ABSTRACT

Logistics-Focused Partnerships Between For-Profit Companies and Humanitarian Organizations: A Content Analysis

William J. Gober

Director: Joshua K. Strakos, PhD

Logistics is one of the most important functions of a humanitarian organization, however research has identified major shortcomings of humanitarian logistics (HL) in comparison to effective for-profit logistics operations. Little research has been conducted regarding logistics-related partnerships between for-profit companies and humanitarian organizations. Existing research indicates that these partnerships are helpful and might improve humanitarian logistics operations overall.

The purpose of this thesis is to provide a structured assessment of cases relating to logistics-focused partnerships between for-profit companies and humanitarian organizations, and from these cases identify commonalities which contribute to the success of the partnerships. The author employs literature review and qualitative content analysis methods. The literature review provides a brief overview of the current state of HL and explains the origins of the research questions. The content analysis assesses five case studies and identifies commonalities between cases. Key findings of the case analysis are that cross-sector HL partnerships are successful and beneficial for both parties. These partnerships especially improve humanitarian groups' proficiency in logistics. Additionally, the research indicates establishing shared values and principles, and outlining deployment criteria for new partnerships reduces difficulties in initiating and maintaining partnerships. This knowledge is valuable because mechanisms for overcoming barriers to partnerships can be utilized by HL practitioners to facilitate more successful cross-sector collaboration in the future.

APPROVED BY DIRECTOR OF HONORS THESIS: Dr. Josh Strakos, Department of Management APPROVED BY THE HONORS PROGRAM: Dr. Elizabeth Corey, Director

DATE:____

LOGISTICS-FOCUSED PARTNERSHIPS BETWEEN FOR-PROFIT COMPANIES AND HUMANITARIAN ORGANIZATIONS: A CONTENT ANALYSIS

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William J. Gober

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CHAPTER ONE

Introduction

According to the United Nations Centre for the Epidemiology of Disasters, between 1994 and 2013 over one million people were killed due to natural disasters, with an average of about 68,000 per year. Additionally some 218 million persons per year were negatively impacted by natural disasters (CRED, 2015). Natural and man-made disasters have always been dangerous and highly problematic for humanity, and planning and preparation to protect against them are not recent developments. Approximately 80% of any given humanitarian relief effort can be attributed to logistics activities (Van Wassenhove, 2006). However, the academic study of humanitarian logistics (HL) only recently began to develop as a subset of operations management literature in the early 2000s. In the beginning HL academic literature was scarce (Van Wassenhove, 2006). Disaster relief operations for humanitarian relief organizations were poorly planned and staffed, with little to no emphasis from these organizations placed on logistics (Van Wassenhove, 2006).

With the emergence of the study of HL, it is evident that the logistics functions of humanitarian organizations are instrumental to the success of their relief efforts (Altay & Green, 2006; Van Wasenhove, 2006). The focus of this thesis is cross-sector partnerships between humanitarian relief organizations and logistics-focused for-profit companies, and the potential these partnerships have to improve HL operations overall. Existing research on cross-sector HL partnerships indicates these partnerships are beneficial in improving HL efforts, and strengthening the capacity of humanitarian groups to prepare

for and respond to disasters (Van Wassenhove, 2006; Kovács & Spens, 2007; Vega & Roussat, 2015; Bealt et. al. 2016; Nurmala et. al. 2017).

In 2002, the first cross-sector partnership between a humanitarian organization and logistics-focused company was initiated to tackle relief and preparedness efforts (Tomassini & Van Wassenhove, 2004). Since then, several cross-sector partnerships have been established for improving HL efforts across the globe. Thus examining the specific conditions and mechanisms which contribute to the effectiveness of these partnerships might provide further valuable knowledge for the improvement of HL practices. The continued improvement of HL capabilities has the potential to improve disaster relief organizations' capacity to save lives and meet the needs of those impacted by catastrophes.

CHAPTER TWO

Literature Review

Major Categories in HL

Development and Growth of Humanitarian Logistics

The field of humanitarian logistics (HL), both academic and in practice, has undergone significant growth and change since 2004. Prior to this time there was very little academic literature on the topic of supply chain management (SCM) in disaster response (Altay & Green, 2006). Also, the existing literature that dealt with humanitarian logistics was published primarily in practitioner journals. Additionally, unlike for-profit firms, logistics functions of humanitarian organizations were generally underdeveloped or nonexistent. This is attributed to the unique nature of HL and differences between humanitarian organizations and for-profit businesses (Van Wassenhove, 2006).

One major difference between humanitarian and for-profit logistics is that humanitarian groups began developing their logistics functions fifteen years after for-profit companies (Van Wassenhove, 2006). Another key difference is that for-profit logistics-focused companies are profit driven and focused on monetary value, whereas humanitarian groups are motivated by saving lives.

The progression of HL can be best broken down into stages of development spanning the time from 2004 to the present. While a handful of scholarly articles regarding the logistics of disaster relief were written prior to 2004, research intensified from 2004-2009 when publications increased and partnerships between for-profit firms

and humanitarian organizations were first established (Van Wassenhove, 2006; Nurmala et. al., 2017). There was an uptick in research generated regarding supply chain and logistics functions of disaster relief organizations in the years following Hurricane Katrina in 2005 and the 2004 Indian Ocean earthquake and tsunami (Van Wassenhove, 2006; Nurmala et. al., 2017). Significant publications during this period included literature reviews which assessed the current state of HL and identified areas where further development was necessary. These literature reviews often focus on explaining the nature of HL, defining terms and generally establishing the scope/framework of HL (Altay & Green, 2006; Van Wassenhove, 2006; Kovács & Spens 2007; Overstreet, 2011). In the establishment phase the few operations research (OR) academics who wrote on the subject of HL were generally in agreement with one another in defining terms and highlighting the needs of the emerging field. The first major literature review which set the stage for further research was conducted by Luk Van Wassenhove in 2006. In this seminal work Van Wassenhove established that supply chain management plays a critical role in modern humanitarian operations. His basic argument was that with proper coordination, both the humanitarian and business realms of supply chain management stand to gain from one another.

One common theme of these original surveys of the HL field is that through collaboration, humanitarian SCM can be brought up to speed with the latest developments and methodologies for maximum effectiveness in disaster response. The first articles published regarding OR and HL implored OR academics to create an established science of humanitarian logistics and especially to draw from existing SCM

concepts employed by for-profit companies (Van Wassenhove 2006; Altay & Green, 2006; Kovács & Spens, 2007).

In the subsequent years, HL researchers including Kovács and Spens performed additional literature reviews and analyses and addressing gaps within the HL field. In 2010 there were no accepted or uniform performance measures for HL providers despite increased research (Kovács & Spens, 2011). This is attributed to the difference in the nature of HL and for-profit operations. Whereas for-profit companies have financial metrics and other logistics key performance indicators (KPI), it is much more difficult to quantify success in terms of HL operations. HL focuses on saving the maximum number of lives, decreasing human suffering, and the overall effectiveness of aid distribution. This is not the only issue found with HL at the time. The lack of proper education and certification standards for HL providers is identified as another major gap in HL (Kovács & Spens, 2011). The lack of performance indicators and training standards creates significant barriers for improvement in the HL field. The academic field of HL saw increased development in the early years after its establishment, especially in the area of cross-sector partnerships. From 2004-2017, the peak years of research covering HL partnerships were 2009 and 2010 (Nurmala et. al., 2017). Currently there is not as much cross-sector partnership academic research generated as in the first six years of HL's development (Nurmala et. al., 2017).

A subset of HL research focuses on examination of performance measurements for humanitarian relief efforts. These sources examine current measurement systems, assess effective for-profit measures, and propose new measurement systems for improving HL practice (Davidson, 2006; Beamon & Balcik 2008; Lu et. al., 2016; Pettit

& Beresford, 2009; Van der Laan et. al., 2009; D'Haene et. al., 2015). This is logical considering how the field has progressed from its nascent stages post-2004. As HL became established, further research identified major problems such as the issue of performance measurement. Adequate performance measurement is crucial because HL relies heavily on for-profit supply chain management concepts.

Gaps in Humanitarian Logistics

Within HL there are critical knowledge and technology gaps which hinder humanitarian disaster relief operations (Altay & Green, 2007; Kovács & Spens, 2011; Overstreet et. al., 2011; Bhimani & Song, 2016). These gaps exist between HL and forprofit practices and also HL research and HL practice. As mentioned in the Development and Growth section, HL research often suggests areas in need of improvement and further research. This research is necessary to bridge gaps in HL research and actual capabilities (Bhimani & Song, 2016). Research regarding the shortcomings of HL typically compares the HL operations status quo to that of the logistics function of a for-profit company. As previously mentioned, this is because disaster relief operations are 80% logistics-based (Van Wassenhove 2006), and humanitarian organizations are able to learn useful and applicable techniques from for-profit logistics providers (Jensen 2012; Nurmala et. al., 2017).

Kovács and Spens conducted the first outright gap analysis of HL in 2011. From this initial analysis it was apparent that there were major gaps in HL practice, HL research, and HL education. Kovács and Spens assessed data from humanitarian organizations, consulted practitioners, and examined education programs and training institutions for HL. Gaps in HL practice include a lack of metrics for performance

evaluation, an exclusion of local sources from the humanitarian response supply chain, and disregard for sustainability with regard to climate change (Kovács & Spens 2011). HL research is in need of more single-case in-depth research as well as reverse logistics for unnecessary donations received. Kovács and Spens also highlight the disorganized state of HL certification programs and higher education in HL, and the need for more strategic level-oriented courses. Kovács and Spens conclude—similar to other HL research—by advocating for research regarding the fields addressed and more specifically encouraging further action in education programs for the expansion of HL. Additionally, in the same year an analysis by Overstreet et. al. examined the gap in existing logistics-related information systems technology and the information systems technology employed by HL practitioners. In the same vein as Kovács and Spens, Overstreet et. al. identified the lack of quality information systems as a significant problem hindering development of the field (Overstreet et. al., 2011).

At present it appears these gaps in HL practice and research persist. For example, a 2016 analysis of the state of HL finds that despite over ten years of collaboration within the United Nations Logistics Cluster, there is still a lack of participation or inclusion of parties from the area impacted by the disaster (Bhimani & Song, 2016). Additionally, Nurmala et. al. conducted an assessment of the current state of partnerships between forprofit firms and HL providers, and found despite an increase in these partnerships since the Indian Ocean tsunami (Van Wassenhove, 2006; Nurmala et. al., 2017), there is a gap when it comes to research on the outcomes of these partnerships.

From all this it is evident that there is still much to be learned and updated in HL, especially when it comes to performance metrics and improvement via partnerships between for-profit firms and humanitarian organizations.

Humanitarian Logistics Performance Measurement

There is currently a lack of standardized performance metrics for HL providers (Kovács & Spens, 2011; Nurmala et. al., 2017). Before understanding the issue of performance measurement with regards to HL, it is necessary to examine key commercial supply chain performance measurement concepts, as well as how success within HL operations is defined.

They key elements of creating a system to evaluate performance are:

"inclusiveness (measurement of all pertinent aspects), universality (allow for comparison under various operating conditions), measurability (data required are measurable) and consistency (measures consistent with organizational goals)" (Beamon, 1996). These elements do not suggest that HL is outside of the scope of effective performance measurement. Beamon (1999) asserts within SCM, performance metrics should be based on resources, output and flexibility. Within these categories specific measures are not easily applicable to HL.

Measures used by for-profit logistics companies are typically related to the company's bottom line. These concepts such as sales revenue and profit, return on investment, and predictable or seasonal demand do not relate to HL with its focus on saving human lives. Sales and profit are totally unrelated to humanitarian organizations which are by their very definition not-for-profit. ROI could be considered relevant in terms of reducing operational costs, but not in the traditional, profit-related sense.

Additionally traditional demand planning is almost impossible because the nature and scope of a disaster are uncertain until the disaster occurs. For-profit SCM performance-related measures also include various costs such as total cost, cost of distribution, and inventory holding cost (Beamon, 1999). For-profit companies benefit from knowing these costs because reducing them decreases overall operating costs and improves the bottom line. However humanitarian groups also operate within budgetary constraints and could potentially see operational benefits from cost savings.

Supply chain performance criteria may be applied to HL operations (Pettit & Beresford, 2009; Van der Laan et. al., 2009; van Wassenhove, 2006). Tomasini and Van Wassenhove provide one of the earliest definitions of HL success: "A successful humanitarian operation mitigates the urgent needs of a population with a sustainable reduction of their vulnerability in the shortest amount of time and with the least amount of resources" (Tomasini & Van Wassenhove, 2009). This is a straightforward definition of effective HL and one which sheds light on the difficulties of measuring its success. Concepts such as "[mitigating] the urgent needs" and "sustainable reduction of ... vulnerability" are not easily translated to typical supply chain performance indicators.

A non-exhaustive review of works related to HL and performance evaluation reveals there is difficulty in transferring commercial SCM evaluation concepts to HL. Academic articles on the subject of HL performance management generally follow the pattern of a literature review and comparison and contrast of commercial and humanitarian SCM, followed by suggestions for further research (Beamon & Balcik, 2008; Pettit & Beresford, 2009; Van der Laan et. al., 2009; D'Haene et. al., 2015). Additionally some scholars provide an actual framework for HL performance

measurements (Davidson, 2006; Beamon & Balcik 2008; Lu et. al., 2016). However, a 2014 literature review focused on performance measurement framework research found that HL evaluation metric frameworks are rarely empirically tested (Abidi et. al., 2014).

The major issue in HL performance evaluation which was identified by multiple scholars is lack of modern information systems which are critical to supply chain success (Davidson, 2006; Beamon & Balcik 2008; Van der Laan et. al., 2009; Abidi et. al., 2014). Adequate information sharing is critical in modern commercial supply chains (Mentzer et. al., 2001). It can be concluded proper information flow is equally critical to the performance of humanitarian supply chains where the operating environment is highly unpredictable (Van der Laan et. al., 2009).

In summation, within the HL sphere of performance metrics scholarly sources provide useful, but untested and not yet unified performance frameworks, as well as identify key areas for growth. Specifically the identification of lagging IT systems is further indication of potential room for growth of HL providers in partnerships with forprofit companies.

Partnerships in Humanitarian Logistics

Although HL as an academic field has experienced significant growth in the last decade, research which specifically focuses on partnerships in HL is lacking (Nurmala et. al., 2017). Partnerships between HL providers and for-profit firms as a way of improving operations were mentioned as early as 2006 by Van Wassenhove, and have subsequently been suggested by other HL scholars (Van Wassenhove, 2006; Kovács & Spens, 2007; Vega & Roussat, 2015; Bealt et. al. 2016; Nurmala et. al. 2017).

One of the first items of research conducted specifically regarding logistics service providers (LSPs) and humanitarian supply chains examined 15 instances of collaboration between humanitarian organizations and LSPs (Vega & Roussat, 2015). They categorized partnerships in specific roles and sub-roles, and examined each type's involvement in various phases of disaster management (Vega & Roussat, 2015). Vega and Roussat established that while for-profit firms do play a role and are interested in getting involved in HL, there is "a gap between the attention paid to LSPs in humanitarian logistics and the apparent willingness of such firms to be a part of relief SCs" (Vega & Roussat, 2015). This gap still persists according to 2017 research examining the current state of cross-sector partnerships in HL (Nurmala et. al., 2017).

In some of the most recent literature assessing the state of cross-sector HL collaboration, Nurmala et. al. conducted a literature review of research relating to HL partnerships. In a similar vein to Vega & Roussat, Nurmala et. al. identifies two general categories of partnerships by which various HL collaborations may be identified. The types of partnerships are "ad hoc" and "strategic" (Nurmala et. al., 2017). The appropriately named "ad hoc" partnerships refer to those which are mainly concerned with the immediate response phase of disaster relief. This is in contrast to "strategic" partnerships which are instituted for the long-term growth of humanitarian organizations and are concerned with the preparedness phase as well as response (Nurmala et. al., 2017). These two categories are more broadly defined than those outlined by Vega and Roussat. However, the categories relate to Vega & Roussats' research in that they encompass each of the roles laid out and provide a more concrete distinction between the types of partnerships that exist.

Existing cross-sector HL partnership literature also explores the motivations for entering into partnerships as well as barriers to partnerships (Bealt et. al., 2016; Nurmala et. al., 2017). Corporate social responsibility is seen as a major factor in motivating collaboration from the for-profit side (Bealt et. al., 2016; Nurmala et. al. 2017). Employee motivation/morale and public image enhancement are also motivating factors for LSPs participating in partnerships with humanitarian organizations (Bealt et. al., 2016; Nurmala et. al. 2017). Contrary to what might be assumed, "a commitment to help vulnerable people" was not identified as a major motivating factor for LSPs (Bealt et. al., 2016). This was the finding of a 2016 survey of both practitioners and employees of companies involved in HL partnerships. One motivation for collaboration from the humanitarian perspective that is generally agreed upon is the desire to improve the effectiveness of humanitarian SCM (Vega & Roussat, 2015; Bealt et. al., 2016; Nurmala et. al., 2017). Additionally pressure from donors is another key motivating factor for humanitarian organizations (Nurmala et. al., 2017).

There are also significant barriers to partnerships identified in academic research. These barriers include differences in goals (Nurmala et. al., 2017), antiquated technology in humanitarian organizations (Pettit & Beresford, 2009; Bealt et. al., 2017; Nurmala et. al., 2017), cultural differences (Nurmala et. al., 2017), and general mistrust between organizations (Bealt et. al., 2016). These factors which impede partnerships help explain the gap between research regarding partnerships and practice.

Summation & Research Questions:

This overview of HL literature and practice reveals that the field is growing, but still lacking in many aspects. There are numerous areas for improvement which include

performance metrics, information technology, and research on cross-sector partnerships in general. Given the potential value cross-sector partnerships could provide in terms of growth and improvement for humanitarian organizations, all of this information leads toward addressing the following research questions regarding cross-sector partnerships:

How successful have cross-sector partnerships been for humanitarian-LSP collaborations?

How does philanthropic collaboration between humanitarian organizations and for-profit firms impact HL relief efforts?

What mechanism(s) might be implemented to decrease current barriers to partnerships?

CHAPTER THREE

Methods and Analysis

Methodology

Literature review

Source selection. The first step in conducting research for the project was compiling a list of journal articles and cases for a literature review which provided a background for the state of HL. Academic literature was located by online search through the Baylor OneSearch engine as well as through Google Scholar. After conducting a search, sources were filtered by reading their abstract to assess their relevance to the subject. Sources that were included had abstracts which referenced partnerships, literature review or content analysis of HL research, performance measurement in HL, gap analysis in HL, and/or areas for improvement in the HL field. Searches included key words/phrases such as: "humanitarian logistics partnerships", "humanitarian logistics performance measures", "logistics service providers and humanitarian organizations" or "humanitarian logistics". Sources were filtered by most recent to form an accurate picture of the current state of HL. Sources were included ranging from the beginnings of academic study of HL in 2004 (Altay & Green, 2006) to the present. This timeframe was selected to provide a sense of how HL has developed over the years that it has been actively researched.

Sources selected for the literature review were analyzed and recorded. Analysis consisted of recording the primary purpose, the central argument or proposition, and the

implications of the research, as well as recording any other relevant information gleaned from the source. Common themes across sources were identified and four sections for the literature review were developed after examining each source.

Development and growth, gaps in HL, and performance measurement were prevalent topics and were selected as categories essential to understanding the state of HL in the literature review. These categories were chosen in order to provide a general assessment of the status quo in HL. The development and growth category was selected because HL as an academic field was established relatively recently, and a history of the field is helpful to understand issues and trends addressed in this thesis. Gaps in HL was identified as another significant category because this thesis focuses on the impacts of cross-sector partnerships in HL and how humanitarian organizations might improve operations through partnerships. The gaps in HL section helps identify specific areas where these partnerships might improve operations. For similar reasons, performance measurement was included as a major category. The initial logic behind having a performance measurement section was that understanding the way performance is measured in HL sheds light on how operations are documented and categorized as successful or unsuccessful. Finally, a section focusing solely on cross-sector partnerships was added because cross-sector partnerships are the subject of this thesis and providing an overview of current research in the area of partnerships was necessary for identifying acceptable areas for exploration in research. A comprehensive review of each category was composed using information from these sources. The research questions addressed in this thesis are the result of the review.

Case Study Content Analysis

Content analysis. An inductive content analysis of case studies was determined to be the best source of information for answering the research questions. Content analysis is a method of analyzing written, verbal, or visual communication messages (Cole 1988). In regard to research it is a systematic and objective means of quantifying and describing phenomena (Krippendorff, 1980; Elo and Kyngas, 2007). Content analysis allows inferences to be made from data which can yield valuable knowledge and insights. (Krippendorff, 1980; Elo and Kyngas, 2007). In inductive content analysis categories and concepts are the result of examination of the data (Elo and Kyngas, 2007). Content analysis is also widely applicable and used across many academic disciplines (Elo and Kyngas, 2007). Because little is known about best practice in HL partnerships, content analysis is especially applicable for answering questions about the state of partnerships.

Case selection. Additionally, case study research was identified as the best source of data for answering the research questions. According to Voss et. al. (2002), case studies are useful sources for research and are especially helpful in creating new theory. Case studies have also been shown to be valuable and trusted sources for practitioners (Voss et. al., 2002).

After searching via the Baylor OneSearch engine, Google Scholar, and INSEAD Case Publishing, five case studies (with three of the studies being part of a series on one partnership) were selected from INSEAD's Social Innovation Center. There were two major factors which played a part in examining only five cases for the thesis. Existing literature detailing guidelines for case studies stresses the importance of having a low

number of cases for quality observation (Voss et. al., 2002). The rarity of cross-sector partnership-related sources also influenced the number of cases chosen. Searching within the Baylor library systems and Google Scholar for key words such as "humanitarian logistics case", "humanitarian partnership case", and "cross-sector partnership case" did not yield any case studies. Because of this, the INSEAD Case Publishing Centre served as a source for the cases. Within INSEAD Case Publishing the humanitarian partnership category listed 29 potential cases. The cases were filtered by assessment of the title and abstract. Cases which did not pertain to logistics were excluded from consideration. The following five cases were identified as meeting the criteria out of 29 total.

Case Summaries

The Logistics Emergency Teams: Pioneering a New Partnership Model. This case details the partnership between the Logistics Emergency Teams (LET) and the United Nations Global Logistics Cluster (the UN cluster). At the time the case was published in 2012, the LET included A. P. Moller-Maersk, Agility, UPS, and TNT Express. The UN Cluster included humanitarian groups such as the World Food Programme (WFP), the World Health Organization, Oxfam, and UNICEF. The initial organization of the LET-UN cluster partnership began in 2007. This partnership was created with the intention of improving UN humanitarian operations during disaster response via pro bono logistics work from the LET firms who often directly competed with one another in their commercial practices. The LET partnership conducted 11 successful operations between March 2008 and July 2011 (Stadtler & Van Wassenhove, 2012).

Agility: A Global Logistics Company and Local Humanitarian Partner. The Agility case recounts the Kuwait-based logistics firm's decision to expand its corporate social responsibility (CSR) programs to include a permanent team dedicated to humanitarian relief. Agility wanted to capitalize on its proficiency in logistics and apply it to humanitarian operations. In June 2006 Agility decided to assist with a major conflict in Lebanon and entered into an ad hoc partnership with local Red Cross/Red Crescent groups. Agility confirmed its usefulness in HL and developed principles for further assistance in humanitarian logistics operations at the conclusion of this original partnership (Tomasini et. al., 2009).

The TPG-WFP Partnership – Looking for a Partner. This is the first of three cases which explores the partnership between the TNT Postal Group (TPG) and the WFP. This case explores TNT's search for a long-term humanitarian partner. Beginning in 2002, TNT searched for a humanitarian partner which aligned with its own values and culture. It also identified business benefits which might result from a humanitarian partner, such as improved employee relations, international reputation, and company unity. WFP was chosen as the best fit and accepted the offer for a partnership under the conditions of a Memorandum of Understanding (Tomasini & Van Wassenhove, 2004). This case especially sheds light on barriers and mechanisms which facilitate partnerships.

The TPG-WFP Partnership – Learning How to Dance. This is the second case from the TPG-WFP series. The case generally covers TPG and WFP during the first year of the partnership discovering the best way to operate together. TPG and WFP agreed

upon the following five initiatives for the partnership to collaborate on: school feeding, private-sector fundraising, emergency response, joint logistics supply chain, and transparency and accountability in reporting and budgeting (Samii & Van Wassenhove, 2004). The case demonstrates difficulties in maintaining a cross-sector partnership, such as differences in management and decision-making structure, as well as simply finding the exact way in which assistance was needed in WFP.

The TNT-WFP Partnership – When the Music Changes, So Does the Dance. This is the final case in the three part series examining the partnership between (now) TNT and WFP. The case was published in 2009, and reviews the partnership performance over its first five years. There was a quantifiable monetary impact of some aspects of the partnership. Between 2003 and 2006 TNT and WFP invested €37,000,000 in their combined humanitarian operations. The numbers indicate significant decreases in WFP's operating costs due to improvements in operations management. TNT and WFP found the impact of their partnership more difficult to quantify in terms of impact on human life. However surveys of employees indicated a positive attitude from both parties about the partnership. Additional results, such as reduced intervention times, indicate measurable success indicators for cross-sector partnerships (Gatignon & Van Wassenhove, 2009).

Limitations and Biases

The constraints of this research are unique due to its nature as an undergraduate honors thesis and its subject material examining cross-sector partnerships in HL. The greatest limitation on the research is the timeframe of approximately two semesters for

completion for an undergraduate thesis. A more exhaustive list of sources and analysis might be completed given a larger timeframe. While academic research in HL is growing, information concerning cross-sector partnerships is scarce. This may be attributed to the newness of HL research or the rarity of published information from practitioners participating in partnerships.

Analysis

Structure and Purpose of Table 1

The analysis table contains three columns—one for each partnership from the five cases. The three TNT/TPG-WFP cases were included in one column together to reduce wasted space and increase ease of interpretation. Aside from the top row which contains case titles, each subsequent row contains answers to the question in the leftmost cell. The layout of figure 1 was selected for the case analysis because it provides a simple and easily interpretable visual representation of data gathered. This design enables side-by-side comparison for identification of trends. Identification of trends can enable formation of new theory, which is one of the strengths of case analysis (Voss et. al., 2002).

Questions in the table are ordered such that they display more basic data gathered from the case analysis first. The data from these questions is more "basic" because it involves answers plainly stated in the cases such as simple names, dates and descriptors about the partnerships. These first answers provide an overview of each case before subsequent questions become more complex. The final questions are also answered directly within the cases, but are intended to highlight trends which lend to answering the initial research

questions. The final questions do not originate from categories found within the text of the cases, but rather commonalities outlined upon the analysis of each case.

Relevant Definitions

Multi-party: Multiple humanitarian organizations working with multiple for-profit companies.

Two-party: One humanitarian organization working with one for-profit company.

Ad hoc: Partnership formed and active for the duration of a single humanitarian response Strategic: Partnership instituted for the long-term growth of humanitarian organizations and are concerned with the preparedness phase as well as response (Nurmala et. al., 2017)

Preparedness: "Includes plans or preparations made to save lives and to help response and rescue operations.... Preparedness activities take place before an emergency occurs" (FEMA, 1998).

Response: "Includes actions taken to save lives and prevent further property damage in an emergency situation... Response activities take place during an emergency." (FEMA, 1998)

Humanitarian Cluster: "grouping together organizations in areas such as water and sanitation, camp management, and logistics... to deal with a set of coordination issues including overlapping provision of relief and unclear responsibility for at risk populations" (Jensen, 2012).

Table 1:

Case:	The LET – UN Logistics Cluster	Agility – IFRC	TNT – World Food Programme
Who were the participants in the	For-profit: AP Moller-Maersk, Agility,	For-profit: Agility	For-profit: TNT Postal Group
partnership?	UPS, and TNT Express	Humanitarian: International Federation of Red Cross & Red	Humanitarian: World Food Programme
	Humanitarian: World Food Programme, World Health Organization, Oxfam, UNICEF	Crescent	
What was the type of partnership?	Multi-party; strategic	Two-party; Ad hoc / CSR Program	Two-party; strategic
What was the duration of the partnership?	2007-present	June 2006 – August 2006 Currently a member of the LET	2002-2012
In what stage of the disaster management process did the partnership participate?	Preparedness Response	Response	Preparedness Response

Case:	The LET – UN Logistics Cluster	Agility – IFRC	TNT – World Food Programme
What were the barriers for the partnership?	Skepticism of business competitors working together; cross-sector partnerships with a humanitarian cluster were a new and abstract concept	There were no significant barriers for either party (This may be explained by the fact that the partnership was immediately needed for the response phase of the crisis)	Convincing TPG's the board of directors; humanitarian organizations had no prior experience forming a long-term cross-sector partnership; organizational focus on saving lives vs. making profit; general humanitarian skepticism of forprofit employees' motives
What factors were and mechanisms allowed the partnership to overcome barriers?	Parties established criteria for deployment of the partnership; Established common principles for all parties involved in the LET in order to overcome idea of cooperating with competitors; Memorandum of Understanding	Agility employees desired engagement in local communities; Agility's global expansion warranted global philanthropy; the humanitarian need produced by the conflict was too great for either party alone; Agility hires local; Agility sought commonalities in a partner such as geographic location and local knowledge	"Organizational fit"; positive reputation of WFP; establishing specific criteria for a partnership; geographic scope; shared vision/driving values; Memorandum of Understanding; senior leadership convinced of partnership value through a field mission
What challenges were faced once the partnership was initiated?	DHL withdrew from the LET after being unsatisfied with a humanitarian response simulation	Difficulty keeping up with changing security situation; short supply of humanitarian goods	Industry and humanitarian jargon created communication issues; differences in organizational structure inhibited action; different "operational contexts"
What did the for- profit companies do to preserve regular business operations?	Agreed that pro bono logistics support for the partnership would not interfere with business operations	Agility limited pro-bono work to specific amounts of time	Limited pro bono work to a specific monetary value

Case:	The LET – UN Logistics Cluster	Agility – IFRC	TNT – World Food Programme
How did the partnership add value to the humanitarian group(s)?	Improved warehousing, transportation & distribution activities	Agility provided last-mile logistics and warehousing during the conflict; operations management experience; maintained own quality standards during crisis; created a regional transport network	Provided € 5,000,000 in cash and services over 5 years (later increased as a result of change in scope); assisted with fleet management, warehousing, software updates, inventory management, aviation training, project management and transportation of non-food items
How did the partnership add value to the forprofit firm(s)?	Enhanced reputation as "responsible partner"	Increased focus on long-term sustainability	Strengthened the relationship between TPG employees and the company; enhanced TPG's reputation; increased company unity
Was the partnership considered successful?	Yes	Yes	Yes
What were success measures for the partnership?	Quantitative: No data provided Qualitative: "Our staff working with WFP and the Logistics Cluster	Quantitative: No data provided Qualitative: -Agility expanded their HL CSR program	Quantitative: -Reduced intervention time -Reduced avg. cost of helping per victim -€37M investment total from both
Cont'd on next page	comes back with an immense feeling of satisfaction and gratification" -deployed 11 times from 2008- 11	-Agility joined the LET -Since Lebanon, Agility has also been involved in disaster in Indonesia, the Philippines, Bangladesh, Thailand and Myanmar	parties -warehousing measures yielded 41% increase in storage space -potential for €1. 2M in savings from optimized delivery routes

Case:	The LET – UN Logistics Cluster	Agility – IFRC	TNT – World Food Programme
What were	-LET still in operation		-€29M in potential HL related costs savings
success measures for the partnership?			Qualitative: Surveys and interviews indicated general positive outlook on the partnership
What were the major takeaways from the partnership?	Establishing common principles fosters cooperation; well defined cross-sectors partnership improve humanitarian logistics capabilities	No entity can work alone in humanitarian relief—large disasters necessitate partnerships; all employees must undergo humanitarian relief training; private companies can help humanitarian groups save on costs through pro bono work	Cross-sectors partnerships increase the efficiency of humanitarian operations by reducing costs and response times through improvements in supply chain and operations management.

CHAPTER FOUR

Findings and Conclusion

Answering Research Questions

How successful have cross-sector partnerships been for humanitarian organizations and for-profit companies in HL-Logistics Service Provider collaborations? AND How does philanthropic collaboration between humanitarian organizations and for-profit firms impact HL relief efforts?

Framework for examining success. To best answer these questions the success and impacts of cross-sector partnerships must be examined separately for each party. It should be noted that Tomasini & Van Wassenhove's definition (see page 7) of a successful humanitarian operation will be applied here, however success will also be examined in terms of value added to both humanitarian and for-profit organizations.

Partnership success for LSPs. Defining partnership success for LSPs is difficult as existing literature is mostly concerned with impact on humanitarian operations. The cases contain little information regarding the impact of each partnership on the for-profit LSPs, and the benefits described are largely intangible as evidenced in the chart. From the analysis, enhanced reputation or public image of the for-profit firms is generally a major positive impact of the partnership (Gatignon & Van Wassenhove, 2009; Tomasini et. al., 2009; Stadtler & Van Wassenhove, 2012).

The LET members in particular felt the partnership enhanced their reputation as responsible business partners (Stadtler & Van Wassenhove, 2012). Agility's Chairman

and Managing Director, Tarek Sultan, explained the benefits of the partnership with IFRC in Lebanon, saying "it has been our experience that everyone benefits – and that is the way it should be, because it allows for sustainability in the long term." (Tomasini et. al., 2009). Additionally, TNT reported their partnership with WFP strengthened the relationship between employees and the company, enhanced TNT's global reputation, and increased company unity (Gatignon & Van Wassenhove, 2009). These findings support existing HL thought, which suggests that motivators for initiating partnerships on the for-profit side are CSR, company morale, and public image (Bealt et. al., 2016; Nurmala et. al. 2017). Given existing research and the findings from examination of the case studies, cross-sector HL partnerships are generally successful for logistics-focused companies.

Partnership Success for Humanitarian Groups and Impact on HL Relief Efforts.

All three cases indicated at least moderate success for each partnership. Although only one of the three cases utilized quantitative performance measures to evaluate the partnership, partnerships can still be considered successful due to positive organizational response and significant value added to humanitarian organizations.

The TNT-WFP case provides quantitative measures of HL performance. These measures included intervention and response time, average cost per victim, operational cost savings, and total investment (Gatignon & Van Wassenhove, 2009). As a result of the TNT-WFP partnership the total intervention and response times were reduced thanks to TNT's existing business operations in a particular region (Gatignon & Van Wassenhove, 2009). Improvements to humanitarian operations due to adoption of superior operations practices resulted in significant cost reduction for WFP. In one

location warehouse storage space increased by 42% (Gatignon & Van Wassenhove, 2009). Gatignon and Van Wassenhove stated that if improvements like this one were applied across all WFP operations "the project could potentially save €29M in the transport and procurement costs of future emergency operations." In addition to reducing operational costs, after five years of collaboration a joint team of managers from TNT and WFP estimated WFP received €3. 75M in donations just in 2006 alone due to media coverage as result of the partnership (Gatignon & Van Wassenhove, 2009).

Although the success of HL operations is not entirely measured in dollars and cents, these numbers provide quantifiable evidence of improvement in HL operations because of a cross-sector partnership. Furthermore, after interviewing 80 people in senior management from both parties in the TNT-WFP partnership there was a general consensus that "both organizational cultures had changed for the better" (Gatignon & Van Wassenhove, 2009).

The LET-UN Cluster and the Agility-IFRC cases do not provide any quantitative measures for partnership success. The cases detail specific ways that cross-sector partnerships impacted logistics operations of humanitarian groups. In the Agility-IFRC case Agility played a major role helping assemble a regional transportation network for humanitarian goods in Lebanon (Tomasini et. al., 2009). Agility specifically capitalized on its core competency in logistics and focused on last-mile logistics and warehousing for the Red Cross (Tomasini et. al., 2009). Agility provided valuable operations experience for the Red Cross and helped maintain quality standards throughout the crisis (Tomasini et. al., 2009). The LET members focused on similar areas of operation. The LET groups improved warehousing, transportation and distribution activities for UN Logistics Cluster

members. The LET was also deployed to assist with disaster relief operations seven times from 2008-2011 (Stadtler & Van Wassenhove, 2012).

Additionally, it should be noted that the LET continues to operate today, and Agility, UPS and Maersk have maintained their membership (LET, 2018). The LET has responded jointly to five humanitarian crises since the 2012 publication of the Stadtler and Van Wassenhove case (LET, 2018). The LET has also enabled 13 instances of bilateral response to a humanitarian crisis, in which the entire LET group is not activated, but one member assists HL operations with a humanitarian partner (LET, 2018). Despite the lack of traditional performance indicators, both for-profit companies and humanitarian organizations continue to commit their resources to relief operations with the LET. This indicates the partnership is performing to at least some degree of success.

In summation, the TNT-WFP case indicated positive results and value added by quantitative and qualitative measures, and the Agility-IFRC and LET-UN Cluster cases demonstrated value added to humanitarian organizations via improved logistics functions. Considering this, cross-sector partnerships have had a beneficial (but overall unquantifiable) impact on HL relief efforts, and cross-sector partnerships have been generally successful for humanitarian organizations.

What mechanism(s) might be implemented to decrease current barriers to partnerships?

Barriers to entry. Existing academic research acknowledges there are significant barriers to entry for cross-sector partnerships (Bealt et. al., 2016; Nurmala et. al., 2017). The LET-UN Cluster and TNT-WFP cases reinforce the idea of barriers to entry for initiating cross-sector partnerships. General skepticism was a barrier for the parties in

both cases. For LET members, skepticism stemmed from the fact that their partnership was an abstract concept in the beginning. LET members also had to overcome their "competitive mindsets" to form a multi-party cross-sector partnership (Stadtler & Van Wassenhove, 2012). The TNT-WFP partnership struggled to get off the ground because neither party had participated in a long-term cross-sector partnership (Tomasini & Van Wassenhove, 2004). WFP was also skeptical of TNT's motives before entering the partnership (Tomasini & Van Wassenhove, 2004) and even after its establishment (Samii & Van Wassenhove, 2004). These similar barriers reflect an issue that afflicts many cross-sector partnerships, that because of dissimilarities in organizational cultures initiating a partnership is difficult although not impossible. Because of the immediacy of the Lebanon crisis the barriers to the Agility-IFRC partnership were solely related to geography, scope, and timeframe (Tomasini et. al., 2009).

Initial barriers to entry were not the only challenges experienced by these three cross-sector partnerships. Barriers to success presented themselves throughout the entire duration of the partnerships. Within the Agility-IFRC partnership, Agility struggled to adapt to the volatile situation in Lebanon and the fact that it was forced to operate with very short supply of humanitarian aid-related goods (Stadtler & Van Wassenhove, 2012). The TNT-WFP partnership also wrestled with communication issues stemming from inability to understand each other's industry jargon and differences in organizational structure (Samii & Van Wassenhove, 2004). Despite these difficulties in initiating and maintaining partnerships none of the three were terminated prematurely. In fact, there are key similarities in the way these cross-sector partnerships were able overcome

obstacles and cooperate for HL operations which may reveal useful methods for overcoming barriers in the future.

Mechanisms and factors conducive to partnerships. Within the partner search process for TNT/TPG, filters and criteria were employed to identify the ideal partner and maximize success of the collaboration (Tomasini & Van Wassenhove, 2004). TNT/TPG filtered unacceptable partners by requiring them to be politically and religiously neutral and generally have a positive reputation. Organizations considered for partnership were then examined based on their fit with TPG/TNT's core competencies, PR-value, attitude and values, effectiveness and overheard costs, and geographic scope (Tomasini & Van Wassenhove, 2004). Agility established similar criteria for future partnerships as part of a larger set of humanitarian engagement principles after completion of its first major HL partnership (Tomasini et. al., 2009). Agility's criteria required that the group be "legally registered, and neutral and impartial in its approach to service" and emphasized prioritization for groups which it had a prior relationship with or shared "a common logistics background or common regional or local knowledge" (Tomasini et. al., 2009).

Although both of these cases deal with for-profit companies establishing criteria, the aforementioned criteria are necessary for identifying ideal partners in a cross-sector partnership for both parties because a partnership between two groups with dissimilar competencies, conflicting values, incompatible operational cultures, or differing geographic scope would likely be unfruitful and very difficult to maintain. Thus the search process is critical to the success of cross-sector partnerships. The importance of the search process is evidenced by the fact that TNT-WFP partnership was an HL

success, and that Agility developed a similar method after the completion of its operation with the IFRC in Lebanon (Tomasini et. al., 2009).

In the case of the TNT-WFP and LET-UN Cluster partnerships both parties created and agreed to a memorandum of understanding before entering into the partnership (Tomasini & Van Wassenhove, 2004; Stadtler & Van Wassenhove, 2012). A memorandum of understanding likely provides clarity for the exact nature of the agreement to form a cross-sector partnership and eases concerns from both parties without setting the conditions of the agreement in stone or binding the parties to a legal contract. This may reduce the skepticism of initiating partnerships for both for-profit companies and humanitarian organizations thus minimizing a barrier to entry.

Additionally, criteria for joint-deployment within a cross-sector partnership has been useful for the LET (Stadtler & Van Wassenhove, 2012). The LET developed straightforward criteria for deployment in order to maintain the original purpose of the partnership and prevent misunderstanding (Stadtler & Van Wassenhove, 2012). The LET deployment criteria stated:

"They would contribute core competences (1) on a pro-bono basis, and (2) only upon the request of the Logistics Cluster to support humanitarian response operations in the event of (3) a natural disaster affecting more than 500,000 people. The LET companies would then be deployed for three to six weeks in the early phase of the humanitarian response." (Stadtler & Van Wassenhove, 2012)

The establishment of criteria was particularly conducive to maintaining the partnership because it provided clarity and prevented future conflict about potential assistance in a disaster (Stadtler & Van Wassenhove, 2012). The LET has been activated 16 times based upon these criteria for deployment (LET, 2018).

While Agility is a member of the LET, it developed similar principles for future single-party partnerships after its operation in Lebanon in 2006 (Tomasini et. al., 2009). Agility's principles for partnerships included guidelines for how to initiate a partnership, how to separate business operations from pro bono work, how to eliminate conflicts of interest, how all pro bono work must be on a volunteer basis (but will still be paid), when it should participate with the LET, and what training is required for employees to participate (Tomasini et. al., 2009). Despite the fact that the Agility-IFRC did not originate as a result of these guidelines, their similarity to the successful LET deployment criteria reinforces the claim that partnership criteria is beneficial to reducing barriers to and difficulties for cross-sector partnerships.

For Agility-IFRC, the significant organizational barriers to entry such as cultural differences and concerns related to trust between humanitarian and for-profit employees were not an issue. This is explained by the fact that Agility's desired scope going into the partnership was to respond only to the crisis in Lebanon with an acceptable regional partner (Tomasini et. al., 2009). Whereas strategic partnerships require memorandums of understanding and other trust-building mechanisms, the Agility-IFRC partnership was able to begin operations quick relative to the other two cases. Thus the narrowly defined scope inherent in ad hoc partnerships may be a factor conducive to partnerships in itself.

Maintaining regular business operations during any type of partnership, strategic or ad hoc, is key for partnership success. If regular operations are majorly disrupted, support for a partnership would likely be drastically reduced. For-profit companies in all three cases created provisions for maintaining regular business operations and outlining the scope of their pro bono services.

At the outset of the "Moving the World" partnership, TPG/TNT determined that they would provide exactly €5M in cash and services through five independent and structured humanitarian initiatives over the course of five years (Samii & Van Wassenhove, 2004). The LET decided that pro bono work with the UN Cluster should never negatively impact regular business operations, and all commercial obligations would be fulfilled first during HL deployment. This was included in a set of core principles laid out by the LET partners (Stadtler & Van Wassenhove, 2012). The LET agreed that companies should never aim to sell additional services to humanitarian partners and conflicts of interest should be avoided at all costs (Stadtler & Van Wassenhove, 2012). Although Agility's overall partnership with IFRC was smaller in scope relative to the others examined, Agility also outlined the extent of its engagement to "clearly circumscribed time limits" (Tomasini et. al., 2009). By defining the scope of pro bono work for cross-sector partnerships, for-profit companies can ensure the partnerships do not become a hindrance to their day-to-day operations.

Additional Observations and Areas for Future Research

Strategic partnerships. While the initial research questions for this thesis did not include an inquiry as to the "best type of" or "ideal" cross-sector partnership for improving HL, information from the research and cases indicated a trend in regards to this subject. All three cases examine partnerships which operate in either the preparedness or response phases of disaster relief (Tomasini & Van Wassenhove, 2004; Samii & Van Wassenhove, 2004; Gatignon & Van Wassenhove, 2009; Tomasini et. al., 2009; Stadtler & Van Wassenhove, 2012). The LET-UN Cluster and TNT-WFP

partnerships operated within both the preparedness and response phases (Samii & Van Wassenhove, 2004; Stadtler & Van Wassenhove, 2012). The LET-UN Cluster and TNT-WFP are also strategic partnerships (Samii & Van Wassenhove, 2004; Stadtler & Van Wassenhove, 2012), whereas Agility's partnership with IFRC was initiated on an ad hoc basis (Tomasini et. al., 2009). This information is not surprising because the preparedness and response phases are the primary focus of HL operations (Van Wassenhove, 2006). This is relevant because there is a strong need for improvement in the preparedness phase of relief efforts (Van Wassenhove, 2006) and efforts to increase the effectiveness of HL operations in the long-term require improvements to preparedness between disasters (Van Wassenhove, 2006).

Effective Disaster Management = Disaster preparedness (DP) + Disaster response (DR) (Van Wassenhove, 2006)

Based on information from the cases—particularly the LET-UN Cluster and TNT-WFP cases—strategic partnerships are most likely the ideal form of cross-sector partnerships for long-term improvement of HL capabilities. This is due to the relative success of the partnership for all parties involved and the overall effect the strategic partnership has on improving HL capabilities when compared to ad hoc partnerships such as Agility-IFRC. While Agility enhanced the IFRC's capabilities in responding to the immediate crisis in Lebanon, there was no evidence that it improved IFRCs logistics capabilities in the long-term. These cases demonstrate that strategic partnerships improve HL capabilities in areas of preparedness such as operations experience and planning, as well as in terms of response such as last-mile logistics. Strategic partnerships also benefit for-profit partners through the positive impacts of expanded CSR.

The decision for organizations to enter into an ad hoc or strategic partnership may best be determined by assessing the situation through the lens of a cost tradeoff.

Although no quantitative evidence is provided in the cases, it could be inferred that long-term partnerships incur higher monetary and non-monetary costs because of their broader scope and need for constant service over the course of several years. Alternatively, ad hoc partnerships may be less costly because by nature their scope is tightly defined and their duration is typically limited to the length of the immediate disaster response. Ad hoc partnerships do not incur the monetary cost of strategic initiatives to improve humanitarian capabilities, or the strain of adapting two different organizational cultures to fit over the course of several years. A future in-depth examination of the cost tradeoffs for strategic and ad hoc cross-sector partnerships may shed light on the conditions which necessitate one type of partnership or the other.

Future research. There is considerable room for further research on cross-sector partnerships improving HL capabilities. One area of future interest might include investigating the benefits of multi-party partnerships compared to those of single-party partnerships. Although performance measurement in HL is already the subject of research and discussion, additional examination of barriers to instituting performance measures and mechanisms successful partnerships employ to establish these measures is worth consideration. This might include compiling and analyzing the performance metrics of successful cross-sector partnerships and how the metrics are used in order to improve HL operations. Research on mechanisms for establishing successful partnerships might also be useful—especially research which more closely examines steps each organization took to organize a HL partnership. These areas for further

research could point humanitarian organizations and for-profit companies toward maximizing the effectiveness of their response efforts.

Summary and Conclusion

The findings of this case analysis support existing HL thought regarding the benefits of and barriers to cross-sector HL partnerships, identify specific mechanisms and conditions which are conducive to successful partnerships, and outline areas for future research. The answers to the initial research questions and additional observations point toward a general best practice for organizing cross-sector HL partnerships. Elements of this rudimentary best practice include establishing common principles, deployment criteria, and ways for preserving regular business operations of for-profit companies as particularly conducive to overcoming barriers to partnerships. Furthermore, this research strengthens the case for humanitarian relief organizations and logistics-focused companies to participate in cross-sector partnerships by demonstrating how these partnerships are beneficial to for-profit companies and instrumental in improving the capacity of humanitarian organizations to prepare for and respond to disasters.

Overall, this analysis is valuable because as academic research in HL hones in on the best mechanisms for cross-sector partnerships, the gaps between the ideal and actual state of HL can be reduced. As gaps are reduced, logistics partnerships may continue to improve the effectiveness of humanitarian relief efforts, in turn minimizing human suffering.

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