

HUMANITARIAN RELIEF SUPPLY CHAINS:
THE INTERNAL AND EXTERNAL IMPACTS
OF CORPORATE PHILANTHOPRIC
DISASTER RESPONSE

by

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ABSTRACT

Humanitarian relief supply chains are critical to providing necessary aid and support to areas affected by natural disasters, such as earthquakes, tsunamis, or hurricanes. These relief supply chains remain immobile until funding or donations become available; funding is an imperative component of relief supply chains and can originate from numerous sources, including government assistance, individual donations, donations-based organizations, and corporate donations. Corporate donations are the primary focus of the paper, and can be expanded into three subcategories of donations: monetary donations, employee volunteerism, and employee donation matching.

These three forms of corporate donations require a certain level of responsibility and accountability from the receiving organization in order to ensure the donations are utilized in a way that is conducive to a restorative relief environment. Corporate donations not only originate from corporation's desire to provide assistance in times of need, but are also a main component of a corporation's strategy; corporate social responsibility is an important, and rather imperative, element of a corporation's strategy in today's marketplace, playing a vital role in a corporation's decision to contribute to humanitarian relief efforts.

Careful consideration is encouraged when a corporation is determining which method of corporate social responsibility and corporate philanthropy to participate in; the opinions of both the stakeholders and customers should be considered, while still ensuring the proposed philanthropic efforts support the corporation's mission and values.

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INTRODUCTION

Humanitarian relief supply chains are a means of providing necessary aid, materials, and support to areas affected by natural disasters, such as earthquakes, tsunamis, or hurricanes. According to Ozdamar (2011), the objective of a humanitarian relief supply chain is “to provide humanitarian assistance in the forms of food, water, medicine, shelter, and supplies to areas affected by large scale emergencies” (pg. 656). Support, resources, and medical aid provided by the relief chain are crucial in the efforts to minimize the volume of deaths and damage caused by natural disasters. Despite advances made in technology and the unpredictable nature of natural disasters, humanitarian relief supply chains are susceptible to numerous uncontrollable variables that cause issues and bottlenecks in the process of planning and coordinating relief aid.

Humanitarian relief consists of much more than providing resources to those in need, but rather, it is a conglomeration of efforts working towards providing aid and supplies while minimizing the destructive effects of a natural disaster. Humanitarian aid requires coordination of relief organizations, donors, local governments, and relief volunteers; this high level of coordination required is not easily achievable, but rather requires an extensive cooperation and understanding among all participants in the relief efforts. Nolz et al. (2011) note that because numerous actions of the relief efforts must happen simultaneously, coordination is directly correlated with the success of the relief efforts. According to Balcik et al.’s analysis of relief chain coordination, many specific entities are involved in relief efforts; “humanitarian relief environments engage international relief organizations, host governments, the military, local and regional relief

organizations, and private sector companies, each of which may have different interests, mandates, capacity, and logistics expertise” (Balcik et al. 2009, 22). This conclusion about the underlying tensions and possible conflict of interests among the contributing entities can cause further problems and undermine the efforts of the humanitarian relief efforts; without coordination and effective communication, relief supplies and funding may not be effectively utilized.

Beneath the overarching umbrella of coordination, numerous factors play a substantial role in how efficiently the humanitarian relief supply chain meets its objectives and minimizes the effects of the natural disaster. These objectives may include minimizing further damage, and reducing the number of people impacted by lack of water, food, and shelter, as well as the evacuation of people directly affected by the disaster. Ratnick et al. (2008) note, “As the complexity of supply chains increase and the breadth of supply and delivery options expand with the continued globalization of markets, sources of uncertainty, risk, and vulnerability increase as well” (pg. 643). When relief efforts are deployed, there is a strong possibility that the relief process becomes a global initiative, thus increasing the volume of support, but also the associated complexity and cost. Without proper funding, these global and local initiatives cannot be executed, leaving people in need without the necessary assistance required for survival in post-disaster environments.

Funding and donations are crucial to the execution of humanitarian relief supply chains and involve a high level of coordination, planning, and discretion in order to

properly utilize and distribute funding to victims of natural disasters. Boin et al. (2010) state “Disaster supply chains do not materialize without resources. Nothing moves without money” (pg. 4). Without money, clean water cannot be delivered, streets cannot be cleared of debris, and damaged infrastructure cannot be rebuilt. Funding can be obtained through numerous providers, such as government funding through the Federal Emergency Management Agency (FEMA), individual donors, humanitarian relief organizations, and corporate donors. This paper will focus on the role of corporate philanthropic donations and will provide recommendations for the proper execution of future corporate donations, in the event of a natural disaster.

Donors, individual or corporate, play a large role in the execution of relief efforts and mandate a certain level of obligation from relief organizations, the receiving entity of funding and donations. According to Balcik et al. (2009), relief organizations must uphold an obligation to the donors, which may cause further complications in the execution of humanitarian relief efforts; “donors may even place restrictions on the types of relief activities in which agencies may be involved...which is not necessarily conducive to coordination among relief agencies” (pg. 23). In addition to the rules or restrictions from donors, competition may spark among different relief organizations to compete for funding from donors, especially immediately after a disaster when there is a spike in donations (Balcik et al., 2009). Oftentimes, when competition and regulations from donors are present, the overall purpose of funding and philanthropic donations is often displaced, which does not foster a healthy or restorative relief environment.

This paper will discuss how corporate donations for humanitarian relief efforts are deployed and why donated money is not always utilized in the most need-worthy conditions. This paper will analyze the main issues that are associated with corporate philanthropic donations and will suggest more appropriate and advisable suggestions. Recommendations will be made regarding key factors that influence corporate disaster donations, and will provide a suggested flow chart of decisions for corporate donors in the event of a natural disaster.

LITERATURE REVIEW

Supply Chain Management

In order to properly understand the purpose of humanitarian relief supply chains, a basic knowledge of a supply chain is necessary. According to the Council of Supply Chain Management Professionals (CSCMP), supply chain management “encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities” (Naslund, 2010, 13). In addition, the Global Supply Chain Forum (GSCF) defines supply chain as “the integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders” (Naslund, 2010, 13). Supply chain management encompasses all the activities and processes that are involved in moving products or services from original sourcing through the end user; supply chain and logistics play a large role in the proper execution of humanitarian relief efforts.

Humanitarian Relief Supply Chains

Humanitarian relief supply chains can be defined in a number of ways and may be referred to by different names. However, all definitions provide a broad overview of the objective of humanitarian relief supply chains. Ozdamar (2011) states that the objective of disaster relief supply chains is “to provide humanitarian assistance in the forms of food, water, medicine, shelter, and supplies to areas affected by large scale emergencies” (pg. 656). Ozdamar (2011) adds, “The ultimate effective humanitarian supply chain management has to be able to respond to multiple interventions as quickly as possible and within a short time frame” (pg. 656). Suzuki (2012) states “disaster relief logistics consists of providing adequate emergency supplies rapidly to the affected people so as to minimize human suffering and death” (pg. 145). Suzuki (2012) elaborates by explaining the purpose of the relief efforts is not to minimize costs, but to “minimize the unfair and inequitable distribution of emergency supplies within the regions affected by disasters” (pg. 146). Balcik et. al (2009) suggest, “Humanitarian relief environments engage international relief organizations, host governments, the military, local and regional relief organizations, and private sector companies, each of which may have different interests, mandates, capacity, and logistics expertise” (pg. 22). Finally, Hildreth (2009) notes that, “Disasters require the quick mobilization of resources by multiple agencies and organizations to ensure the continuity of public services” (pg. 402).

After analyzing the various definitions of humanitarian relief supply chains, a more concise view of the purpose of a humanitarian relief supply chains can be formed. By acknowledging the objective of humanitarian relief supply chains, there is an

increased awareness of which factors consequently affect the success and execution of relief supply chains in the event of a natural disaster. Funding, financial resources, and donations are the only way for these relief efforts to be deployed; these resources come in numerous forms, such as government funding, corporate philanthropic efforts, and individual in-kind donations; the main focus of this paper is corporate donations.

Government Funding

Government funding is a prominent player in disaster relief, while at the same time it can also be deeply affected in the event of a natural disaster. Hildreth (2009) notes that disasters cause large disruptions in the intended performance of governments, affecting both the budget and performance goals of the affected government entity. These interruptions in government budgets and priorities bring on an uninvited change; Hildreth (2009) states, “All of this uninvited change produces a gap between the immediate post-disaster wobbly state of affairs and resumptions of the pre-event stable condition” (pg. 400). When an unexpected natural disaster occurs, local governments are subject to drastic changes; Hildreth (2009) states, “Severe disasters force governments to revisit their budgets in order to align spending with reduced revenues” (pg. 403). Additionally, “a general government is assumed to have the financial flexibility to advance the funds out of reserves, emergency accounts, budget reallocations, insurance claim advances, or even borrowing” (pg. 404). Upon the occurrence of a natural disaster, the ruling government must immediately accept and recognize that predetermined annual budgets will not be followed and that humanitarian relief efforts and destruction rebuilding will become top priority. It is the responsibility of the affected governments to acknowledge

the effects of the natural disaster at hand and take actions to minimize the further destruction and suffering, regardless of the fact that these changes may alter the existing budgets and plans.

Although all levels of government may be conflicted and possibly affected by the occurrence of a natural disaster, Hildreth (2009) notes that the Federal Emergency Management Agency (FEMA) assists local governments in the restoration of areas affected by the natural disaster. “FEMA’s public assistance program allows the president to make contributions to repair, restore, reconstruct, or replace a damaged public or nonprofit facility, and for associated expenses” (Hildreth, 2009, 404). Bagdoyan (2014) adds that “FEMA’s IHP (Individuals and Households Program) provides financial assistance and direct assistance to eligible individuals and households who, as a direct result of a major disaster or emergency, have uninsured or underinsured necessary expenses and serious needs that cannot be addressed by other means, such as other assistance programs or insurance” (pg. 8). However, FEMA is a reimbursement program, and does not provide funds in advance (Hildreth, 2009). Due to the fact that FEMA works on a reimbursement system, rather than advancing funds, local governments and entities may resist utilizing allocated funding during the relief and rebuilding period; liquid and immediate cash is always preferred over a reimbursement system. In addition, Hildreth (2009) makes note that “FEMA’s authority is to restore public facilities and infrastructure to the pre-event condition, not to offset a community’s long-term neglect of public facilities” (pg. 404). It must be acknowledged that the purpose of FEMA is not to renovate and improve the existing facilities, but rather to restore the facilities to their pre-

disaster condition. FEMA also requires that individuals or households applying for assistance meet specific eligibility requirements in order to qualify. Lastly, FEMA's assistance is not distributed liberally, but only to those in absolute need of assistance that cannot be obtained elsewhere (Bagdoyan, 2014).

Although government assistance through FEMA is a much respected and helpful form of funding, the reimbursement process becomes a “paper battle,” as stated by Hildreth (2009). Roberts (2006) notes “Emergency management suffers from... a lack of clear measurable objectives, adequate resources, public concern or official commitments...Currently, FEMA is like a patient in triage. The president and Congress must decide whether to treat it or let it die” (pg. 16). Although government funding provides necessary financial assistance, a number of setbacks and requirements are encompassed with the funding process, as shown in Figure 1, below.

FEMA Reimbursement System Analysis	
Positive Aspects:	Negative Aspects:
<ul style="list-style-type: none"> - Capability to restore facilities and infrastructure from damage of natural disaster - Secured funding, separate from donations - Financial or direct assistance can be provided to eligible individuals or households 	<ul style="list-style-type: none"> - Reimbursement system rather than advanced funding - Reimbursement system may lead to excess spending, with the potential of not being refunding or supported by FEMA - “paper battle” forms through reimbursement process - Only restores to prior condition, so impoverished or deteriorated areas do not benefit greatly from assistance - Not distributed liberally; includes many restrictions and requirements - Eligibility difficult to establish

Figure 1 FEMA Reimbursement System Analysis

Corporate Philanthropic Disaster Response (CPDR)

Corporate philanthropic disaster response is a corporation's way of responding to disasters through financial donations, employee volunteerism, and employee donation matching. According to Muller and Kräussl (2011a), one of the many reasons corporate philanthropic giving has increased over time is due to its increased necessity in 'business life.' Not only is corporate giving, in the event of a natural disaster, a way to facilitate large donations to those in need, but the donations also help improve and maintain the company's reputation, responsibility, and recognition. Among other factors, Zhang et. al note "firm size, profitability, geography, cash resources, and leverage are significantly associated with the CPG (corporate philanthropic giving) decision" (Zhang et. al, 2010, 48). Due to corporations' large financial power, generally corporate donations are welcomed; however, corporate philanthropic disaster response encompasses much more than just generous donations.

Not all donations may be useful in the event of a natural disaster, and some may actually cause bottlenecks or inefficiencies within the disaster relief process. According to Tomasini et al. (2010), "bottlenecks in the donation process caused by delays or inappropriate donations can have a serious impact on the effectiveness of the response" (pg. 3). Inappropriate donations are donations that cause more harm than benefit in the relief process. For example, expired medical supplies are an inappropriate donation that may take away time and money from relief efforts. Due to the high impact that inappropriate donations may have on the relief process, the formation of relationships or agreements between corporations and donation-based organizations are encouraged

during times of little disaster-related activity. These established relationships help ease the complexity of the donation process in the actual event of a natural disaster, and facilitates faster assistance during times of need.

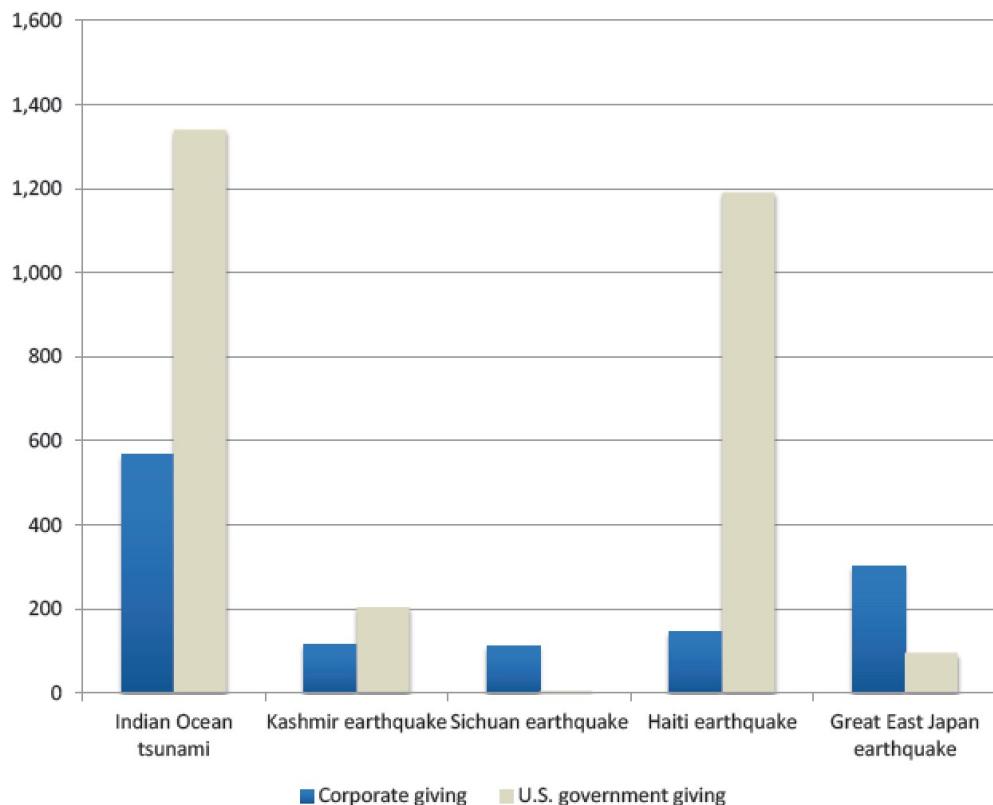
In the event that relationships or agreements are not formed during a time of little disaster activity, Tomasini et al. (2010) note that “collaboration may take place on a needs basis during a disaster, and may even provide the foundation for a future partnership, but during a disaster humanitarian organizations need to focus on carrying out a timely response rather than setting up partnership agreements” (page 7). Figure 2, below, shows the appropriate and inappropriate actions involved with relationships and agreements in corporate relief efforts.

Corporate Disaster Response Relationships	
Appropriate Actions	Inappropriate Actions
<ul style="list-style-type: none"> - Form donation-based relationship during time of little disaster-related activity - Always consult with organization about what types of donations are needed to avoid inappropriate donations 	<ul style="list-style-type: none"> - Do not attempt to form donation-based relationship in the event of a natural disaster - Avoid inappropriate donations

Figure 2 Corporate Disaster Response Relationships

Some comparisons can be made between the volume of donations originating from governments and from corporations to natural disaster relief efforts. As previously discussed, most governments provide funding on a needs-basis, while corporations may provide donations for a number of different reasons. Figure 3, below, is a graph representing the differences in giving between the U.S. government and corporations to

individual natural disasters; this graph also represents the lack of consistency in the donation volume made by both the US government and corporations. Figure 3 makes it apparent that much more is involved in the donation process than initially perceived, including disaster severity, corporate relations, connection to the disaster area, and corporate social responsibility.



(Taken from: Corporate Engagement in Natural Disaster Response: Piecing Together the Value Chain)

Figure 3 Comparison of Corporate Giving to U.S. Government Giving (\$ in Millions)

In order to gain a clear idea of the magnitude of donations corporations contribute towards natural disaster relief efforts, White (2012) provides valuable information regarding which corporations provided the most substantial donations to specific natural

disaster relief efforts; these donation figures include monetary donations, in-kind donations, and employee donations. According to White (2012), Pfizer was the largest corporate donor during the Indian Ocean tsunami and donated over \$45 million dollars to the relief efforts; Jeffries Group was the largest contributor to the 2010 Haiti Earthquake with a donation of \$14.5 million; lastly, Coca-Cola was the largest contributor to the Great East Japan Earthquake with a donation of \$33 million (White, 2012, 6). These figures can provide insight into which corporations, from across all industries, contribute to relief efforts around the world. The following commentary on corporate social responsibility will shed further light on the motives behind corporate donations.

Corporate Philanthropy and Corporate Social Responsibility (CSR)

Corporate social responsibility is a large determinant in a corporation's decision to participate in relief efforts during both times of disaster and minimal disaster activity; not only are the people affected by the disaster a large player in this decision, but the opinions of customers and stakeholders are also critical to consider. According to Xiaodong (2013), corporate social responsibility is "increasingly practiced by companies and is generally viewed as a sign of good corporate citizenship" (pg. 39). Xiaodong (2013) also notes, "Corporate philanthropy may help a firm establish reputation, brand recognition, and loyalty; promote itself as a 'socially responsible' firm; or attract and maintain a work force" (pg. 39).

Xiaodong's commentary on corporate social responsibility sheds light on why corporations choose to participate in relief efforts, which may be contradictory to the

consumer's general belief of a corporation 'just willing to help.' Ricks (2013) proposes some important steps to take when a corporation is interested in becoming a donor to relief efforts, whether it is in the event of a natural disaster, or when forming an agreement during a time of little disaster activity. Ricks (2013) states "corporate philanthropy, the act of a business enterprise donating a portion of its resources to a social cause, has been an important part of American business for over a century" (pg. 413). Ricks (2013) adds that when a corporation is considering becoming a donor, it is essential to establish strategic outcomes that may provide a potential competitive advantage for the corporation; additionally, metrics should be established to measure the strategic outcomes to ensure that the donation achieves strategic goals while also improving the well being of those affected by the natural disaster. Saraf et al. (2012) state, "Firms all over the world are beginning to grasp the importance of intangible assets, be it brand name or employee morale. Thus CSR activities will help to build goodwill in the community and focus on the personal relation in contrast to the impersonal donation of money and leverage these intangible assets into strategic advantages" (pg. 94). By allowing employees, consumers, and stakeholders to see the contributions a corporation is making towards corporate social responsibility, a greater sense of community, philanthropy, and pride in the corporation's initiative may be formed, creating a competitive advantage.

Corporate philanthropy has become a popular and nearly imperative aspect of business in today's marketplace; Gautier (2015) states, "today, what is considered illegitimate is for corporations not to engage in philanthropic activities" (pg. 343).

Michael Porter states “Corporations can use their charitable efforts to improve their competitive context – the quality of the business environment in the locations where they operate. Using philanthropy to enhance competitive context aligns social and economic goals [of a company] and improves a company’s long-term business prospects” (Koehn et al., 2010, 2). Porter’s statement conveys the importance of corporate philanthropy in a corporation’s business strategy, for it not only improves short-term business operations, but also contributes to the corporation’s long-term reputation and presence in the market.

Lastly, Muller and Whiteman (2009) support the argument for corporate social responsibility stating, “Differences in philanthropic behavior are rooted in the differences in pressures originating from the social structures in which organizations are embedded. These institutional forces are reflected in managerial values, stakeholder expectations, governance structures, and culture” (pg. 590). Corporate social responsibility and the actions that corporations take towards participating in corporate philanthropy not only have implications on relief efforts, but also on managerial decisions, stakeholder perception, and the culture in which the corporation operates. Corporate philanthropy is a factor of business life that should not be ignored or approached lightly, but should be viewed as an essential to long-term success and presence in the marketplace.

Figure 4, below, is a flowchart of considerations that should be taken into account when choosing to participate in corporate philanthropy.

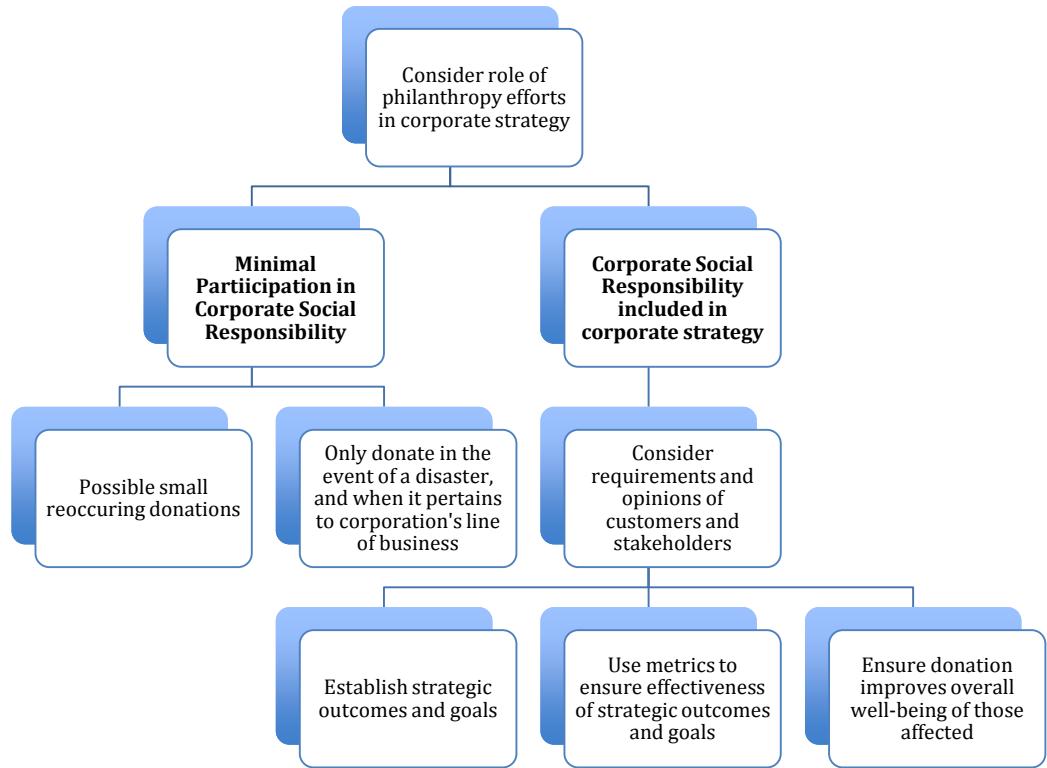


Figure 4 Flow Chart Regarding Corporate Social Responsibility Decisions in Terms of Corporate Donations

Types of Corporate Philanthropic Disaster Responses

Corporate Philanthropic Disaster Response (CPDR) can be broken down into different forms of giving; the most prominent categories are monetary donations, employee volunteerism, and employee donation matching; each of these categories involve their own set of stipulations and requirements that each require individual attention.

Corporate Monetary Donations

In the event of a natural disaster, many corporations make some form of donation in order to assist in disaster relief, among other reasons such as corporate strategy and corporate social responsibility, mentioned previously. Many corporations have pre-

arranged agreements or relationships with donation-based organizations, such as the Red Cross, that are put into action upon the occurrence of a natural disaster. These relationships have been formed during a time of little disaster activity in order to confirm all details involved in the corporate donation, before a possible natural disaster occurs. Muller et al. (2009) note, “The Network for Consumer Protection documented the donations of 23 large corporations to the (South Asian) Tsunami, Hurricane Katrina, and the Kashmiri earthquake and reported cumulative donations of over US \$263 million” (pg. 589). This figure documenting corporate cash donations to large natural disasters from 2004 to 2009 shed light on a corporation’s willingness to donate to relief efforts. Corporate philanthropy is becoming a more prominent and expected part of a corporation’s business strategy.

If pre-determined agreements or relationships do not exist, Tomasini et al. (2010) state “In the immediate aftermath of a disaster, cash is often the most valuable donation. It provides the liquidity necessary to purchase essential relief supplies and equipment upfront” (pg. 8). When prior relationships between corporations and relief organizations do not exist, the most useful and flexible form of donation is cash. The flexibility aspect of cash donations sheds light on why cash donations are always encouraged and welcomed, however, corruption and misuse of cash cannot be overlooked.

In the event of a natural disaster, it is apparent that many corporations are willing and eager to help assist relief efforts; oftentimes, the mindset of preferring to help in other ways than just providing a monetary donation may prevail. Building off of Tomasini et

al.'s statement, cash may be the most effective and helpful donation a corporation can provide in the event of a natural disaster, especially if a prior philanthropic relationship has not been formed.

Oftentimes, corporations are hesitant to donate primarily cash to a relief cause because they do not have a sure way of knowing where and how the money will be spent, for corruption and misuse may be present. "Donors want to know how their money will be used and how capable the recipient organization is of using their funds efficiently" (Tomasini et al., 2010, 10). In some cases, corporations are willing to donate cash to the immediate relief efforts, but place restrictions on how the money is spent, which may create more costs than benefits for the relief organization and the relief efforts itself.

It is understandable that corporations do not want to blindly donate cash, but rather prefer to know where the lump sum of money will go. Interestingly, or rather disturbingly, the law does not require donation-based philanthropic organizations, such as the Red Cross, to disclose exactly where or how donated money is spent (Page, 2012, 21). With this said, it is simple to see why corporate donors place stipulations or restrictions on their donations, or why a corporation would rather provide donations and relief assistance in forms other than cash. It is a battle of trust knowing whether or not a cash donation, which is said to be the most helpful donation in disaster relief efforts, will be used properly; cash is also a donation that has no means of tracking or confirmation of use. With this issue at hand, it is clear that a new plan for corporate donations needs to be formulated.

Below, Figure 5 displays a flowchart of options involved in a corporation's decision to donate to a relief cause. This figure places emphasis on the monetary donations, discussed above.

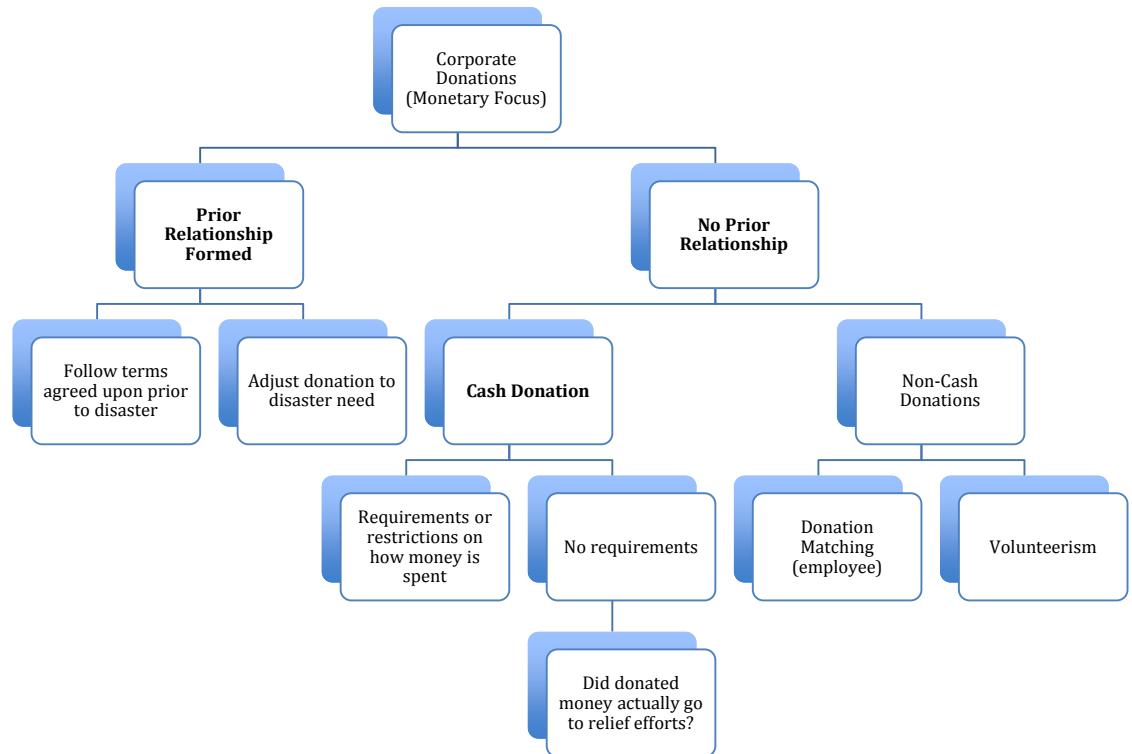


Figure 5 Corporate Donations Flow Chart in Terms of Monetary Donations

Employee Volunteerism

Employee volunteerism is another form of corporate philanthropic disaster response that may occur in the event of a natural disaster. Employee volunteerism is a way for employees of a corporation who want to be part of the relief process to react in an active, rather than passive way. Volunteerism is generally thought of as a positive way

to help those in need, but there is more involved in volunteering than just lending a hand. Although there is always a need for additional help in the relief efforts, providing volunteers that are not educated on the area or the type of disaster at hand may cause more of a problem than intended. Tomasini (2010) writes that although volunteers can be a beneficial aspect to the relief process, volunteers that have no prior knowledge of the situation at hand, or who are not native to the affected area, may cause more disturbances and setbacks than anticipated. “Volunteers need to be well trained, familiar with the local context, have experience with emergency situations and preferably fluent in the language of the country in order to be effective from the outset” (Tomasini, 2010, 7). Tomasini’s commentary sheds light on how important knowledge and understanding of the disaster at hand is, and how it can impact the effectiveness of the relief efforts.

Muller et al. (2011b) note that “employee involvement signals greater (future) affective commitment and employee identification with the organization, which improves motivation and productivity, helps the organization retain knowledge, and reduces costs associated with recruiting search and selection” (pg. 214). Employee volunteerism is a means for a corporation to allow its employees to identify with both the corporation and their personal interest through volunteering. By providing this opportunity to volunteer through the corporation, employees may foster a greater sense of pride for the corporation, which in turn may improve productivity, morale, and commitment to the corporation.

Many corporations or individuals are encouraged to donate through different outlets, but especially when the corporation or individual has a connection to the disaster area or those affected, they are more inclined to actively help. There is an “association between how much people know about an area and how willing they are to donate to the victims of a disaster there” (Zagefka et al., 2013, 644). Additionally, Zagefka et al. (2013) continue, “people who know more about the disaster region identify more with the victims, which causes their enhanced willingness to help” (pg. 649). People that are directly or indirectly related to the disaster area are more likely to want to donate in some way; however, when someone has a personal attachment to the disaster area, they may be more willing to volunteer in person rather than providing a monetary donation. In this case, regardless of one’s level of experience or expertise, one may be persistent on providing in-person assistance; it is the responsibility of the corporation to determine whether or not to provide an outlet for employee volunteerism.

Below, Figure 6 displays a flowchart of options involved in a corporation’s decision to donate to a relief cause through employee volunteerism. This figure places emphasis on employee volunteerism, discussed above.

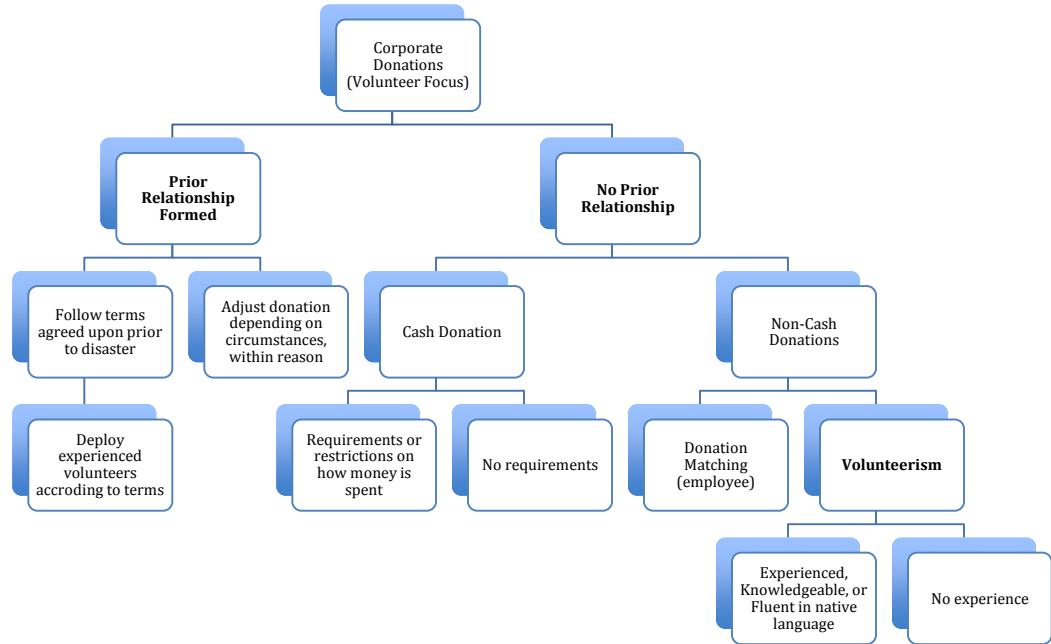


Figure 6 Corporate Donations in Terms of Employee Volunteerism

Figure 7, below, outlines the suggested requirements for appropriate volunteers when participating in volunteer relief efforts, in the event of a natural disaster.

Suggested Requirements for Employee Volunteerism	
Appropriate Volunteers:	Inappropriate Volunteers:
<ul style="list-style-type: none"> - Experienced in some type of prior volunteer activities - Specific skill set that may be useful - Speak native language 	<ul style="list-style-type: none"> - No experience - Cannot speak native language

Figure 7 Suggested Requirements for Employee Volunteerism

Employee Donation Matching

Employee donation matching is another way for corporations to donate to relief efforts, in a more passive, rather than active way, facilitated by the corporation. Employee donation matching allows the employee to choose how and which disaster relief efforts to donate to, and the corporation will match the donation. Although there may be some stipulations or requirements that the corporation may impose on the donation process, this form of donations is an efficient way to providing monetary donations to those in need through employee action. According to Tomasini (2010), “the impact could be greater if channeled through their employer, who at times may match their donation, raise awareness to the cause from their customers, and help the humanitarian organization lower the cost of fundraising” (pg. 11). Tomasini’s description suggests that employee donation matching is a positive way for humanitarian relief organizations to receive larger volumes of donations while also supporting the corporation’s reputation through funding relief efforts. Employee donation matching is a way to incorporate corporate social responsibility into the corporate strategy while encouraging employee involvement and participation.

Despite the positive benefits of employee donation matching, Tomasini (2010) adds “corporate donors must respond to humanitarian organizations’ needs in the wake of a disaster without compromising their own interests” (pg. 13). This concept is not only crucial to employee donation matching, but in all aspects of corporate relief donations. Tilcsik et. al (2013) notes that one of the only times a corporation may be truly hesitant to donate to a disaster relief effort is when a corporation’s operations is personally affected

by the natural disaster; this was greatly apparent during Hurricane Katrina. While matching an employee's donation to relief efforts is a positive step towards corporate social responsibility, it is important to support causes that are appropriate and conducive to the mission and values of the corporation and its operations.

Corporate Philanthropic Disaster Response as Business Strategy

As mentioned previously, corporate philanthropic donations are not only a means of providing funding to those affected by disasters, but also serve as a springboard for corporations to improve their reputation, gain customer awareness, and improve and maintain their corporate social responsibility. Muller et al. (2011a) state “from a reputational perspective, some firms may engage in CPDR in order to maintain a preexisting reputation for responsibility” (page 914). This suggestion from Muller et al. produces the almost-obvious statement that corporate donations do not originate purely out of genuine generosity, but also encompass self-seeking benefits. These positive benefits that corporate donations may have on a company may produce further implications on managers. “It is widely accepted that managers can and do engage in philanthropy for strategic reasons like public relations, and recent research suggests managers use philanthropy as a tool to manage volatility in their economic performance” (Muller et al., 2011a, 915). Xiaodong’s (2013) research shows that “corporate giving is a reaction to seismic shifts in environmental landscape, and it represents a reactive strategy crafted to counter pressures such as stakeholder demands, threats of government intrusion into industry’s freedom, and escalating public expectations” (pg. 39). Corporate social responsibility involves serious business strategy, and it would be naïve to believe that

corporate philanthropic donations, especially in the event of a natural disaster, do not play a role in a corporation's strategy and efforts to maintain and improve public reputation.

It is clear from the academic research provided by Xiaodong and Muller et al., corporate philanthropic donations are not merely a way of lending a hand to those affected by natural disasters, but rather, corporations see the philanthropic giving as a strategic opportunity to improve the corporation's external reputation, appeal to stakeholders, and increase customer awareness. Xiaodong (2013) notes "corporate donations can help the company forge a relationship with the customer and build loyalty" (pg. 40). Loyal customers are among many of the catalysts for a successful company, thus any opportunity to improve and create customer loyalty will be pursued.

Discussion

Humanitarian relief supply chains serve a vital role in the relief efforts in the event of a natural disaster. As discussed in the literature review, numerous factors play a role in the timely execution of humanitarian relief supply chains, including government assistance, donation-based relief organizations, transportation of supplies, and in-kind donations, all brought together through high-level coordination. Donations and funding are the primary way to ensure movement of necessary materials, the participation of donation-based organizations, and relief in the event of a natural disaster.

Donations, monetary or non-monetary, may originate from individuals, churches, and corporations, among others. The role of corporations in donating to natural disaster relief efforts is important to the liquidity of relief organizations in the pursuit of minimizing further damage and loss of life. Corporate donations not only help provide necessary financial resources to relief efforts, but also facilitate a source of competitive advantage through corporate social responsibility for the corporation; in some, or potentially most cases, these relief donations are an element in a corporation's overall business strategy.

One of the primary reasons that corporate donations for relief efforts play such a large role in the firm's strategy is due to corporate social responsibility, which is influenced by the requirements and opinions of stakeholders and consumers. Stakeholders have a large bearing on the use of the corporation's financial assets; reputation and corporate social responsibility are critical to maintaining and improving a strong customer base and a positive corporate image. Although corporate donations should be viewed as a positive form of donations, it is crucial to remember there are almost always additional motives in the eyes of corporate donors.

This research on the funding that drives humanitarian relief supply chains is limited by the lack of public information regarding donations from private corporations, as well as the lack of information provided by the donations-based relief organizations regarding their financial cash flows. Because relief organizations, such as the Red Cross, do not have a legal obligation to fully disclose where all donated money is utilized,

donations may get lost in the midst of the relief efforts, making it unclear where donated money is actually spent. Additionally, there are limitations in the research regarding what types of restrictions or stipulations corporations put on their donations; this information could prove useful in analyzing how vital the concept of reputation and corporate social responsibility are to the corporation, as opposed to just donating based primarily on need and compassion. Corporations, just like donation-based organizations, are not always eager to disclose how their money is spent, or what types of restrictions are placed on the donations in order to maintain their public reputation and ensure credibility in future endeavors. This lack of transparency has limited further research regarding specific details of donations, stipulations, or requirements involved.

Based on these limitations, there is room for further research. As mentioned previously, it may prove incredibly interesting to break down the financial reports of donation-based relief organizations, such as the Red Cross, in order to determine where the donated money actually is spent. Research has been done on this topic, but the lack of transparency and availability of data from these organizations creates limitations on information available to the public. For example, Michele Mitchell wrote a documentary called “Haiti: Where Did the Money Go?” that goes deep into the heart of Haiti to determine where the millions of donated dollars were spent; although this documentary sheds light on the lack of transparency within donation-based relief organizations, full disclosure is never fully obtained (Page, 21, 2012). For example, over \$486 million was raised by the Red Cross for Haiti earthquake relief efforts, and yet it was clear that the large sum of donated money was not fully put towards relief efforts; however, the public

may never be certain where the millions of dollars of intended relief donations were spent. (Page, 21, 2012). From this research done in the midst of the relief efforts, Michele Mitchell stated, “This is not just about Haiti. It’s about the need for real reform. Because when you give money to a do-good organization, you expect it to do good with it. We need to do better” (Page, 21, 2012). The research provided in the paper, along with Mitchell’s observations, sheds light on the necessary reform required to make changes in the way donations are handled. Donations need to be utilized in the means by which the donor intended; thus, this uncertainty regarding donations places the responsibility of the donor to demand a high level of responsibility and understanding from the organization receiving the donation to ensure it is being put to proper use.

Figure 8, below, is a basic representation of the origin of donations that are utilized in humanitarian relief supply chains. While the four main means of donating to humanitarian relief supply chains are listed, corporate donations are the main focus of this paper.

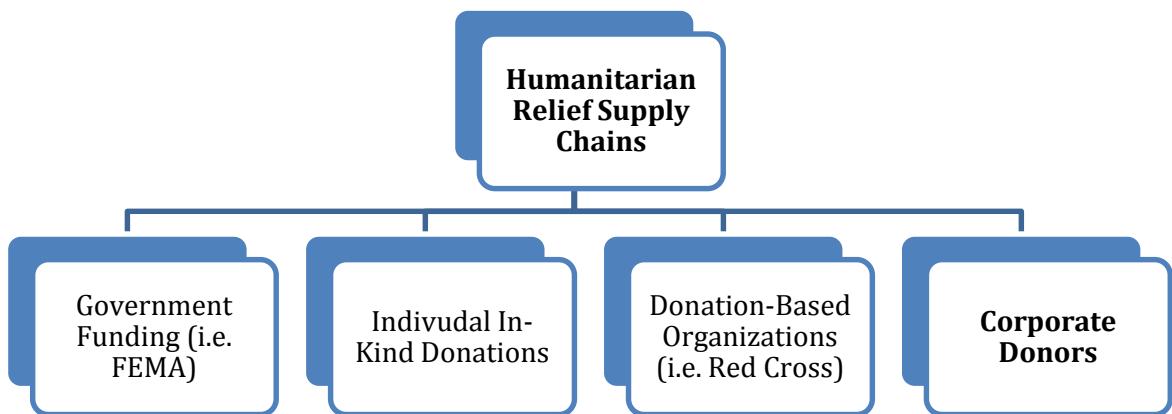


Figure 8 Origins of Humanitarian Relief Supply Chain Donations

Figure 9, below, is a compilation of the previous decision flow charts. This diagram provides a full breakdown of decisions regarding corporate donations, and the impacts on the corporation.

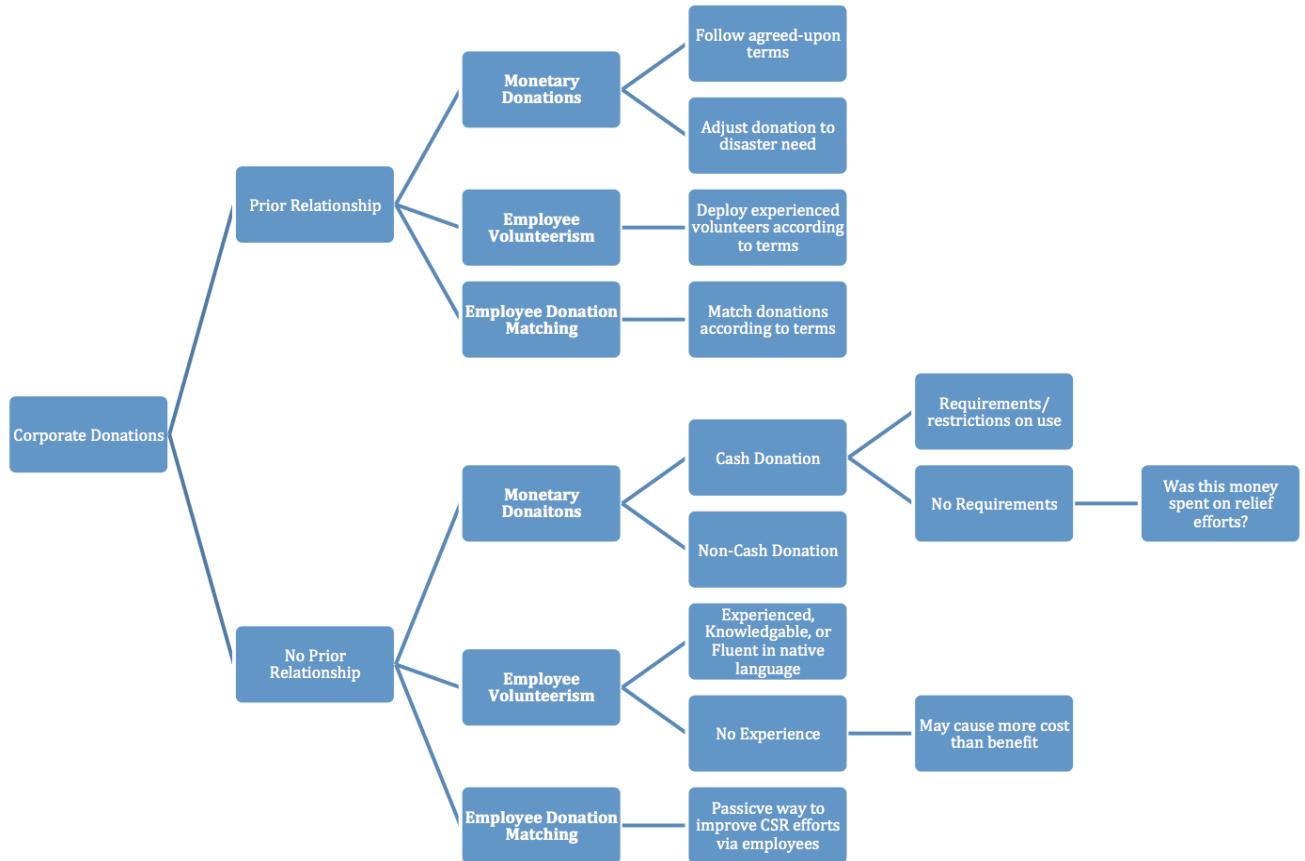


Figure 9 Corporate Donations - Detailed Breakdown of Decisions

Implications

Corporate social responsibility and reputation have a large presence in a corporation's decision to donate to relief and philanthropic efforts, especially in the event of a natural disaster. Corporate social responsibility is a factor that remains important in the eyes of customers and stakeholders; in order to maintain a valuable reputation and participate in corporate social responsibility, many corporations feel the responsibility to donate or assist in relief efforts, especially when there is a large presence in the media. Human and Terblanche (2012) note, "A well-managed brand has the ability to positively shape consumer awareness, associations, attitude, and loyalty" (pg. 147). In today's market, corporate social responsibility and philanthropic participation are no longer viewed as an option, but rather an essential to a successful business strategy; by utilizing corporate philanthropy as part of a corporate strategy, outside perceptions and attitudes of the corporation can be created and improved, ultimately affecting the success of the corporation.

Managerial implications and lessons can be gained from this research regarding corporate social responsibility and its role in corporate donations and the movement through humanitarian relief supply chains. It is important to remember the implications of corporate social responsibility and reputation when conducting activities in the role of manager. Managerial duties not only include managing employees and conducting the necessary aspects of business on a day-to-day business, but also include an awareness and understanding of the world and environment in which business is conducted. As a

manager or a corporate-level executive, it is imperative to consider the employee and stakeholder opinions and requirements regarding the corporation's participation in corporate philanthropy, corporate social responsibility, and the corporation's expected level of participation in relief efforts. Participation in relief efforts is now considered part of 'business life' and needs to be incorporated in a manager's approach to achieve the corporation's strategic goals.

As stated previously, a corporation's role in relief activities and other forms of corporate social responsibility has a great bearing on the stakeholder's and customer's opinion of the corporation, which may ultimately affect the success of the company.

Conclusion

Humanitarian relief supply chains are a means of providing necessary supplies, materials, and assistance that are critical to the minimization of death, suffering, and destruction in the event of a natural disaster. Humanitarian relief supply chains remain immobile without funding; funding and donations play a crucial role in how efficiently and effectively the humanitarian relief efforts are executed.

Funding for these relief efforts can come from numerous sources, such as individual donations, non-profit donations, government assistance, and corporate donations. The main focus of this paper is corporate donations and the external impacts

these donations have on disaster response, as well as the internal impacts the donation may have on the corporation.

Corporate donations, the main focus of this paper, encompass greater implications and considerations than generally perceived by a consumer. Corporate donations are an output of careful consideration regarding the corporation's strategy as well as philanthropy's role in maintaining a certain level of perceived corporate social responsibility. Corporation social responsibility and corporate philanthropy, while previously considered an encouraged option, have become nearly imperative to remain an established, well-rounded corporation. In order to achieve these goals of maintaining a certain level of corporate social responsibility for stakeholders and customers, corporate philanthropic donations to relief efforts need to be considered.

Corporate donations can be broken down into three main categories: monetary donations, employee volunteerism, and employee donation matching. Each of these three categories mandate a certain level of attention to detail, for each require specific considerations before being implemented as a form of corporate social responsibility.

Regardless of the means by which a corporation participates in relief efforts, it is crucial to consider the internal and external impacts those decisions may have on the corporation. Reputation is a critical component of a corporation's success, and while it may take years to create a positive reputation, one decision can alter the reputation instantly. Careful consideration is encouraged when determining which method of

corporate social responsibility and corporate philanthropy the corporation will participate in; the opinions of both the stakeholders and customers should be considered, while still ensuring the philanthropic efforts support the corporation's mission and values.

Humanitarian relief supply chains facilitate the movement of necessary aid needed for relief efforts in the event of a natural disaster; coordination and funding work together to minimize the effects of death, suffering, and destruction. Corporate funding is among one of the most prominent and highly regarded forms of donations, which improves the well being of those affected, while also contributing to the corporation's competitive advantage and future endeavors.

REFERENCES

1. Bagdoyan, S. J. (2014). FEMA has improved disaster aid verification but could act to further limit improper assistance. *GAO Reports*, i-84.
2. Balcik, B., Beamon, B. M., Krejci, C. C., Muramatsu, K. M., Ramirez, M., (2009). Coordination in humanitarian relief chains: practices challenges, and opportunities. *Int. J. Production Economics*, 126, 22-34.
3. Boin, A., Kelle, P., Whybark, D. C., (2010). Resilient supply chains for extreme situations: outlining a new field of study. *Int. J. Production Economics*, 126, 1-6.
4. Gautier, A., & Pache, A. (2015). Research on corporate philanthropy: a review and assessment. *Journal Of Business Ethics*, 126(3), 343-369.
5. Hildreth, W. (2009). The financial logistics of disaster: the case of hurricane Katrina. *Public Performance & Management Review*, 32(3), 400-436.
6. Human, D., & Terblanche, N. S. (2012). Who receives what? The influence of the donation magnitude and donation recipient in cause-related marketing. *Journal Of Nonprofit & Public Sector Marketing*, 24(2), 141-160.
7. Koehn, D., & Ueng, J. (2010). Is philanthropy being used by corporate wrongdoers to buy good will?. *Journal Of Management & Governance*, 14(1), 1-16.
8. Muller, A., & Kräussl, R. (2011a). Doing good deeds in times of need: a strategic perspective on corporate disaster donations. *Strategic Management Journal*, 32(9), 911-929.
9. Muller, A., & Kräussl, R. (2011b). The value of corporate philanthropy during times of crisis: the sensegiving effect of employee involvement. *Journal Of Business Ethics*, 103(2), 203-220.
10. Muller, A., & Whiteman, G. (2009). Exploring the geography of corporate philanthropic disaster response: a study of fortune global 500 firms. *Journal Of Business Ethics*, 84(4), 589-603.
11. Naslund, D., & Williamson, S. (2010). What is management in supply chain management? - a critical review of definitions, frameworks and terminology. *Journal Of Management Policy & Practice*, 11(4), 11-28.
12. Nolz, P., Semet, F., & Doerner, K. (2011). Risk approaches for delivering disaster relief supplier. *OR Spectrum*, 33(3), 543-569.

13. Ozdamar, L. (2011). Planning helicopter logistics in disaster relief. *OR Spectrum*, 33(3), 655-672.
14. Page, C. (2012, February 2). Where did Haiti donations go?. *Caribbean Business*. p. 21.
15. Ratnick, S., Meacham, B., Aoyama, Y. (2008). Locating backup facilities to enhance supply chain disaster resilience. *Growth & Change*, 39(4), 642-666.
16. Ricks, J. M., & Peters, R. C. (2013). Motives, timing, and targets of corporate philanthropy: a tripartite classification scheme of charitable giving. *Business & Society Review (00453609)*, 118(3), 413-436.
17. Roberts, P. S. (2006). FEMA After Katrina. *Policy Review*, (137), 15-33.
18. Saraf, V., Singhai, S., & Payasi, S. (2012). Corporate social responsibility: building brand and linking corporate strategy with philanthropy. *BVIMR Management Edge*, 5(2), 88-97.
19. Suzuki, Y. (2012). Disaster-relief logistics with limited fuel supply. *Journal Of Business Logistics*, 33(2), 145-157.
20. Tilcsik, A., & Marquis, C. (2013). Punctuated generosity: how mega-events and natural disasters affect corporate philanthropy in U.S. communities. *Administrative Science Quarterly*, 58(1), 111-148.
21. Tomasini, R., Stapleton, O., & van Wassenhove, L. N. (2010). The challenges of matching private sector donations to humanitarian needs and the role of brokers. *INSEAD Working Papers Collection*, (41), 1-25.
22. White, S. (2012). *Corporate Engagement in Natural Disaster Response: Piecing Together the Value Chain* (pp. 7-19). Washington D.C.: Center for Strategic and International Studies.
23. Xiaodong, Q. (2013). Corporate philanthropic disaster response and post performance: evidence from China. *International Journal Of Management & Marketing Research (IJMMR)*, 6(2), 39-51.
24. Zagefka, H., Noor, M., & Brown, R. (2013). Familiarity breeds compassion: knowledge of disaster areas and willingness to donate money to disaster victims. *Applied Psychology: An International Review*, 62(4), 640-654.
25. Zhang, R., Zhu, J., Yue, H., & Zhu, C. (2010). Corporate philanthropic giving, advertising intensity, and industry competition level. *Journal Of Business Ethics*, 94(1), 39-52.