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Agility Learning Opportunities in Cross-Sector Collaboration. An Exploratory Study

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Introduction

Since the end of the 1990s, we have witnessed a shift towards profit and non-profit engagement, especially in humanitarian logistics; before that time, "collaboration between the two sectors seemed unfeasible" (Stapleton et al. 2012, p. 220). Traditionally, business has considered the social sector "a dumping ground for spare cash, obsolete equipment, and tired executives" (Kanter 1999, p. 123). Conversely, from the viewpoint of the humanitarian sector, profit-driven companies have been perceived "to be the cause of, rather than solution to, problems affecting the developing world" (Stapleton et al. 2012, p. 220), e.g., child exploitation, environmental disasters, pollution and intensive monocultures.

In the past, the humanitarian sector has had an interest in dealing with businesses only when they are needed, on the basis of purely commercial exchanges, such as the purchase of the goods or services that are relevant to the fulfilment of specific humanitarian needs. In some cases, individual companies have carried out philanthropic donations so that the humanitarian organizations considered, for a certain

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time period, monetary contributions as the only appropriate forms of corporate giving (Stapleton et al. 2012).

Recently, however, humanitarian organizations have shown greater interest in the resources, skills, processes and technologies that can be found in the business sector (Van Wassenhove et al. 2008). The humanitarian sector has, in fact, begun to consider investing in its own growth by not only obtaining more goods, more services and more funds but also by placing importance on the professional and managerial skills of its employees, stimulating them, improving them and, above all, by acquiring and learning from the for-profit sector (Blansjaar and Van Der Merwe 2011).

Companies have also increased their interest in the humanitarian sector. In addition to pure philanthropic contributions, companies may also be interested in welcoming humanitarian organizations as their new clients. Companies in the pharmaceutical, packaging, food and logistics services industries have begun to develop tailored solutions for humanitarian purposes (Kovács 2011). In addition, companies may be interested in reaching certain geographical areas, for example, after a disaster, to build new relationships with local governments to identify new markets and new business opportunities in those countries where they do not yet have a presence.

Between these two extremes lies an area of Corporate Social Responsibility (CSR), "where commercial and philanthropic intentions can easily overlap", even in humanitarian logistics (Tomasini and Van Wassenhove 2009b, p. 140). Under the common umbrella of CSR, companies may seek opportunities to improve their impact on society through responsible actions, including obtaining economic benefits. This development is based on the assumption, which is now widely accepted, that companies can increase their competitiveness through initiatives in which social value and economic value overlap because "there is no inherent contradiction between improving competitive context and making a sincere commitment to bettering society" (Porter and Kramer 2002, p. 66).

Business-humanitarian collaboration seeks "to build on synergies between the business and humanitarian communities to advance humanitarian objectives and at the same time support CSR" (Andonova and Carbonnier 2014, p. 350). Companies often provide a mix of "cash donation, in-kind donation of goods or services, the provision of technical or managerial expertise, cause-related marketing, employee giving schemes and sponsoring, or logistical support and collaboration specific to field activities"; in such cases, the humanitarian organization that is involved

generally "grants its corporate partner the possibility of using its name or logo in public communication, thus creating a public association of image or brand between the two parties" (Andonova and Carbonnier 2014, p. 350).

Companies may also be interested in establishing the continuity of their business after a disaster and in playing an active role in relief operations where their plants, offices, employees, suppliers and/or customers are located. In this way, they can personally maintain company's activities that have been affected by a disaster (Cozzolino 2012, 2014).

These are more traditional motivations for companies to engage with the humanitarian sector. A new trend was indicated by Kanter (1999, p. 123), according to whom "smart companies are approaching the social sector as a learning laboratory"— especially in terms of the potential to learn "complementary skills" (Oglesby and Burke 2012).

One potential area of learning that is a specific competency of the humanitarian sector for the benefit of firms has only recently been identified by some authors (Tomasini and Van Wassenhove 2009a/2000b; Charles et al. 2010; Cozzolino 2012, 2014) in the agility of the supply chain.

We refer to agility, in this chapter, as the capability to respond to unpredictable events in a simultaneously fast, effective and flexible way and at a reasonable cost. This insight comes from the observation of specific experience that the humanitarian sector – and especially the world's largest humanitarian organizations – has developed in managing logistics and supply chains in the extreme conditions of emergency response operations, which are based on the principle of agility.

When agility is discussed in the humanitarian logistics and supply chain management context, it is mostly associated with its importance and usefulness during emergency relief operations, as noted by many authors such as Van Wassenhove (2006), Tomasini and Van Wassenhove (2009a/2009b), Maon et al. (2009), Christopher and Tatham (2011), Cozzolino (2012) and Cozzolino et al. (2012). Further, in the final report of its Policy and Research Conference held in 2011, the United Nations Office for the Coordination of Humanitarian Affairs identified agility as a priority research theme (L'Hermitte et al. 2015). However, although agility is repeatedly mentioned, the academic literature on humanitarian logistics and supply chain management on the possibility for companies to learn agility from the humanitarian sector is limited (Van Wassenhove 2006; Tomasini and Van Wassenhove (2009a/2009b); Maon et al. 2009; Cozzolino 2012), and the extent to which they grasp such an opportunity is not empirically investigated.

In summary, there is still no settled understanding of the concrete possibility that companies have to learn agility during a cross-sector collaboration with the humanitarians during disaster relief operations. Thus, this chapter is designed to fill this gap through a preliminary empirical analysis of a case study, which represents a best practice in cross-sector partnerships in humanitarian logistics, and aims to investigate the following research questions:

RQ1: Can companies concretely learn agility from the humanitarian sector in emergency relief operations?

RQ2: What do they concretely learn in terms of agility?

To address these points, we organize the remainder of this chapter as follows. The next section outlines the theoretical background of this study in a synthetic manner. We present the main insights from the literature on the chances that businesses can learn supply-chain agility from the field of humanitarian emergency management (section "Agility in Humanitarian Supply Chains"), the importance of the mutual benefits of a collaboration (section "Mutual Benefits That Are Derived from Collaboration"), the cross-sector learning opportunities (section "Cross-Sector Learning Opportunities"), and partnership models for cross-sector collaboration in humanitarian logistics (section "Partnership Models for Cross-Sector Collaboration in Humanitarian Logistics"). We then focus more on the empirical investigation that adds the most value. The case study is presented in section "Case Study Analysis". We choose a best practice case study (section "Methodology") and describe it in section "The LET Initiative". The results obtained from the case study analysis and discussion are provided in sections "Key Findings" and "Discussion". In the conclusion, limitations and suggestions are indicated for future research.

Theoretical Background

Agility in Humanitarian Supply Chains

In the literature, although many authors define agility in different ways, it is generally described as the ability to respond quickly and effectively to unexpected changes, both on the demand side and on the supply side (Charles et al. 2010; Scholten et al. 2010; Kovács and Spens 2009; Pettit and Beresford 2009; Taylor and Pettit 2009; Oloruntoba and Grey 2006; Narasimhan et al. 2006; Christopher 1992, 2000, 2005; Sheffi 2005; Aitken et al. 2002; Van Hoek et al. 2001; Christopher and Towill 2000; Towill and Christopher 2002;

Childerhouse and Towill 2000; Mason-Jones et al. 2000; Naylor et al. 1999). "In essence it is about being demand-driven rather than forecast-driven" (Christopher et al. 2006, p. 6). To do this "sometimes means putting spare or redundant capacity aside to cope with unpredictable surges in the pipeline, but that is part of the price you pay" (Gattorna 2006, p. 161); moreover it could require "a massive and periodic source of employment" (Peck 2005). Because agility is not achievable at a "low cost" (Lapide 2006; Gattorna 2006), the availability of goods and services is therefore more properly connected to "reasonable costs" (Hofman and Cecere 2005).

The concept of agility goes beyond the level of an individual firm and refers, rather, to an entire supply chain (Van Hoek et al. 2001). In fact, despite the fact that a single firm may have established internal processes to guarantee agility, it would still be limited if it were to, for example, face long lead times from suppliers. In reality, therefore, an important aspect of agility is the presence of agile partners upstream and downstream of a focal firm (Christopher 2005), which may provide an agile supply chain.

We can also identify some guidelines as a starting point in the creation of an agile supply chain (Christopher 2005; Lee 2004; Harrison et al. 1999):

- Synchronization of activities by sharing information with other actors in the supply chain to align logistics processes. Synchronization requires all partners to share scheduling and use the same reference codes, with the ability to observe and communicate with other partners in the refurbishing and replenishment processes to monitor and maintain inventory levels.
- Creating collaborative relationships with suppliers, especially with those with the capacity to respond to unforeseen or unforeseeable changes. Suppliers should not be chosen based on cost.
- Construction of a reliable logistics system, creating stable relationships with logistics providers who can provide expertise and logistical resources.
- Reduction of the complexity of products at the design stage process: the
 sources of complexity vary along the supply chain and increase with variety.
 Complex products do not always allow simplification; however, simplification can be achieved in the design of common parts for more products or
 groups of products. Complex processes can be re-engineered to delete
 activities that correspond to waste and do not create value. It is also possible
 to increase concurrent actions, or, in parallel, to decrease lead time.
- Implementation of the postponement: such postponement refers to the process by which the assembly of a product (good and/or service) in its final form or the physical availability is delayed as long as possible pending an actual customer request. If the market is characterized by strong

- heterogeneity, products that are assembled according to customer requests, after the time of the actual request, can reduce the likelihood that the product no longer fulfils the needs of the market;
- Design of contingency plans and building of crisis management teams: a successful response to a crisis event is challenging; the more that is invested in preparation, the more effective the response phase.

The principle of agility has been combined with the concepts of emergency and humanitarian logistics in several academic contributions (Charles et al. 2010; Scholten et al. 2010; Kovács and Spens 2009; Pettit and Beresford 2009; Taylor and Pettit 2009; Oloruntoba and Grav 2006; Towill and Christopher 2002), and it has also been closely linked with theories of unexpected shocks that affect supply chains (Van Wassenhove 2006; Lee 2004). More specifically, the agile approach is applied during a disaster relief operation in the response phase; this phase covers all of the operations that must be carried out directly after the occurrence of a sudden disastrous event (Cozzolino 2012, 2014; Cozzolino et al. 2012; Conforti et al. 2008). It is, therefore, during the response operations after a disaster that the agile principle - according to the objective of urgent effectiveness - finds its highest expression, and it is actually in this context that companies can learn agility from the humanitarian sector. The only way for companies to be present at such dire moments is through strategic collaboration with humanitarian actors in response to disasters.

Mutual Benefits That Are Derived from Collaboration

The essence of collaborative relationships is in the mutual benefits (Maon et al. 2009). There are several factors that motivate the private sector to engage in humanitarian initiatives, even if there is misalignment between the two sectors in terms of goals. The former focuses on making a profit, while the latter focuses on saving lives and assuring the wellbeing of affected people. Nevertheless, the advantages that can be derived from business-humanitarian collaborations can benefit both sectors.

Companies can identify new market opportunities that are otherwise difficult to obtain (Van Wassenhove et al. 2008; Van Wassenhove 2006), and they can demonstrate the efforts that they have made to meet their social responsibility (Thomas and Fritz 2006). They can also improve employee job satisfaction and retention (Binder and Witte 2007). The benefits for the humanitarian sector relate to the expertise that can help them to operate more efficiently and

effectively, incorporating the best supply chain practices to balance the flexibility and efficiency that can be of great benefit in life-and-death situations (McLachlin et al. 2009). Furthermore, as Murphy et al. (2012) state, the new knowledge that can be derived from cross-sector experiences is more likely to "accrue to society rather than for the firm" (p. 1704). From this point of view, going beyond profit, the principles of corporate social responsibility can be realized, and companies can demonstrate good corporate citizenship (Maon et al. 2009; McDonald and Young 2012; Labib Eid and Sabella 2014). The private sector's engagement in humanitarian logistics can be projected to serve a variety of conditions and crisis contexts (Zyck and Kent 2014). As Christopher and Tatham (2011) state, the involvement of companies in the humanitarian aid market will continue, as they can obtain benefits that can be derived from the realization of corporate social responsibility.

On the other hand, the humanitarian sector recognizes that the potential benefits that can be obtainable from the collaboration go well beyond cash donation, which is the most common form of contribution of the private sector. In fact, cross-sector collaboration brings several benefits in terms of velocity of support during disasters, back office support for disaster preparedness, capacity building between disasters and best practices exchanges among partners (Van Wassenhove et al. 2008; Tomasini and Van Wassenhoe 2009a/2009b; Stapleton et al. 2012). Businesses can offer immaterial resources, such as expertise, knowledge and best practices that are as essential as technology and infrastructure, but the private sector's technical expertise can be a key factor in meeting humanitarian challenges (Zyck and Kent 2014). The process of systematic learning to create shared value (Porter and Kramer 2011) is a highly relevant result of these partnerships as "every joint project either between or during a disaster is an opportunity to learn" (Tomasini and Van Wassenhove 2009b, p. 135).

Cross-Sector Learning Opportunities

The engagement of business in partnership with the humanitarian sector is guided by goals such as the potential for learning and business development (Tomasini and Van Wassenhove 2009b). The concept of cross-sector collaboration as a vehicle for new knowledge creation requires going beyond the mere transfer of existing knowledge (Arya and Salk 2006; Anand and Khanna 2000; Larsson et al. 1998; Kale et al. 2000), and it constitutes a breeding ground for the parties that are involved in cross-sector collaboration to benefit from cross-learning opportunities (London et al. 2005).

In particular, in these cross-learning opportunities, knowledge management implies the continuous involvement and sharing of the lessons that have been learned among the partnership members. These processes could allow the company to convert knowledge from tacit to explicit and from individual to organizational, resulting in a "spiral of knowledge", by which the assets of the enterprise' knowledge are extended and deepened, according to the perspective offered by the "knowledge-based view of the firm" by Nonaka (1994).

Knowledge management, which is one of five key elements of effective disaster management, can be translated in the context of humanitarian logistics in "learning from previous disaster by capturing, codifying and transferring knowledge about logistics operations" (Tomasini and Van Wassenhove 2009a, p. 182). Moreover, in the context of high uncertainty, mutual learning in cross-sector collaboration requires that the sharing of learned experience be done so rapidly (L'Hermitte et al. 2016; Redding and Catalanello 1994) to improve practices and prevent them from becoming obsolete. As Tomasini and Van Wassenhove (2009b) explain, sharing lessons learned facilitates the making of faster and better decisions.

Relief operations require fast and timely responses from the numerous members who are involved in a humanitarian supply chain. The continuous improvement in the performance of humanitarian operations entails mutual understanding and alignment of their objectives, sharing of information and undertaking joint planning (L'Hermitte et al. 2016). The effective exploitation of the core competences of both sectors can contribute to the improvement of disaster preparedness (Van Wassenhove et al. 2008). The combined knowledge of partners can affect the achievement of mutual goals (Murphy et al. 2012).

Partnership Models for Cross-Sector Collaboration in Humanitarian Logistics

In the humanitarian logistics context, Thomas and Fritz (2006) identify four types of "private corporation disaster-relief agency partnership": "single-company philanthropic partnership"; "multi-company philanthropic partnership"; "single-company integrative partnership"; and, "multi-company integrative partnership".

Taking the number of partners into account, this classification is based on the taxonomy that was proposed by Austin (2000a/2000b), which more generally identifies different approaches to collaboration between businesses

and non-profits, encompassing a wide range of industries and social sectors (Austin 2000a/2000b; Wymer and Samu 2003). In particular, Austin (2000a/2000b) conceptualizes a "cross-sector collaboration continuum", along which there are three types and stages of relationships: "philanthropic", "transactional" and "integrative".

"Integrative" refers to a smaller but growing number of collaborations that evolve into strategic alliances, which involve deep mission mesh, strategy synchronization and value compatibility. Core competencies are not only simply deployed in such cases, but they are also combined to create unique and high value combinations.

An integrative partnership in particular may be of interest because it has features that specifically support cross-learning in the context of humanitarian logistics. In cooperation, the two sectors can learn from each other and together can build a cross-transfer process of their best practices, which is precisely one of the most successful drivers for this type of cross-sector collaboration (Tomasini and Van Wassenhove 2009a/2009b).

Collaboration between the two sectors is not easy because there is a high degree of heterogeneity in terms of culture, purpose, interests, mandates, capacity and expertise (Balcik et al. 2010) – but the diversity can become an asset if they can build on their comparative advantages and complement each other's contributions (Global Humanitarian Platform 2007).

Case Study Analysis

Methodology

We conducted an empirical investigation based on the study of a case. The methodology of the case study is well recognized as a valid approach through which to deepen understanding of a phenomenon that is still in development, and/or the dimensions of which have not yet fully explained (Yin 1994).

As the company contributions with the highest impact on the social sector use "the core competencies of the business" (Kanter 1999), for disaster relief operations, the supply chain and logistics functions are crucial for an operation's success (Van Wassenhove 2006); by virtue of their logistics and supply chain management competencies, logistics companies are among the best private organizations to partner with humanitarian organizations "not only from a charitable concern but also as an opportunity for learning and business development" (Tomasini and Van Wassenhove 2009a, p. 557).

For the purpose of this study, it is of interest to verify the research questions, beginning with an overview of logistics service providers.

To choose the case, we mapped integrative collaborations at the international level (in the literature on humanitarian logistics) between humanitarian and logistics providers in emergency response operations. Integrative types of partnership, as defined in Austin (2000a/2000b), are recognized as the most favourable for inter-organizational learning.

The partnerships that have emerged among global logistics providers have included Agility, DHL, FedEx, Geodis, Kuehne+Nagel, Maersk, Toll, TNT, and UPS (Thomas and Fritz 2006; Spring 2006; Binder and Witte 2007; Maon et al. 2009; Tomasini and Van Wassenhove 2009b; Samii 2008; Van Wassenhove 2006; Samii and Van Wassenhove 2004; Quinn 2010; Stadler and Van Wassenhove 2012; Oglesby and Burke 2012; Cozzolino 2012 and 2014; Vega and Roussat 2015; Abidi et al. 2015). These types of partnership are limited and involve well-known global organizations, so it was quite simple to identify them in the literature. They are also communicated on the institutional web sites, but to go in-depth, it is necessary to contact the person responsible for each specific initiative.

From this analysis emerges the first (historically) and still the only international experience of multi-company integrative partnership that has focused on logistics services and been composed of companies in the logistics sector with humanitarians that work in emergency responsiveness: Logistics Emergency Teams (LETs) in collaboration with the World Food Programme, as a Global Logistics Cluster for the entire system of the United Nations and other organizations that belong to the international humanitarian community (www.logcluster.org).

This type of relationship represents "a platform for private sector–humanitarian collaboration" at global level (Oglesby and Burke 2012), and it is a way to "pioneer a new partnership model" as part of the emergency response (Stadler and Van Wassenhove 2012), as it is the first case of its kind in the world (http://www.logcluster.org/logistics-emergency-teams).

It is not a coincidence that the first initiative of this type was born out of a collaboration with the WFP, which is the largest humanitarian logistics expert at the international level and which implements the principles of agility in its supply chains in its relief operations (Cozzolino et al. 2012; Conforti et al. 2008).

We decided to take an in-depth view of this important case. Therefore, we proceed to analyse different sources, to consolidate and enrich the inquiry findings and to ensure proper data triangulation, which would ensure the different perspectives of observation (the LETs' views on individual logistics

providers belonging to the initiative, on the one hand, and the WFP's views on logistics clusters and the World Economic Forum, on the other): institutional websites; official videos, internal reports and public files that describe the initiative of the LET; publications of academic research that specifically analyse the LETs (in the Media section of the website www. logisticsemergency.org); interviews that have been published in other academic research and institutional video that describe the initiative of the LETs, in terms of individual missions, success factors and critical issues of cooperation and the results that have been obtained; and, at the end, data collected through a specific questionnaire that was composed for this research project.

After investigating on desk the elements from the perspective of business-humanitarian collaboration through transcribed and analysed interviews from secondary sources, the study was completed with a field analysis suitable for the specific purpose in our research. This was necessary because no other studies have specifically addressed this aspect of the learning the agility.

The empirical investigation was based on a questionnaire (with both open and closed questions) completed by the three top managers for each of the three companies of the LET Steering Committee. We consider this number of interviews to be sufficient because the managers are the highest proponents of the business sector in the LET/LC partnership and have years of collaboration and involvement in the initiative, and their point of view represents their own companies. They all appreciated being part of our research. Because of the geographical distance, there was no opportunity to meet with them personally, so the interviews were conducted through email or Skype; hopefully, face-to-face interviews can be conducted in the next step of the research.

The secondary data and the data from the questionnaires were analysed through qualitative content analysis (Krippendorff 2004). To assure the trustworthiness of this research, the model that was proposed by Guba was selected. Following Guba's framework (1981), a trustworthy study should follow the four criteria of credibility, transferability, dependability and confirmability. Furthermore, to ensure the reliability of the study, a formal protocol (see Table 11.1) was developed, taking into account as a primary driver the objectives of the current research, combined with the insights that were gathered from the literature review.

A pilot test was performed before the interviews with one practitioner, experts in the logistics field, and one academic professor in supply chain management. As a result, the wordings of some of the questions were

Table 11.1 The structure of the questionnaire

Section	Title	Aim				
Section I	Business-humanitarian collaboration as a cross-learning opportunity	Description of the cross- learning opportunities in				
	Section I (a) Logistics service providers- humanitarians colla- boration as a cross- learning opportunity	the collaboration between business and humanitarian sectors				
	Section I (b) WFP-LET collaboration as a cross-learning opportunity					
Section II	Learning agility from the humanitarian supply chain	Analysis of the possibilities of learning the agility of				
	Section II. (a) Definition of "agility" Section II. (b) Learning agility from the humanitarian supply chains (LSPs-humanitarians)	the supply chain of humanitarian emergency management				
	Section II. (c) Learning agility from the humanitarian supply chain in WFP-LET collaboration					
Section III	Cases and experiences in WFP-LET colla- boration (documents, blogs and busi- ness case studies)	Collection of cases and experiences				

Source: Our elaboration.

changed to make them both easier to understand and more focused on the areas of interest. This step aimed to provide a solid structure for the interviews and facilitate a comparison of the cases at the analysis stage.

If it took the form of an oral conversation, the questionnaire was shared with the interviewed manager after its transcription. The information that was collected was treated confidentially.

The LET Initiative

"The annual meeting of world economic leaders in Davos has become one of several platforms for brokerage of public—private partnerships in the humanitarian field" (Andonova and Carbonnier 2014, p. 349): at the 2008 World Economic Forum (WEF) summit, United Nations agencies and WEF member companies announced a new initiative that considered substantial contributions by multinational logistics companies to Logistics Emergency Teams (LETs) that intervene in disasters.

As Sean Doherty, Head of Logistics and Transport Industry of the WEF, stated: "Logistics Emergency Teams provide surge capacity – warehouse space, offices, airlifts, shipping, trucking – but most importantly, they have experts with on-the-ground experience, knowledge, and relationships" ("Logistics Emergency Teams" video, see at https://www.youtube.com/watch?v=lLwWfjQ7vPU&feature=player_embedded).

LETs unite the capacity and resources of the logistics industry with the expertise and experience of the humanitarian community to provide more effective and efficient disaster relief. A key reason for cooperating through LETs is to provide a demand-driven, efficient response. LETs are the first partnership of this type, formalizing a multi-stakeholder cooperation between the private and public sector. It remains one of the best WEF-initiated and operationalized public-private partnerships (http://www.logcluster.org/logistics-emergency-teams).

Josette Sheeran, Executive Director del World Food Programme, said: "When disaster strikes, our job is to mobilize massive assistance and to make sure it reaches those in need – fast! Private sector expertise and corporate partnerships are critical to helping us save lives" (www.wfp.org).

The WEF facilitated the partnership in 2005. The concept behind LET was the result of important dialogues that took place at the international level after the Asian tsunami of 2004. On that occasion, in fact, many companies that belong to the WEF sought to determine lessons learned as a result of aid operations in response to huge natural disasters and the possibility and/or need to supplement the available resources of the various companies within the humanitarian relief system. With the increasingly clear awareness of the extreme criticality of logistics in humanitarian relief operations, in 2005 Agility, TNT and UPS officially announced their willingness to work through a multi-company and cross-sector partnership. After some years the composition of LETs changed. In the first phase, Maersk joined the team, and in the second phase, TNT left the initiative, but the aim of the initiative remained the same. The LET is currently composed of Agility, UPS and Maersk.

The formal collaboration, however, began only in 2008, given the complex organization that was required by a partnership of this magnitude, which was unprecedented. The first field operation was in Myanmar and, later, in other locations, such as Mozambique, Haiti, the Philippines, Indonesia, Pakistan, Chile and Japan.

As Olivia Bessat, Senior Manager del Global Agenda Council Team del World Economic Forum, declared: "The strength of LETs lies in engaging, in advance, all of the private and humanitarian members in the design of the entire mechanism behind their partnership. The result is a set of pre-arrangements and an effective contingency plan ready to be triggered to support the relief effort for large-scale natural disasters" (www.weforum.org).

LETs are designed to provide effective and rapid logistical support for survivors after a disaster, and, to achieve such a performance, all of the business partners that support the WFP must faithfully follow the agreement that was set forth in the Memorandum of Understanding and in the operative procedures that govern the partnership (www.logcluster.org) through which they have agreed to contribute with their "core competences (1) on a pro-bono basis, and (2) only upon request of the LC to support humanitarian response operations in the event of (3) a natural disaster affecting more than 500.000 people" (Stadler and Van Wassenhove 2012 p. 6).

Support is provided through pre-agreed operating procedures and training, and it includes: logistics specialists (e.g., airport coordinators, airport managers, and warehouse managers); logistics assets (e.g., warehouses, trucks, and forklifts); and, logistics services (e.g., airlifts, trucking and customs management).

The LET business partners are all top companies in the logistics and transportation industry. They have robust corporate social responsibility programmes and previous experience in disaster-relief operations. The dedication to help in disaster response is explicitly included in the priorities of social responsibility initiatives.

The teams are made up of the LET staff with logistics experience, and they are prepared to mobilize within 48 hours of an emergency at the request of the WFP. As stated by one of the volunteers of the LET on the field as part of the interview that was released during one of the post-disaster relief operations: "We are in a very closed cooperation with WFP. We know each other, and we know each other's needs very well. So, in the case of a disaster like this, we come together very quickly, and we generate concrete plans".

Staff recruitment takes place among the employees of partner companies, in voluntary mode for a total availability of two years. Every year there is a training to prepare volunteers for their missions in the field, so that, as Matteo Perrone of WFP (Stadler and Van Wassenhove 2012, p. 6) stated: "In the field, the deployed employees are no more Agility, Maersk, UPS or TNT. They are part of our team; they are living with us".

Even in the perception of the participants, this is an important aspect, as two LET volunteers declared during the annual training meeting (LET training session video by Maersk): "I am sitting in a room with a lot of dedicated professionals, and [...] it is very evident that there is a sense of

community even if we are competitors" (Marketing Executive – TNT Netherlands) and "This is a very special partnership: we are all in the logistics and transportation industry, and [...] we come together as one team" (CSR Associate – Agility Kuwait).

The LET values and combines the capabilities and resources of the logistics industry with the skills and experience of the humanitarian community: "A spirit of cooperation, good faith, and willingness to learn from each other are key to success" ("Relationship guidelines for LET Members/ Global Logistics Cluster Collaboration" see at www.logcluster.org).

Key Findings

Based on the conceptual framework, this first exploratory study analyses the empirical evidence on the concrete opportunities for companies to learn agility in collaboration with the humanitarian sector during disaster relief management.

The following considerations emerged from secondary data and from the questionnaire completed by the three top managers for each of the three companies of the LET Steering Committee. For confidentiality reasons, in the following empirical analysis, the letters attached to the quotations reflect the codes that we assigned to each interviewee/organization. The other quoted sentences from secondary sources have explicit references.

Results from Secondary Data

Secondary data analysed in this section are derived in particular from two previous manuscripts: Stadler and Van Wassenhove (2012), and Cozzolino (2014).

Stadler and Van Wassenhove (2012) is mainly useful for the present research because it specifically treats in depth the case of the LET in partnership with WFP/LC. From the above-mentioned study, some interesting considerations on partnership, joint benefits and learning possibilities emerged. In particular, it was possible to understand the point of view of LET's representatives on four elements of agility (effectiveness, flexibility, quicker response, reasonable costs). The companies' perspective primarily considers the first three elements, as shown in Table 11.2. Referring to the costs, there are no specific quotes from the companies, but this come only from the WFP.

Table 11.2 Elements of agility

Chairman and Managing Director (Agility)	Effectiveness "Engaging in a cross-industry collaborative approach not only required jointly shaping the partnership design and operations, but also adapting the members' own organizational pro- cedures and systems to ensure smooth and coor- dinated implementation"
Director of Corporate Social Responsibility (Agility)	Flexibility "Humanitarian logistics if they want X, Y, and Z and you're busy preparing it, the next day they may rather need A, B, and C. That is sometimes frustrating but it might be that they initially wanted to deliver food but then cholera has become the main problem in the camp, so the priority has moved from food to medical and hygiene equipment. You have to learn flexibility"
Director of Corporate Social Responsibility (Agility)	Quicker response "Working in a disaster areas is incredibly challenging. The total communication infrastructure can break down and the humanitarians succeed in setting up an operation within two hours. The humanitarian system has to work with very few resources and they are very creative with new solutions. We can learn a lot with regard to efficiency"
Logistics Officer (WFP)	Reasonable costs "They [the LET companies] don't want it to be too costly for them"

Source: Cozzolino (2014) from Stadler and Van Wassenhove (2012).

Cozzolino (2014) is mainly useful for the present research because it has explicitly investigated with an empirical study which opportunities the companies may have to learn agility of the supply chain from humanitarian emergency management, in the perspective of the humanitarian sector. From this work, it was possible then to extrapolate if LET companies may learn agility in the perspective of the WFP/LC, which is the opposite perspective that we have chosen instead in the present work. The quotes extracted from Cozzolino (2014) and reported below refer to an interview of the author of the Deputy Global Logistics Cluster Coordinator in 2013. The LC manager noted that "all volunteers and managers absorb a great deal from humanitarian operations in conjunction with WFP at both the operational and strategic levels" and that this specific ability to adapt and respond as quickly as possible to events can be learned in the field. He stated that such an ability "cannot be learned in a short time (the time of a single volunteer of the LET

in the field) but can only come from years of experience". In particular, compared with employees who work in, for example, Dallas or Liege, employees who work in countries that are subject to natural disasters or critical climate issues obtain more immediate and valuables benefits from their volunteer experience with the LET initiative. In fact, the next time a natural disaster occurs in an area where a former volunteer with the WFP initiative of the LET works, he will know what action to take, potentially personally intervening and handling the emergency for his headquarter and his colleagues.

Results from the Questionnaire

The data from the questionnaires administered to the LET Steering Committee are aligned with the primary objective of our research, that is, to capture variations in theory and concepts and not generalizability (McCracken 1998; Strauss 1987), aiming to explore unusualness and not only typicality (Hartley 2004). Difference and similarities among the three companies' perspectives emerged, as outlined in the following paragraphs.

Solving the most complex humanitarian and global health challenges requires enhanced collaboration and partnerships (Z). In the specific collaboration between LET and WFP/LC, each organization wants to support humanitarians on a long-term basis and to contribute its expertise to sustain the community as part of a CSR programme. The engagement in the LET/LC partnership expresses each company's corporate citizenship through both community and employee commitment (X and Y). The LET has helped bring life sustaining supply chain solutions to disaster-impacted communities over the past decade: this is a tremendous example of how the transportation sector has worked together to share its expertise to help beneficiaries (Z).

As shown in Table 11.3, these are the reasons why logistics companies should collaborate with the humanitarian sector and, in particular, serve as the rationale for a collaboration between LET initiative and the WFP/LC.

By virtue of their worldwide presence the LET' global LSPs are present in almost every markets in the world, and many of the markets where they are present, with a business activity, they are countries that are disaster risk prone and rely a lot on international humanitarian support, so partnering in LET/ LC they can demonstrate that in these markets they are there not only to make money, but also with a long-term partnership with the community where they operate to support them in case of crisis (X). Moreover a lot of their own employees ask what they do as big company for the society, so that

Table 11.3 Reasons to collaborate

	In general		In LET/WFP			
	X	Υ	Z	Х	Υ	Z
Possibility for the companies to enhance their reputation (and demonstrate their good intentions)	Yes	Yes	Yes	Yes	Yes	Yes
Possibility to improve the risk manage- ment (companies can improve the management of events with low probability and high risk)	Yes*	Yes	Yes	Yes	Yes	Yes
Companies can achieve higher customer loyalty	No	No	Yes	No	No	No
Retention and job satisfaction of employees	Yes	Yes	Yes	Yes	Yes	No
Possibility for the companies to reach new clients and/or new markets	Yes	No	Yes	No	No	No
Possibility of mutual learning of best practices and innovation	Yes	Yes	Yes	No	No	Yes
Humanitarian sector's need for specia- lized logistics expertise/knowledge	Yes	Yes	Yes	Yes	Yes	Yes

^{*}Only some of them.

Source: Our elaboration.

partnering with WFP/LC it "is the right thing to do": "our employees want us to do it and we have the fully resources to help in this way" (Y).

In the companies perspective, the primary motivation in collaborating in LET/LC initiative is to contribute to the humanitarian cause by providing their resources and logistics expertise, as is clear declared in the official communications of the LET initiative, in the institutional LET web site, and in the CSR section of the single companies member of the initiative. The intent of the business is to express and communicate its humanitarian conscience – in terms of CSR programmes – to its customers and employees, offering itself as a stable partner in emergency operations.

"The two sectors can learn each other", as all three companies (X, Y and Z) confirmed, and they embrace the opportunity to learn other best practices from their partners and apply those to their supply chains (Z). In emergency management "every moment is a learning moment" as well as every disaster provides an opportunity to learn how casualties could have been prevented; those learnings can be shared with communities to build resilience prior to the next disaster (Z). However learning is not necessarily the main reason for engaging in such a partnership, as shown in Table 11.4.

Referring to the definition of agility used in this work, we asked the respondents to confirm or, if they disagree, give their own definition, as shown in

Table 11.4 Importance of mutual learning

		In general			In LET/WFP	
	×	>	Z	×	>	Z
The importance of learning opportunity	Very important (4)	ery Not very important (2)	Extremely important (5)	Very important (4)	Not very impor- tant (2)	Not very impor- Extremely important (2) tant (5)
among the reasons that lead to						
collaboration*						
The importance of	Somewhat	Not very	Extremely	Somewhat	Not very impor-	Somewhat
mutual learning of	important (3)	important (2)	important (5)	important (3)	tant (2)	important (3)
logistic best practices						
in particular among						
the reasons that lead						
to collaboration*						

*Please express your opinion on this statement using a five-point scale: where 1 = completely disagree and 5 = completely agree. Source: Our elaboration.

Table 11.5 Definition of "agility"

	Χ	Υ	Z
Agility refers to the capability to respond to unpredictable events in a way that is simultaneously fast, effective, flexible and at reasonable costs*.	5	4	5
As an agile supply-chain needs a massive source of employment, and it cannot be reached at a low cost, "reasonableness" in cost configuration is defined as the perspective to keep a response to uncertainty *.	4	2	5

^{*}Please express your opinion on this statement using a five-point scale: where 1 = completely disagree and 5 = completely agree.

Source: Our elaboration.

Table 11.6 Learning agility

	In general			In LET/WFP		
	Х	Υ	Z	Х	Υ	Z
Can logistics service providers learn from humanitarians how to manage unexpected shocks that affect supply chains, in order to adopt and transfer the learned competencies into their business supply chains?	Yes	Yes	Yes	No	Yes	Yes
Can logistics service providers learn agility from humanitarians during disaster relief operations?	Yes	Yes	Yes	No	Yes	Yes

Source: Our elaboration.

Table 11.5. Each of them provided confirmation, but what is interesting is that one of the interviewed managers noted that "agile supply chains do not necessarily require massive amounts of employees or high costs" (Y).

As shown in Table 11.6, logistics service providers can learn agility from humanitarians during disaster relief operations. Only from the point of view of X there was a contrasting view expressed: "the specific LET/LC collaboration is not for the purpose of learning agility, it is not really based on something to learn".

From a business perspective, LSPs may learn from the humanitarian sector about responsiveness, change management, working with limited resources and, particularly in the LET/LC partnership, responsiveness and change management (Y). In the business perspective, the humanitarian sector may learn from business LSPs about planning, process management, business applications and, particularly in the LET/LC partnership, planning and

process management (Y). According to Z, the humanitarian sector may learn from leading LSPs, especially those in LET, "what they do best": efficiency, problem solving, innovation, and safety. While LSPs may approach the humanitarian sector as a laboratory of innovation and collaboration into a very complex supply chain. According to X, the humanitarian sector may learn from business LSPs, particularly from those in LET, about access to information about countries and infrastructures (how to access a certain place, how it works in different countries), transport optimization, and going to new countries (where companies have their own structures and employees and WFP/LC do not). In contrast, large LSPs, especially those in LET, already have all of their expertise in house, so there is much more room for the humanitarian sector to learn from main LSPs in logistics (X). According to X, the humanitarian sector relies on large international LSPs such as those in LET to respond to disasters.

However, because humanitarians must work in dynamic work environments and still deliver, private sector companies should be able to learn from this to improve service quality because change management is a critical part of any supply chain, particularly in the humanitarian context (Y). By virtue of good teamwork and dialogue between the LET/LC partnership, LSPs could have the chance to learn some of the rules of agility from WFP/LC in disaster relief operations (Y), as reported in Table 11.7.

Negative answers (of the X company) indicate that learning agility is not the reason for this partnership.

Discussion

From these preliminary results, learning agility seems to be almost an unintentional consequence and not a primary motivation to cooperate. However, at the same time, it is considered an important point in the cross-sector collaboration.

However it seems that the learning theme is just little or not communicated. Some hypotheses are described in the following sentences.

This, above all, because agility is already a capability that those global LSPs – as leaders in their business sector – have learned before others during their competition in an instable context. Thus, more than learning it, the opportunity could be to continue training in the field and increasingly implement their agile capabilities in new challenging contexts.

If they do not already have this capability, some other options emerge. It may be that there is still no full awareness of the learning opportunity, or also

Table 11.7 Rules of agility that companies can learn

Rules of agility	ln	gener	al	In	LET/W	ΈP
Nules of aginty	Х	Υ	Z	Х	Υ	Z
Reacting to events rather than relying on the forecasts (on the demand side)	Yes	Yes	Yes	No	Yes	Yes
Handling short lead time of supply (on the supply side)	Yes	Yes	Yes	No	Yes	Yes
Synchronizing tasks sharing information among actors of the humanitarian supply chain (shared scheduling)	Yes	No	Yes	No	Yes	Yes
Re-organizing processes by eliminating activities that do not add value	Yes	No	No	No	Yes	No
Creating collaborative relationships with suppliers and, in particular, working with suppliers to reduce the time of in-bound and usefulness of delivery	Yes	No	Yes	No	Yes	No
Reducing complexity (too many product variations, too many suppliers, mode of transportation, etc.)	Yes	Yes	No	No	Yes	No
Planning for postponement	Yes	Yes	Yes	No	Yes	Yes
Setting up buffer of low-cost stocks of key- components	Yes	Yes	Yes	No	No	Yes
Building a reliable logistics system, creating stable relationships with 3PLs	Yes	Yes	Yes	No	Yes	Yes
Drawing contingency plans and setting up crisis management	Yes	Yes	Yes	No	Yes	Yes
Innovating to respond quickly and effectively to an emergency	Yes	Yes	Yes	No	Yes	Yes

Source: Our elaboration.

because concrete results of the learning process are not yet visible. Another option is that the learning opportunity has not a proper space in the institutional communication of the companies because the communication is directed to the target of customers and stakeholders not directly interested in this topic, but in the CSR area.

An alternative reason it could be the desire not to communicate this opportunity because valuable element of differentiation from the competition. In this sense, the companies involved could develop important innovations or even new business models. Companies are focused on understanding the needs that humanitarian agencies have in terms of logistics; and, they are also interested in knowing the type of materials most frequently handled during rescue operations – that, compared to those that normally manage, are much more simple and standard – in order to speed up their supply chains in response to the needs of

humanitarian actors. Consider, for example, the interest that the LET companies manifest in understanding the types of materials handled by the WFP and their distribution methods: learn how to handle these products appropriately has an advantage on the success of pro-bono partnership (in the present and for the future) and an advantage if they wish to eventually propose themselves at a later time for money to other humanitarian organizations; but also there is the possibility for the company to invest in new lines of services, opening also the way to new business models for logistics for-profit clients. This could be in line with the idea that one of the primary motivations for companies to engage in partnership with humanitarians is, in the humanitarian perspective, to open new markets, no longer served pro-bono but for-profit; but that could be coherent with CSR approach, where economic and philanthropic intentions in same ways simultaneously occur.

Conclusion

With this contribution, we aim to investigate the opportunity for companies to learn about the agility of supply chains in the context of humanitarian emergency operations.

The literature and the analysed operational conditions reveal that companies and humanitarians can learn from each other during disaster relief, not only the humanitarian sector from the business sector but also the other way around, in terms of agility.

The results of this research may be of particular interest to academics and practitioners in both the profit and non-profit sectors because such learning opportunities are reflected in the best outcome for the logistics of humanitarian aid to benefit people in need. It can also support the creation of an agenda for their engagement in the realization of corporate social responsibility goals.

This first exploratory study, despite having provided unprecedented findings on the topic, needs to be deepened especially in its empirical investigation. The selected methodology permits a thorough exploration of a phenomenon that is still at an early stage, but requires further analysis. It is important to be in constant communication with the parties that participate in the initiative explored in this research to obtain their points of view. First, it might be useful to go in-depth with more questions through a semi-structured interview to the LET Steering Committee. Second, further investigation might consider collecting opinions from other profiles in the

companies belonging to different functions, such as volunteers and logisticians. We should also complete the research from the WFP/LC perspective on the topic by giving a questionnaire/interview to the major exponents of the partnership on the humanitarian side. Moreover, it would also be interesting to investigate sectors other than logistics.

Through such additional studies (with the direct involvement of managers/professionals from both business and humanitarian sector), it will be possible to create a deeper understanding of the agility learning opportunities for companies.

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