In this response strategy,

organizations seek to lessen the attributions of responsibility assigned by stakeholders. In

the rebuild crisis response strategy, organizations assume full responsibility for the crisis

and seek stakeholder forgiveness, sometimes offering compensation such as money, free

products or other gifts (Coombs, 2006; Coombs 2007; Coombs, 2015). Bolstering

strategies can also be used to supplement the primary response strategies in an attempt to

further increase reputational assets. Bolstering, in a sense, seeks to generate goodwill

amongst stakeholders and can be done through reminders of past organizational good

works, praising stakeholders, and/or painting the organization as a victim in the crisis

(Coombs, 2007; Coombs, 2015).

Coombs (2006) states "An appropriate crisis response strategy matches the level of

reputational damage generated by the crisis situation with the 'protective powers' of the

crisis response strategies" (p. 245). These protective powers refer to the "ability to create

perceptions of the organization taking responsibility for the crisis and aiding victims"

(Coombs, 2006, p. 255). In other words, if crisis response strategies are selected

according to stakeholder perceptions of responsibility, the aligned response has the

potential to positively impact the organization's reputation and improve the crisis

situation. Accordingly, organizations that select crisis response strategies that do not

align with stakeholder assessments of control and responsibility will not benefit from the

"protective powers" that would be offered by an aligned response strategy.

While SCCT offers an effective framework to determine crisis response in order to

impact stakeholder perceptions, the theory does not account for actual versus perceived

levels of responsibility in crises where responsibility is obscured. Supply chain crises are

generally not under the direct control of an organization, but if the organization does not

attune to the unique stakeholder perceptions regarding the organization as the at-fault

party, the correct crisis response strategy will not be selected. Organizations must utilize

SCCT in conjunction with stakeholder theory to determine stakeholder perceptions of

responsibility versus organizational assessments of responsibility.

To better understand the communicative strategies needed in a supply chain crisis, a

description of supply chains, and the unique characteristics of supply chain risk

management is outlined next.

Supply Chain Management

Supply chains function to meet customer demand through an interconnected system

of suppliers, production facilities, and related systems working toward production of a

final product (Blackhorse & Wu, 2009; Stock & Boyer, 2009). Prioritizing efficiency,

supply chains attempt to meet consumer demands while maintaining low inventory costs.

Supply chains are ultimately responsible for customer satisfaction and should involve all phases of design, procurement, manufacturing, and distribution (Sinha, Whitman & Malzahn, 2004). Gaudenzi and Borghesi (2006) suggest each member of the supply chain has unique approaches and goals but should be united under the common goal of the final market product and highest level of service for customers. Supply chain management serves to organize these motivations across the various organizations involved in order to establish efficient and satisfactory production for consumers.

Supply chain management requires a mindset of collaboration to coordinate all entities involved in the supply chain in order for the supply chain to work as effectively and seamlessly as possible (Zuckerman, 2002). Blackhurst and Wu (2009) assert "Effective supply chain management is a crucial component of a firm's ability to fill consumer demand, regardless of the industry" (p. 1). Zuckerman (2002) makes a similar claim stating "Companies today cannot ignore supply chain management and expect to survive. Nowadays, supply chain thinking is common operating practice for all major corporations worldwide" (p. 4).

Slack et al. (2013) offer five performance objectives to evaluate a supply chains' effectiveness in meeting both performance goals as well as customer satisfaction. Supply chains are evaluated on quality, speed, dependability, flexibility, and cost. Maintaining all performance objectives across the entirety of a supply chain is challenging for managers. With the interdependence of all suppliers, the supply chain is vulnerable to the varying constraints and fluctuations of all supply chain members (Slack et al., 2013). These concerns expose organizations to increased levels of risk as the level of control over the

final product decreases and the potential for breaks in the supply chain can lead to delays

or halts on production (Powell, 2011; Slack et al., 2013).

The importance of incorporating supply chain risk management alongside supply

chain management is summarized well by Zsidisin and Ritchie (2009):

[Supply chain management] today demands a much more proactive, strategic and

corporate approach, engaging with the other organizations throughout the supply

chain in seeking to gain sustainable competitive advantage and profitability through

leaner, more agile, efficient, resilient, comprehensive and customer-focused

strategies. Developments of this nature may not automatically reduce the risks and

indeed may certainly change the profile of risks encountered if not increasing them

(p. 2).

Supply chain risk management. A universal definition of risk is difficult to offer

as definitions of the concept vary depending on the academic and professional discipline

in question (Ritchie & Brindley, 2009). Generally, risk can be defined as "the extent to

which there is uncertainty about whether potentially significant and/or disappointing

outcomes of decisions will be realized" (Sitkin & Pablo, 1992, p. 9). Risks to supply

chains can be divided into external and internal factors, with some researchers adding the

factor of network relation to the categorization (Chapman et al., 2002). Examples of

internal risk include production issues, structural defects, labor concerns, and IT-related

incidents. External risks include political and legal influences, natural disasters, social

factors and marketing risks. Network related risks are the interactions among the

organizations involved in the supply chain (Chapman et al., 2002; Liu & Wang, 2011;

Natarajarathinam et al., 2009). Each risk type has the potential to result in a supply chain

18

disruption, and potentially a supply chain crisis for which an organization must answer. With a variety of potential disruptions to the supply chain it is unsurprising that supply chains ranked as one of the top three business risk areas by 500 financial executives in both the United States and Europe (Ritchie & Brindley, 2009).

Organizations utilizing supply chains face "increasingly uncertain demand as well as supply" making supply chain risk management a burgeoning area of management that is being implemented more frequently (Lee, 2008, p. 99; Zsidisin & Ritchie, 2009). Supply chain risk management takes a proactive approach to mitigating disruptions in the supply chain and is dependent on quality management to foresee potential disruptions and create plans to mitigate the negative impacts of a supply chain disruption when it occurs (Ritchie & Brindley, 2009).

A global supply chain introduces further complexity with greater numbers of suppliers to manage and various international constraints. As Barry (2004) states, "The scope of supply chain sources and the markets are global; so is the risk" (p. 695). Researchers are looking specifically at global supply chain risk management to best assess risks unique to global supply chains (Manuj & Mentzer, 2008a; Manuj & Mentzer, 2008b).

The burgeoning field of supply chain management and risk management demonstrates the growing organizational recognition of the risks inherent with supply chains and the necessity for internal measures to manage these risks. Just as organizations have begun to realize the need for internal processes to prevent and mitigate supply chain risks, external measures must be put in place to respond when such risks are realized and result in supply chain disruptions and potential crises.

Research Questions

Supply chain crises simultaneously distort attributions of responsibility while challenging perceptions of organizational reputation. The fundamental suggestion of SCCT— use crisis responsibility level to guide crisis response— is key to the acute paradox underlying supply chain crises. When suppliers are identified during a crisis, stakeholder notions of organizational reputation are complicated by the involvement of multiple organizations not before considered as part of the organization. Current crisis response strategy does not account for the reputational shift from a single to multiple identities and crisis response strategy literature fails to incorporate the perceived and actual level of responsibility an organization has over the crisis, as demonstrated through supply chain crises. As more diverse suppliers are incorporated into an organization's function and appearance, response strategies must adapt to the increasing dissonance between responsibility and reputation.

To demonstrate this unique crisis type, Samsung's 2015 Galaxy Note 7 phone crisis will be examined. In August, 2016, Samsung released its Galaxy Note 7 smartphone in an attempt to reach holiday markets and beat out competitor, Apple, for a new smartphone release during the profitable sales time (Brody, 2016). Less than one week after being placed on the market, reports regarding phones overheating and batteries exploding surfaced (Lee & Pak, 2016). The unpredictable nature of the exploding cell phones led the United States Federal Aviation Association and the United States Consumer Product Safety Commission to issue a ban on all Galaxy Note 7s from aircrafts and advisement for consumers to discontinue use of the phone (Dolcourt, 2017). Samsung issued a global recall for over 2.5 million phones and offered customers a

replacement phone. Samsung utilized a new supplier for the replacement cell phones; however, despite this new supplier, Samsung yet again faced reports of batteries overheating and exploding phones (Lee & Pak, 2016). After this, Samsung discontinued the production of the Galaxy Note 7 and advised consumers to stop using the device. Estimations show the company lost upwards of $5 billion due to this supply chain crisis (Brody, 2016; Dolcourt, 2017). To examine this case, the following research questions are posed:

RQ1: What crisis response strategies did Samsung use during the supply chain crisis to communicate with publics?

RQ2: What are the stakeholder attributions of responsibility during Samsung's supply chain crisis as seen through media reports?

RQ3: What are the organization's attributions of responsibility during Samsung's supply chain crisis as seen through organizational documents?

RQ4: What challenges did Samsung experience during the supply chain crisis and resulting recall as evidenced by the organizational documents and media reports?

Chapter Three: Methods

The purpose of case study research is to develop the boundaries of contemporary phenomenon, cognizant to the larger context surrounding the process; as Yin (2002) observes, "The case study is the method of choice when the phenomenon under study is not readily distinguishable from its context" (p. 4). Case studies explicate the problem through observable mechanisms, including "a discussion of important elements, and finally, 'lessons to be learned'" (Creswell, 1998, p. 221). Yin (1981) advocates a scholarly recognition of the narrative implicit to crisis events through qualitative and

critical research; case studies can "provide description, test theory, or generate theory" (Eisenhardt, 1989, p. 535). Case study research examines a broad range of historical, attitudinal, and behavioral issues and should be conducted in a comprehensive applied manner with the intent of translating the work into practical recommendations (Yin, 2002).

Data Collection

Media reports and organizational documents from Samsung were collected to identify the crisis timeline, compose a crisis summary, and examine crisis communication strategies and attributions of responsibility in the case study.

Media reports. A Google News Search with the search term "Samsung Galaxy note 7" and a date range of 08/01/2016, the month that the phones were released, until 02/28/2018 to allow for the most current news coverage, returned 4,280,000 results. The search was then narrowed to "Samsung Galaxy note 7 supply chain" with a return of 10,500 results. Many articles from the original search were included in the narrowed search term. Of the 10,500 "Samsung Galaxy note 7 supply chain" results, 50 unique articles were identified. The evidence in this case summary includes 36 news articles from the following sources: USA Today (n= 3), The New York Times (n= 8), National Public Radio (n= 2), Forbes (n= 4), The Wall Street Journal (n= 6), CNBC (n= 3), Fortune (n= 2), TIME (n= 1), Reuters (n= 3), NBC (n= 1), BBC (n= 1), and The Washington Post (n= 2) and 14 industry specific online magazines including CNET (n= 5), Supply Chain 247 (n= 1), Supply Chain Dive (n= 3), Wired (n= 1), Slate (n= 1), The Verge (n= 2), Fast Company (n= 1), and Tech Radar (n=1).

Organizational documents. To obtain organizational documents, the search

feature on Samsung's website was used. The range of time from when the device was

released, 08/01/2016, until the month the cause of the faulty phones was determined,

01/30/2017, was searched with the term "Galaxy Note7" retrieving all organizational

statements from Samsung during that time (n= 20). Samsung's first organizational

statement was on August 2, 2016 revealing the new smartphone and its features. The first

statement acknowledging the overheating phones was on September 2, 2016, when the

organization explained the product exchange program for consumers with faulty phones.

A series of statements throughout September offered updates regarding the growing

severity of the overheating and exploding phones. On September 15, 2016 the voluntary

US recall was announced. By October 10, 2016 Samsung announced the Galaxy Note 7

would not be sold in stores any longer. The organization released a final statement on

January 22, 2017 offering an explanation as to why the phones were overheating.

Data Analysis

Before analysis, all documents were placed in chronological order to develop an

understanding of the progression of the supply chain crisis. In order to best understand

the details of the crisis, an initial overview of the data included reading each document

and taking notes. Data was examined based on category of retrieval and within the

category, in chronological order (for example, media reports were examined in the order

they were released, then organizational documents in order of their release).

Both inductive and deductive analyses were used to examine the organizational

documents and media reports. Although qualitative research often relies on inductive

analysis, researchers advocate for a balanced approach to qualitative research using both

inductive and deductive processes (Hyde, 2000; Kirk & Miller, 1986; Parke, 1993). Relying only on inductive analysis "could deprive the research of useful theoretical perspectives and concepts" while relying only on deductive analysis "could preclude the researcher from developing new theory (Hyde, 2000, p. 88). Deductive analysis was used for the following research questions:

RQ1: What crisis response strategies did Samsung use during the supply chain crisis to communicate with publics?

RQ2: What are the stakeholder attributions of responsibility during Samsung's supply chain crisis as seen through media reports?

RQ3: What are the organization's attributions of responsibility during Samsung's supply chain crisis as seen through organizational documents?

Analysis for RQ1 was guided by the crisis response framework SCCT (Coombs, 1995; Coombs & Holladay, 2002; Coombs, 2006; Coombs, 2007; Coombs, 2015) in order to assess Samsung's crisis response strategies during the crisis. Samsung's organizational responses were found in the data and coded for qualities present in the SCCT response strategies.

Analysis of RQ2 and RQ3 was guided by attribution theory (Heider, 1958) and measured according to Stratton's (1997) attributional coding process. Each attributional statement was coded to ensure the statement met the standard dimension of attribution, or that the crisis was a result of an identifiable condition or event.

Inductive thematic analysis was used to analyze organizational documents and media reports to answer the following research question:

RQ4: What challenges did Samsung experience during the supply chain crisis and

resulting recall as evidenced by the organizational documents and media reports?

Clarke and Braun (2014) offer "a good [thematic analysis] involves more than

simply reporting what is in the data; it involves telling an interpretive story about the data

in relation to a research question" (p. 6626). Guest, MacQueen and Namey (2012) state

thematic analysis can offer perspectives regarding not only the subjective human

experience but also the "social and cultural phenomena as well" (p. 18). Both Clarke and

Braun (2014) and Guest et al.'s (2012) assessments of potential benefits of thematic

analysis support the application of the process in the current research. Assessing a past

supply chain crisis through not only the organizational or stakeholder lens but the greater

social and cultural lens as well can offer improved understanding of the unique

challenges of a supply chain crisis.

Steps to a successful thematic analysis range in number depending on the author

but are similar in concept (Braun & Clarke, 2006; Guest et al., 2012; Chapman, Hadfield,

& Chapman, 2015). Generally, the researcher must familiarize themselves with the data.

Next, potential themes should be identified. After themes are identified, they should be

reviewed, defined and named. Finally, conclusions should be drawn (Braun & Clarke,

2006; Guest et al.; Chapman et al., 2015). Analysis was conducted similarly to the

suggestions of Clarke and Braun (2014) and Braun and Clarke (2006). As suggested,

research questions guided the analysis of the data while also allowing for new,

unanticipated themes to emerge.

The data was repeatedly examined in order to immerse the researcher in the data,

through reading and rereading of the dataset and developing understanding of the context

of the data (Chapman et al., 2015). Both asides and commentaries were regularly taken as the data was examined. Asides, or succinct and clear reflections of the text and questions regarding the text, were written along the media reports and organizational documents (Lindlof & Taylor, 2011). Commentaries, or more elaborate asides dealing with broader issues, were taken on a separate page as organizational documents and media reports were reviewed (Lindlof & Taylor, 2011). As Lindlof and Taylor (2011) state, asides and commentaries are "jumping-off points for conceptual categories" (p. 244) based off what strikes the researcher as important or intriguing and are thus speculative. These comments help inform the next stage of the thematic analysis process, coding.

Once the crisis was thoroughly reviewed, the research question guided the first round of analysis through open coding line by line (Lindlof & Taylor, 2011). In this phase, the data was coded for smaller pieces of potentially meaning information (Clarke & Braun, 2014). After the data was combed through initially for qualities present in the research questions, the data was again examined to allow for new insights not previously accounted for within the research questions. The constant-comparative method was used to "see more clearly how the categories are differentiated from each other, how they interrelate, and how full (or empty) of compelling evidence they are" (Lindlof & Taylor, 2011, p. 251).

After codes were established, a wider focus was placed on the data to identify pertinent themes across codes. Organizing the coded data by broader meaning offers insight into patterns across the dataset that are important to the research questions, as well as new insights not anticipated (Clarke & Braun, 2014). Triangulation, through analysis of various data types (in this research through the organizational documents and media

reports) was also used as the method "represents a comprehensive and accurate picture of the data" and improves validity of the findings (Chapman et al., 2015, p. 203; Lindlof & Taylor, 2011).

Chapter Four: Analysis

This study sought to better understand communication strategies used during a supply chain crisis, attribution of responsibility during a supply chain crisis, and communication challenges inherent to this unique type of crisis. By examining a recent supply chain crisis, Samsung's Galaxy Note7 crisis, analysis of media reports and organizational documents offers insight into previously used crisis response strategies by an organization facing a supply chain crisis, as well as media attributions and organizational attributions of responsibility. This study allowed for new communication challenge themes to emerge to be explored in future research.

Crisis Response Strategies

In a crisis, an organization must answer for its actions by accepting responsibility and demonstrating accountability (Coombs, 2007). SCCT offers crisis response strategies as a way for organizations to accept responsibility in the eyes of its stakeholders. To assess Samsung's crisis response strategies, organizational documents and media reports released during the time of the crisis were used to answer the following research question:

RQ1: What communication strategies did Samsung use during the supply chain crisis to communicate with publics?

Analysis was guided by the crisis response framework SCCT (Coombs, 1995; Coombs & Holladay, 2002; Coombs, 2006; Coombs, 2007; Coombs, 2015) to assess

strategies used by the organization during the crisis to communicate with its publics. Primary crisis response strategies should be chosen based on the level of acceptance of responsibility and include: deny, diminish, and rebuild (Coombs, 2006). Secondary response strategies, or bolstering, can be used to supplement the primary strategies.

Samsung used all three primary strategies as well as the secondary strategy of bolstering. The use of response strategies shifted as the crises progressed. First, deny and diminish were used, assuming no responsibility or minimal responsibility. Rebuild strategies were used toward the end of the crisis, assuming responsibility and seeking forgiveness. Bolstering was used throughout.

Deny. Initially, Samsung denied responsibility asserting "heating issues reported by Galaxy Note 7 users could have been caused by using different cables or adaptors than the ones supplied with the phone" (Valerio, 2016, para. 8) and placing blame on an isolated supplier who was no longer in use (Lee & Lee, 2016). Samsung's denial strategies were found in media reports based on statements made by the organization, but were not found in the organizational documents online.

Diminish. Samsung diminished the severity of the crisis in organizational documents. Statements minimizing the number of overheated and exploding devices such as: "While there have only been a small number of reported incidents" (Samsung, 2016a, para. 2) and "Although there have only been a small number of reported incidents" (Samsung, 2016d, para. 3) were included before explaining the steps the organization was taking to address the crisis. Emphasizing a low number of reported issues aligns with the diminish crisis response strategies as Samsung acknowledged the existence of a crisis but

argued the severity of the crisis was less than stakeholders may have perceived (Coombs, 2006; Coombs, 2007; Coombs & Holladay, 2002).

Rebuild. Rebuild crisis strategies were seen in both organizational documents and media reports once the recall was issued. Rebuild strategies include compensation, or offering crisis victims gifts or money, and apology, when the organization assumes full responsibility and asks for stakeholder forgiveness (Coombs, 2007). Compensation in the form of bill credit or a gift card was offered to customers under shifting conditions. First, $25 was offered if customers chose a Galaxy Note 7 family device when exchanging the phone (Samsung, 2016a) and then expanded to exchanges for any other Samsung product (Samsung, 2016d). Once the second recall was in place, compensation was increased to $100 bill credit "for a customer who exchanges a Note 7 for another Samsung smartphone" and $25 bill credit for those seeking a refund or purchasing another smartphone (Samsung, 2016j, para. 5). Apology was used after Samsung decided to stop production and sale of the Galaxy Note 7. The organization ran a full page ad in *The New York Times*, *The Washington Post*, and *The Wall Street Journal* stating "An important tenet of our mission is to offer best-in-class safety and quality. Recently, we fell short on this promise. For this we are truly sorry" (Samsung, 2016k, para 1).

Bolstering. Finally, Samsung used bolstering strategies throughout the crisis in the organization documents. Bolstering is a strategy used to supplement the primary crisis response strategies and help repair organizational reputation by reminding customers of past good works and praising stakeholders for their patience and understanding (Coombs, 2007). Samsung's consistent pride in their brand and reminders of customer safety

prioritization were examples of bolstering as the organization reminded stakeholders of its positive traits in the midst of a crisis.

Examples of Samsung's bolstering include "Samsung continues to deliver the highest quality products" (Samsung, 2016b, para. 1), "Samsung has taken great care to provide affected consumers with the support they need" (Samsung, 2016d, para. 3), "Samsung is committed to producing the highest quality products" (Samsung, 2016d, para. 1), and "We thank the Department of Transportation, airlines, airports, our partners and Note 7 owners for their patience and support during this time" (Samsung, 2017a, para. 3).

Samsung used all crisis response strategies, however, theory suggests crisis response strategies should be chosen based on the attribution of responsibility held by stakeholders toward organizations for the perceived control and responsibility in the crisis. In order to best assess the crisis response strategies used, attribution of responsibility must be understood.

Attribution of Responsibility

To understand the attributions of responsibility during the Galaxy Note 7 crisis and begin explicating the role of responsibility in a supply chain crisis that may differ from previous conceptions of clear-cut responsibility during a crisis, the following questions were posed:

RQ2: What are the stakeholder attributions of responsibility during Samsung's supply chain crisis as seen through media reports?

RQ3: What are the organization's attributions of responsibility during Samsung's supply chain crisis as seen through organizational documents?

Analysis of RQ2 and RQ3 was guided by attribution theory (Heider, 1958) and Stratton's (1997) attributional coding process. In coding, an attributional statement was one that "an outcome is indicated as having happened, or being present, because of some identified event or condition" (Stratton, 1997, p. 124). Attributional statements had to meet the dimensions of internal/ external and/ or controllable/ uncontrollable. Internal/ external dimension assesses if the cause originated within the organization or was an external circumstance. Controllable/ uncontrollable assesses if the organization could have exerted a significant amount of control over the crisis or the crisis was completely out of the organization's control (Stratton, 1997).

Stakeholder attributions of responsibility, as seen through media reports (RQ1) unanimously attributed Samsung as the at-fault party. Such attributions of responsibility include "Samsung is to blame" (Swartz, 2016, para. 9), "Samsung… did not do the type of quality assurance and testing to make sure the Galaxy Note 7 was designed properly and totally safe" (Sullivan, 2016, para. 9), "Procedures have been either lax or ignored, and the safety checks you would expect to be present did not catch the flawed design" (Spence, 2016, para. 13), "If it's once, it could be taken as a mistake. But for Samsung, the same thing happened twice with the same model" ("Samsung permanently stops Galaxy Note 7 production," 2016, para. 16), and "Samsung… did not do the type of quality assurance and testing to make sure the Galaxy Note 7 was designed properly and totally safe" (Sullivan, 2016, para. 9). All attributions held Samsung directly responsible with most speculating the organization rushed the production and pushed design capabilities in order to compete with Apple's iPhone 7 release. *USA Today* reported an expert on lithium batteries said Samsung was at fault "for trying to create what he calls a

thinner 'club sandwich' – a layer of electrodes stacked in the phones battery – to give its devices a sleek design" (Swartz, 2016, para. 9) and an analyst with *Bloomberg Intelligence* stated "They were rushing to beat Apple and they made a mistake" (Spence, 2016, para. 9).

Samsung, on the other hand, did not attribute responsibility in any of the organizational documents (RQ3). The organization indirectly accepted responsibility following the recalls but did not attribute responsibility during the crisis. The acceptance of responsibility can be seen when President and COO Tim Baxter stated Samsung "appreciated the patience of our consumers, carrier and retail partners" and asserted Samsung was "committed to doing everything we can to make it right" (Samsung, 2016j, para. 4). At the press conference held in January, 2017 where the organization conclusively revealed the reason behind the overheating phones, President of Mobile Communications Business, DJ Koh "expressed his sincere apology and gratitude" but did not outright state Samsung was at-fault.

As noted in media reports, however, Samsung originally attributed responsibility to forces outside of the organization's control- consumers using incorrect charging equipment and a supplier no longer in use. *EBN*, an online community and reporting site for global supply chain professionals, and *Supply Chain Dive*, an industry news cite focused specifically on the supply chain industry, both report Samsung attributing the cause of the overheating phones as something that "could have been caused by using different cables or adaptors than the ones supplied with the phone" (Spieler, 2016; Valeria, 2016, para. 8). *The New York Times* reported on September 2, 2016, the day Samsung confirmed the first Galaxy Note 7 recall, that "Samsung said it thought the

problem came from a 'minute flaw' in the production of the batteries. Samsung would not name the supplier involved" (Mozur & Lee, 2016, para. 12). In contrast, Samsung's organizational documents from the same day announcing the recall did not attribute responsibility and reference a supplier issue, instead stating the recall was a result of "a battery cell issue" (Samsung, 2016b, para.1) and "isolated battery cell issues" (Samsung, 2016a, para. 1).

While media reports demonstrate a clear attribution of responsibility, holding the organization at fault for the overheating phones, the organization did not have as clear of attribution. This lack of awareness of responsibility was demonstrated in the array of crisis response strategies Samsung employed. The difference in the number of attributional statements in media reports (n= 18) versus organizational documents (n= 0) further indicates Samsung did not prioritize establishment of a coherent attribution during the crisis. Interestingly, the only acceptance of responsibility by Samsung is done by statements to the media and the full page advertisement in major newspapers. The clarity with which Koh states "We now feel a painful responsibility for failing to test and confirm that there were problems in the design and manufacturing of batteries before we put the product out to the market" (Sang-Hun & Mozur, 2017, para. 9) at the 2017 press conference held to explain the cause of the overheating phones, assumes responsibility more than any organizational document.

Samsung's Supply Chain Crisis Challenges

Thematic analysis of media reports and organizational documents was conducted to answer RQ4 (What challenges did Samsung experience during the supply chain crisis and resulting recall as evidenced by the organizational documents and media reports?).

Overarching themes of both supply chain systems challenges and communication challenges were identified.

        System challenges. Unsurprisingly, as the Galaxy Note 7 crisis was a direct result of a fault in the supply chain, the theme of supply chain challenges was prevalent in media documents. The theme was not, however, mentioned in Samsung's organizational documents. Thus, a divide in organizational response and media priority was found in the inductive analysis as it was with the deductive analysis of attribution of responsibility. Media reports, such as *The Wall Street Journal's* position, on the role of Samsung's crisis in better understanding supply chain complexities were recurrent:

> Samsung Electronic Co.'s botched recall of its Galaxy Note 7 smartphone is putting a spotlight on supply-chain oversight and raising questions about the ability of today's technology and management tools to help companies maintain quality control in giant complex networks of suppliers- as when products are being built and upgraded more swiftly (Loten & Norton, 2016, para. 1).

The supply chain challenges that emerged in the analysis included: the difficulty of managing a supply chain even for large companies, increased risks in global supply chains, dangers of shared suppliers across an industry, and the affect of industry pressures.

        Strong chains still have gaps. The challenge of effectively managing a supply chain is articulated by the not one, but two supply chain crises Samsung, an organization known for its prowess in supply chain management, faced. *The New York Times* supports Samsung's position of expertise in supply chain management commenting "the recall strikes at the heart of what has long been considered [Samsung's] greatest strength: its

management of the supply chain" (Mozur & Lee, 2016, para. 28) and concludes the article stating "You wouldn't think this would happen to a company like that, but somehow it slipped through" (para. 32). Suggestions for supply chain managers emerged in media reports during coverage of Samsung's crisis. A call for greater supply chain visibility in order to catch issues in production before they result in crises (Spieler, 2016), improved supplier relationships with an emphasis on value from suppliers, as opposed to low cost, and quality control (Brody, 2016) were recommended based off of Samsung's recalls.

After the Galaxy Note 7 phones had been pulled from the market and ceased production, during the January 2017 press conference revealing the cause of the overheating phones, *The New York Times* noted the surprising occurrence of Samsung's back-to-back supply chain crisis stating "the most interesting part of the presentation was what Samsung did not say: How could such a technologically advanced titan – a symbol of South Korea's considerable industrial might – allow the problems to happen to begin with?" (Sang-Hun & Mozur, 2017, para. 2).

Globalization of supply chains. Research shows global supply chains, while offering cheap labor and raw materials, are coupled with uncertainties and heightened risks (Barry, 2004; Manuj & Mentzer, 2008a; Manuj & Mentzer, 2008b). Valerio (2016) well summarizes globalization in today's supply chain stating "Organizations are finding that the supply chain is infinitely more complex than it was twenty or thirty years ago" (para. 3). Timothy Brown, managing director at Georgia Institute of Technology's Supply Chain & Logistics Institute, cautions that "companies looking to reduce costs by

outsourcing much of their supply chain to countries with cheaper labor markets also run the risk of sacrificing quality" (Loten & Norton, 2016, para. 9).

Samsung's supply chain crisis was further complicated and more difficult to manage due to reliance on a global supply chain. Comments regarding global supply chains remark on a system that is "very stressed" (Valerio, 2016, para. 3) with the potential for "low standards and few regulations" (Mozur & Lee, 2016, para. 27) particularly regarding smartphone batteries since the market is "full of counterfeits" (Valerio, 2016, para. 9).

Samsung also met problems identifying the cause of the crisis during the first recall due to the lengthy and complex global supply chain (Loten et al., 2016). Media reports noticed the organization's lack of clarity regarding the root of the issue and made comments such as "Samsung still doesn't even know the source of the problem" (Sullivan, 2016, para. 2) and "Exactly what went wrong remains unclear" (Oremus, 2016, para. 3). Interestingly enough, the at-fault supplier for the first recall was eventually determined to be from Samsung's own facility, Samsung SDI (Lee & Lee, 2016). This introduced a new concern for the crisis as Samsung SDI supplied lithium-ion batteries to many top electronic brands, including Apple (Lee & Lee, 2016; Spieler, 2016; Valerio, 2016).

Shared suppliers increase spillover risk. Until the exact issue was pinpointed, media reports questioned the safety of products containing Samsung SDI batteries. Samsung's own facility was then placed under the microscope as speculations of safety of electronics other than Galaxy Note 7s caused concern for companies such as Apple that utilized the lithium-ion supplier (Lee & Lee, 2016; Spieler, 2016; Valerio, 2016).

36

When Samsung SDI was revealed to be the cause of the faulty batteries, Valerio (2016) speculated "this development could disrupt the supply chain for new devices for the rest of the year" (para. 2). While this element of the Galaxy Note 7 crisis did not impact Samsung Electronics, the risk of reliance on the same suppliers is important for understanding supply chain crises and potential risks of supply chain interdependence.

Although not Apple's crisis, the brand was mentioned in the media during the Galaxy Note 7 coverage. For example: "Samsung's recall could affect more than just the South Korean company. Samsung SDI, the company's battery maker also supplies batteries to various other companies including Apple" (Spieler, 2016, para. 1) and "The company… makes batteries for other phone-makers too, including Apple" (Lee & Lee, 2016). Reliance on the same suppliers in the industry opens organizations up to the potential for a spillover crisis (Veil et al., 2016). Samsung faced a supply chain crisis as the Galaxy Note 7 contained faulty batteries from one member of the supply chain. Apple faced a potential spillover crisis as a result of sharing lithium battery suppliers with the perceived unsafe Samsung supplier.

Reliance on the same supplier was not the only tie to Apple in the Galaxy Note 7 crisis. Media reports commonly speculated that a major contributing factor to the faulty smartphone was rushed production by Samsung to beat Apple's iPhone 7 release date and attempts to overextend the brand's technological abilities to keep up with smartphone industry pressures.

Industry pressures stretch capability. In hopes to beat competitor Apple's new iPhone release date, Samsung pressured suppliers to hurry production, and engineers to innovate quickly, to regain standing in smartphone sales (Oremus, 2016). This rush and

overextension of technological capability was mentioned often in media reports. *Bloomberg News* released a story with the title "Rush to Take Advantage of a Dull iPhone Started Samsung's Battery Crisis" (Lee & Lee, 2016). Other stories seconded the sentiment. "It wasn't meant to be this way" *Forbes* states, "The South Korean company brought forward this launch and the retail side of the Galaxy Note 7 by ten days this year, to early August. That offered it clear air before the iPhone 7 family would arrive" (Spence, 2016, para. 2). Multiple articles make similar claims such as "Samsung was counting on the Galaxy Note 7 to maintain momentum against Apple's new iPhones" ("Samsung Galaxy Note 7 batteries reportedly catch fire", 2016, para. 2), "The recall puts Samsung, which has been trying to match the success of the Apple iPhone, in a precarious position" (Mozur & Lee, 2016, para. 3), and "The Galaxy is one of the South Korean company's most visible consumer product lines, and its smartphones compete with the Apple iPhone for pre-eminence with consumers" (Kang, 2016, para. 9). Industry pressures and competitive positioning that led to the rushed production "can't come at the expense of quality control" (Brody, 2016, para. 1; Loten & Norton, 2016; Oremus, 2016) and yet, for Samsung, that was the case.

Samsung is not alone in feeling the industry pressure to produce and innovate rapidly. While "Samsung in particular has developed a reputation for jamming as many features as possible into a single handset" (Oremus, 2016, para. 14), Oremus (2016) proposes other smartphone industry leaders absorb Samsung's Galaxy Note 7 crisis as a cautionary tale:

We might look back on Samsung's battery meltdown as an inflection point in the history of the industry, when the frantic push for smartphone-makers to launch

'revolutionary' new devices every year or two finally ran up against the physical limits of the form (para. 16).

The complications due to the organization's complex supply chain and the various noted implications supply chain managers can take away from Samsung's case may inform why the organization was not perceived as transparent or effective communicators during the crisis.

Communication challenges. Subthemes related specifically to communication challenges were also found in Samsung's organizational documents and the media reports. While balancing the interests and needs of all involved is undeniably difficult, Samsung did not effectively communicate during the crisis. Avi Greengart, an analyst at Current Analysis, a global market research firm, commented "They have not been very clear in their communications, in terms of what specifically is the problem, how it will be resolved and what's the time frame" (Selyukh, 2016, para. 15). Specifically, themes emerged regarding transparency, ambiguous instruction, mixed messages, "unsafe" reputation, and consumer defiance.

Lack of transparency. Media reports offered frustrated pleas to Samsung to clarify statements, proactively share information, and assume responsibility for the crisis. Commentary such as "they've under communicated, rather than over communicated" echoed sentiments commonly portrayed in media reports (Selyukh, 2016, para. 21). Sullivan (2016) stated "From the very beginning Samsung should have been more honest about the problem. It should have called the thing by its proper name- a product recall. Instead it called it an exchange program" (para. 12). Oremus (2016) summarized this

frustration during the second recall stating "Samsung could recover more quickly if it can show transparency and accountability in its handling of the investigation" (para. 7).

Ambiguous phrasing such as "exchange program" instead of global recall, the aforementioned minimizing of the number of faulty devices, terming the overheating phones as "incidents" (Samsung, 2016a; Samsung, 2016b; Samsung, 2016d; Samsung, 2016i) and stating consumers "raised questions" during the second recall, as opposed to stating consumers experienced overheating and exploding devices (Samsung, 2016g), did not paint Samsung to be a transparent and open company during this crisis.

The contrast between these vague terms and the online content circulating describing and even showing videos of phones not "just overheating or melting down or imploding – they were exploding like bombs" (Sullivan, 2016, para. 4) was stark. Media reports demanded transparency and ownership regarding the overheating and exploding phones. Following the second recall, *Forbes* questioned procedures in place, suggesting Samsung revisit decisions that led to the same issue happening twice (Spence, 2016). The article continued on to say "How the company reacted to the problem, how the recall was implemented, and how the issues were communicated to the world should be questioned" (Spence, 2016, para. 13). Forbes took issue with the communicative handlings of the crisis from the very beginning; the immediate reaction, the recall protocol, as well as the handlings of issues along the way, were not up to par (Spence, 2016). Quotes like these further strengthen the notion that the media framed Samsung as not effectively handle the crisis and that more transparency and communication would have improved perceptions of the organization.

The concept of multiple stakeholders could potentially inform Samsung's lack of transparency regarding the Galaxy Note 7 crisis. Once a global recall was necessary, Samsung had to include suppliers, government agencies, retailers/distributors, and consumers in order to pull all unsafe devices from the market while also answering for why the crisis occurred in the first place. Involved government agencies included Consumer Product Safety Commission, Department of Transportation, Federal Aviation Administration, and International Air Transport Association (Selyukh, 2016; Spieler, 2016; Swartz, 2016). Involved retailers/distributors included Verizon, AT&T, T-Mobile, and Sprint (Kang, 2016). The question was, did Samsung really know what was going on in order to offer stakeholders and media transparency? With the complexity of involved parties including suppliers, government agencies, and retailers, confusion was at an all-time high as Samsung scrambled to determine the issue in what Koh described as "a tiny problem in the manufacturing process" (Selyukh, 2016, para. 5).

Ambiguous instruction. While strategically ambiguous crisis responses can potentially be effective (Coombs & Holladay, 1996; Ulmer & Sellnow, 1997) Samsung's use of ambiguity did not improve the crisis. Ulmer and Sellnow (1997) offer the use of ambiguity in crisis response when its use improves clarity regarding the crisis scenario. Samsung's use of ambiguity in crisis response did not benefit stakeholders in interpretation of the crisis and offer improved clarity. Instead, the ambiguity reflected the confusion Samsung experienced regarding the crisis and negatively impacted the clarity of communication to stakeholders. Both organizational documents and media reports demonstrated this theme throughout the crisis. Samsung's first statement addressing the faulty devices and announcing the temporary halt on sales advised customers who

purchased the Galaxy Note 7 that Samsung would "voluntarily replace their current device with a new one over the coming weeks" (Samsung, 2016b, para. 3). In this initial statement Samsung did not insist consumers replace the device and was not clear regarding the danger of the overheating phones. On that same day, in a separate statement, Samsung offered the "availability of the U.S. Product Exchange Program for Galaxy Note 7 owners" before mentioning there had "only been a small number of reported incidents" (Samsung, 2016a, para. 1-2). The word "availability" and the reminder of "a small number of reported incidents" does not necessarily stress whether or not the exchange is mandatory, suggested, or just an option. Samsung did not place urgency or concern on the announcements regarding the devices. In response to the reports that replacement devices that were supposed to be "safe" were having the same issues as the previous devices, Samsung responded by saying "If we conclude a safety issue exits, we will work with CPSC to take immediate steps to address the situation" offering stakeholders little direction regarding the safety of their new replacement devices (Samsung, 2016g, para. 4).

Instructing information can communicate organizational control during a crisis to stakeholders and benefit the organization's reputation (Coombs, 2006). However, the instructing information in the organizational documents on the various recalls demonstrated a lack of clarity. After the first recall was established, the organization released 8 statements that included instructions or details regarding how to participate in the recall (Samsung 2016a; Samsung, 2016b; Samsung, 2016c; Samsung, 2016d; Samsung, 2016e; Samsung, 2016f; Samsung, 2016h, Samsung, 2016j; Samsung, 2016L). Samsung had to repeatedly offer instructing information to consumers while waiting for

all unsafe devices to be returned. Each organizational statement was another reminder of the crisis the organization was facing.

    Mixed messages. Media reports reflect confusion regarding the recall protocol, timeline for a fix, how safe the replacement devices truly were, and the severity of the risk of using the device. From the first recall, *The New York Times* reported confusion stating "It was unclear if Samsung would provide refunds for the Galaxy Note 7 customers who did not want a replacement by the company" (Kang, 2016, para. 10). Other media sources report consumers struggling to go through the recall process efficiently. *NPR* pointed to the "interchanging sales reps, bureaucratic intricacies and unclear guidelines" as one customer attempted to exchange her faulty device (Selyukh, 2016, para. 2). The story went on to say "Alongside stories of completely smooth transactions floating on Twitter, Reddit and Samsung forums are posts about lengthy customer service calls, unnecessary store visits, demands of original boxes or accessories and other hiccups" (Selyukh, 2016, para. 14). What was already a crisis, the organization's device overheating and exploding unpredictably, has now worsened as consumers struggled to efficiently return their devices.

    Just how severe the danger was of the device was also unclear. More than a week after recommending consumers power down the Galaxy Note 7s, a formal recall was still not issued and it was still legal to sell the devices (Selyukh, 2016). Lee and Lee (2016) also commented on the "mixed messages" Samsung sent, recommending phones should be shut off and not used, and days later stating a software fix had been created that prevented batteries from overheating. Similarly, many stakeholders felt confused and frustrated after the first global recall when after receiving what was supposed to be a

fixed device, turned out to have the same risk of overheating and exploding as the first

Galaxy Note 7 (Oremus, 2016). *BBC News* well summarizes this frustration and

confusion regarding reassurances of safety from Samsung when they rehash the timeline

of the recalls in comparison to Samsung's response:

> In September, Samsung recalled around 2.5 million phones after complaints of
>
> exploding batteries. It later insisted that all replaced devices were safe. However,
>
> that was followed by reports that those phones were catching fire too. A Kentucky
>
> man said he woke up to a bedroom full of smoke from a replaced Note 7, days
>
> after a domestic flight in the US was evacuated after a new device started emitting
>
> smoke in the cabin. Even as late as Monday evening, a spokeswoman insisted the
>
> phones were safe to use. But on Tuesday, the company said it would stop Galaxy
>
> Note 7 production ("Samsung permanently stops Galaxy Note 7 production",
>
> 2016, para. 8).

Samsung's lack of clarity regarding the crisis was evident to the publics as they

demanded clearer communication from the organization.

As noted, as the crisis progressed, Samsung did offer instructional information that

sought to help with confusion and clarify what information the organization was able to

clarify. These messages generally included updates via organizational documents

regarding what the organization was doing to ensure the consumers were safe and the

steps to participate in the recall with sources to go to if consumers needed further

explanation. Bulleted lists of instructions regarding options for those needing to replace

or exchange their devices were included at the end of statements (Samsung, 2016a;

Samsung, 2016d; Samsung, 2016j). Samsung also stated it was using multiple mediums

of communication to reach a range of consumers who may not have heard about the exchange. These mediums included "direct communications, customer service, social media, marketing, and in-store communications" (Samsung, 2016j, para. 9).

Another example of clarifying information came after the first recall, when consumers were encouraged to exchange the risky phones for the "safe" Galaxy Note 7s. At this time, many consumers were confused how to tell if their device was safe or not. In response, Samsung developed a software update which displayed a green battery icon to indicate "consumers have a new Galaxy Note 7 with an unaffected battery" (Samsung, 2016e, para. 3). The organization also released informational videos and images once the cause of the battery overheating was discovered to assist stakeholders in understanding why phones were exploding. (Samsung, 2016e; Samsung, 2017b; Samsung, 2017c; Samsung, 2017d).

"Unsafe" reputation. Another common theme throughout media reports was concern regarding Samsung's reputation as a result of the crisis. Reaction to the first recall led *Bloomberg Technology* to report "This is creating an enormous problem for the company – for its reputation and ability to support customers when there's a problem" (Lee & Lee, 2016). *BBC News* reported similar opinions following the second and final global recall stating "The real issue is brand and reputation… the fact that Samsung appeared to still be shipping defective devices could trigger a large loss of faith in Samsung products" ("Samsung permanently stops Galaxy Note 7 production", 2016, para. 24). *The New York Times* put it most succinctly simply stating, "The Note 7 disaster raised more doubt about Samsung's reputation." (Sang-Hun, 2016, para. 17). Although the overheating and exploding device issue was directly linked to two separate supplier

faults, and not a design factor that Samsung was responsible for, the crisis still negatively impacted the organization's reputation. Media reports took issue with a product as a representation of Samsung that endangered consumers, regardless of the supplier being at-fault.

When phones began overheating and exploding on airplanes, the Federal Aviation Association, the International Air Transport Association, and The Department of Transportation's involvement eventually led to the banning of Galaxy Note 7s from airplanes (Spieler, 2016; Sullivan, 2016, Swartz, 2016). The Department of Transportation stated the Samsung Galaxy Note 7 was "considered a forbidden hazardous material under the Federal Hazardous Material Regulations" and would not be allowed on any flights (Selyukh, 2016, para. 1). Signs were placed at airports reminding flyers that Samsung Galaxy Note 7 devices were not permitted on airplanes due to the explosive potential of the device. Samsung lost control as messages regarding their devices were placed prominently in airports around the world. Sullivan (2016) summarized the impact of this ban of devices on Samsung's Galaxy Note 7 crisis when he stated:

The Samsung recall is a big one. It's the first one I know of in which announcements were made at airport gates that the device would not be allowed on planes until they were powered down completely. All those public announcements were like negative ads, and they were heard by hundreds of people (para. 8).

Consumer defiance. Once the first release of Galaxy Note 7 phones were determined dangerous, millions of customers had already purchased the device. This meant Samsung had to instruct millions of stakeholders how to participate in the recall and exchange the device for a replacement phone, containing a battery from a new

supplier, that was deemed safe. Following the first recall, the newly replaced "safe"

devices were determined unsafe and the Galaxy Note 7 was pulled from the market.

Samsung faced an even more challenging and risky quandary.

In order to end the crisis, Samsung ceased production of the Galaxy Note 7s and

attempted to remove all devices from the market. However, to do this Samsung was

dependent on the millions of Galaxy Note 7 consumers' participation. Organizational

documents demonstrated that while many consumers willingly participated in order to rid

themselves of the unsafe device, Samsung struggled with the remaining 10% or so. 10%

of unreturned Galaxy Note 7s was not a small number considering the millions of people

who originally purchased the phone. Perhaps the remaining 10% who did not participate

did so out of lack of information, unclear as to how to exchange their device for a

different phone, or they simply did not care to take Samsung's suggestion to return the

phone. Samsung was seemingly unsure as to why consumers were not responding when

the brand stated "For those not heeding [the] advice or are still not aware of the recall

notice, a software update will be pushed to all recalled devices" (Samsung, 2016e, para.

4). More important for supply chain crisis communication research than the reasoning

behind consumers not returning their device, is the cautionary lesson of how out of

control Samsung was during the Galaxy Note 7 crisis as the organization had to plead

with consumers to return devices. The time and money invested in the steps that had to be

taken to end the crisis outlined below, and the impact of this lack of control on

organizational reputation is important to note.

As of December, 9, 2016 almost two full months after Samsung's October 10, 2016

notice of a global recall for all Galaxy Note 7 devices, Samsung was still missing 7% of

the phones (Samsung, 2016L). By then, multiple software updates had already been issued to encourage returns of the dangerous devices. These updates began after the first recall and included the green battery icon to indicate a safe device (Samsung, 2016e) and a safety notice "that [urged] owners to power down and exchange their recalled device" each time the phone was turned on and off (Samsung, 2016e, para. 4). After the devices were pulled off the market and Samsung was still struggling to reach 100% return, Samsung implemented a software update, released on December 30, that prevented Galaxy Note 7 devices from charging so that once the phone lost power, it was no longer able to be used (Samsung, 2016L).

Samsung was forced to invest time and money to create and implement software updates to make their phones inoperable to encourage consumers to return the dangerous devices. Samsung was placed in a position of complete lack of control as consumers who would not return the device of their own free will put the organization at risk of having to answer for another exploding device. Consumers not returning devices kept the crisis alive. Samsung had to continue to address the missing dangerous devices in organizational statements in order to encourage consumers to return them, reminding stakeholders of the exploding devices linked to Samsung's brand.

Chapter Five: Conclusions

This paper used case study analysis to explore crisis response strategies and attributions of responsibility in a supply chain crisis. Organizational documents and media reports from Samsung's Galaxy Note 7 crisis were collected and analyzed to better understand the unique communication challenges a supply chain crisis poses for an organization.

RQ1 (What communication strategies does the organization use during the supply chain crisis to communicate with publics?) found that Samsung used all SCCT crisis response strategies and did not cater crisis response strategies to the stakeholder perspective. RQ2 (What are the stakeholder attributions of responsibility during the supply chain crisis as seen through media reports?) and RQ3 (What are the organization's attributions of responsibility during the supply chain crisis as seen through organizational documents?) found a dissonance between the attributions of responsibility that could inform Samsung's variety of crisis response strategy choices.

Thus, Samsung did not follow the guidelines presented by SCCT since their crisis response strategies did not align with their stakeholder attributions of crisis responsibility. Coombs (2006) states "The more responsibility stakeholders attribute to the organization the more the crisis response strategy must seem to accept responsibility for the crisis" (p. 248). With media reports demonstrating high levels of attribution of responsibility, the crisis response strategies chosen by the organization during the crisis with minimal acceptance of responsibility, deny and diminish, did not align with stakeholder expectations. Samsung also misused bolstering, placing it as a primary response strategy and using it throughout the crisis. Bolstering offers a "minimal opportunity to develop reputational assets" (Coombs, 2007, p. 172) and efforts could have been focused on primary crisis response strategies that aligned with attributions of responsibility, as opposed to bolstering, to repair reputational damage.

RQ4 (What challenges did Samsung experience during the supply chain crisis and resulting recall as evidenced by the organizational documents and media reports?) uncovered a variety of themes present during Samsung's crisis related to supply chain

challenges as well as communication challenges. As experienced as Samsung was with managing a supply chain, the complexity of the global supply chain, risks of shared suppliers, and industry pressures all contributed to the crisis. Meanwhile communication challenges including a lack of transparency, ambiguous language, and mixed messages contributed to the "unsafe" reputation and continued consumer defiance.

The complexity of suppliers challenged Samsung's transparency as the organization had to track down the fault in the supply chain while answering for the overheating and exploding devices to the public. Once the phones began exploding and had to be globally recalled, the stakeholders expanded to include government agencies, retailers/distributors, and consumers on top of Samsung and its suppliers, which further complicated communication and transparency.

Findings in this paper introduce challenges to traditional crisis response strategies that do not account for dissonance between perceived and actual responsibility when responding to supply chain crises. Challenges to traditional notions of reputation are also introduced. While theorizations of reputation originally relied on the organization's own actions (Coombs, 2006; Coombs & Holladay, 2002; Fombrun & van Riel, 2003; Newsom et al., 2012), researchers such as Barnett and Hoffman (2008) and Veil et al. (2016) began to expand the traditional notion of the organization being the only impacting factor on its reputation. This paper further expands on this idea to include supply chain members as affecting organizational reputation. Samsung's Galaxy Note 7 crisis demonstrates that stakeholders will still hold the organization responsible if the end product is faulty, even if it was the fault of a link in the supply chain. Supply chain

members, thus, impact reputation and must be considered as part of the organizational reputation.

Theoretical Implications

If Samsung had oriented themselves toward stakeholder perceptions, particularly regarding attribution of responsibility, more appropriate crisis response strategies could have been chosen. Samsung seemed disconnected in their organizational messages to stakeholders based on media reports. Crisis scholars should caution organizations against not attributing responsibility during a supply chain crisis. Coombs (2007) states "Responsibility requires accountability and the organization must answer for its actions" (p. 170). Samsung did not attribute responsibility in organizational documents and seemingly did not answer for its actions. Media reports reflected frustration toward the brand for not communicating clearly and not answering for the crisis at hand. In a supply chain crisis, where actual and perceived levels of control and responsibility are more skewed than traditional crises, organizations could benefit from a stakeholder oriented perspective to attune to public perceptions of responsibility.

Another implication is for reputation management research. Suppliers have an impact on the reputation of an organization and the potential to negatively impact an organization's reputation when a supply chain crisis occurs. This study demonstrates that despite the level of control over an actual at-fault entity within the supply chain, the end producer is always held responsible. While Samsung did not identify the suppliers at fault in organizational documents, the media reports did. And yet, only Samsung was held responsible for the crisis. Thus, this study suggests the reputational damage from a supply chain crisis will fall on the end producer.

Finally, research postulating the necessity of aligning crisis response strategies with attributions of responsibility in order to benefit an organization during a crisis were supported (Coombs, 1995; Coombs, 2006; Coombs, 2007; Coombs & Holladay, 2002; Coombs & Holladay, 2006). Samsung's attributions of responsibility and stakeholder attributions of responsibility did not align and, as demonstrated in media reports, did not improve organizational reputation. The "protective powers" that Coombs (2007) states the correct crisis response strategy can offer for an organization's reputation during a crisis, were not received by Samsung as the misaligned strategies used by the organization did not communicate an acceptance of appropriate responsibility to stakeholders.

Practical Implications

This study demonstrates the need for closer examination of supply chain network challenges and supply chain crises. As *The Wall Street Journal* aptly stated, Samsung's supply chain crisis placed "a spotlight on supply-chain oversight and raising questions about the ability of today's technology and management tools to help companies maintain quality control in giant complex networks of suppliers" (Loten & Norton, 2016, para. 1). Even Samsung, a noted expert in supply chain management, faced multiple breaks in their supply chain and a severe supply chain crisis. As use of supply chains increases, supply chain managers should remain cognizant of the risks inherent to supply chain reliance. Organizations must further examine complexities of supply chain management and supply chain crisis management to most effectively manage supply chains and prepare for potential crises.

Another practical implication for crisis managers and organizations with a supply chain is to understand that reliance on a supply chain lessens organizational control. The more complex the supply chain, the more difficult supply chain management of individual suppliers and the supply chain as a whole becomes. For Samsung, control was originally decreased by their reliance on a global supply chain, further decreased as multiple outer organizations became involved in the recall, and reached an all-time low once the brand was reliant on all consumers returning Galaxy Note 7 devices in order to end the crisis.

This study also poses the question of how transparent organizations should be regarding their supply chain. Organizations could be more transparent about both supply chain reliance and the suppliers within the chain. With greater transparency of suppliers and supply chain reliance, stakeholders could have a greater awareness regarding supply chain complexities. If awareness is increased, in the event of a crisis, the break in the supply chain could be identified and more easily understood by stakeholders to be the at-fault party, as opposed to holding the organization solely responsible.

Finally, while management researchers delve into the fields of supply chain management and risk management to best serve the unique needs of supply chains, so too should communication researchers. As internal measures are implemented to prevent and alleviate supply chain risks, external measures such as employing supply chain crisis managers, trained specifically to address the unique risks of supply chain crises, should be implemented as well.

Limitations and Future Research

        This study was conducted as an exploratory study to begin the process of supply chain crisis research through examination of one supply chain crisis. Samsung's Galaxy Note 7 crisis was chosen for its recency, newsworthiness, and unique instance of having two separate supplier failures in the same crisis. Future research should examine a range of supply chain crises to explore potential differences in crisis response and management based on factors such as industry, severity, location, etc.

        The data collected in this research focuses on external communication through examination of organizational documents and media reports. While these documents offer insight into both organizational handlings and media perceptions, future research could delve into the internal communications of an organization facing a supply chain crisis to offer insight as to why certain response strategies are chosen. For example, interviews with communication directors at organizations that have experienced a supply chain crisis could offer more rich data regarding supply chain crisis management than organizational documents alone can show. Future research could also delve more thoroughly into stakeholder perceptions through social media analysis.

        In conclusion, this thesis contributes to the crisis communication research literature by introducing a previously unstudied type of crisis, a supply chain crisis. Organizations are increasingly relying on supply chains (Natarajarathinam et al., 2009) and thus demand further research into the unique elements of this type of crisis. This study found that the complexity inherent to supply chain crises brings into question shared accountability and its impact on organizational responsibility, control, reputation

and response during a crisis. Future studies should delve further into this type of crisis to

examine appropriate communication strategies when answering for a supply chain crisis.

Appendix A: Media Reports and Organizational Documents

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Academic Employment

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Academic Awards and Honors

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Professional Publications

Ambrose, K., & Matusitz, J. (in press). Understanding Ebola in West Africa: Applying the human ecology theory. Global Social Welfare.

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