THE RELATIONSHIP BETWEEN ORGANISATIONAL CULTURE AND HUMANITARIAN SUPPLY CHAIN COLLABORATION IN LONG-TERM AID

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The Relationship between Organisational Culture and Humanitarian Supply Chain Collaboration in Long-Term Aid
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Key words: Humanitarian supply chain, Collaboration, Organisational culture, Institutional logics, Systematic literature review, Case study.

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The above verse is from the Thirukkural which says that more water flows out when the depth of search increases. Similarly, more knowledge flows out when it is searched for in depth.

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Sabari R. Prasanna
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1 INTRODUCTION

As the number of man-made crises increases globally, there is a corresponding upward trend in the need for long-term aid (UNHCR, 2015); in Somalia, for example, the civil war has displaced 154,000 people (UNHCR, 2015). The aftermath of natural disasters may also require prolonged aid deliveries; in Haiti, the 2010 earthquake left 1.5 million people homeless, and rebuilding basic infrastructure like housing, roads, water, and sanitation has taken seven years (OXFAM, 2018).

Long-term aid is often developmental in nature and may include restoration of infrastructure, distribution of food and medical/hygiene supplies, and provision of clean water and sanitation, as well as psychological counselling, family-based assistance, and schooling for children (Natural Hazards and Applications Information Centre, 2005). It can take several years of humanitarian aid before beneficiaries find a ‘new normal’ (UNHCR, 2015); recent data from the United Nations Office of the Coordination of Humanitarian Affairs indicate that the average length of a humanitarian aid mission is now seven years (OCHA, 2015). Aside from disaster relief, long-term aid may also be required simply to improve people’s living conditions (Reliefweb, 2015; Munslow, 1999). For example, one NGO has been helping to improve the living conditions of 40,000 salt farmers in Gujarat, India since 2009 by reducing their total production costs (SEWA, 2015).

Long-term aid activities require large amounts of funding. In 2015, five protracted crises – in Syria, Yemen, South Sudan, Iraq, and Sudan – accounted for over half of all long-term aid funding (GHA, 2016). In 2017, 58% of all forcibly displaced people (refugees, IDPs, and asylum seekers) were concentrated in the Middle East and North Africa (GHA, 2018). Recent data show that while about $18.62 billion of foreign aid funds from the United States Agency for International Development (USAID) for 2017 was earmarked for long-term aid, only $7.84 billion was allocated to short-term aid (CFR, 2017). In 2015, UN expenditure on long-term aid amounted to $12.02 billion (UN System, 2015). According to OCHA (2018), required funding for the years 2016, 2017, and 2018 amounted to USD 22.1 billion, USD 23.5 billion, and USD 25.33 billion, respectively, for people in need of aid (97.6 million, 92.8 million, and 97.4 million, respectively). In these years, only 43.4% of the funding need is met (OCHA, 2018).

In the aftermath of a disaster, several actors participate in relief efforts, including government agencies, UN agencies, international NGOs, local NGOs, military or armed groups, logistics service providers, private companies, and community actors (Kovacs and Spens, 2007). To mitigate potential inefficiencies, actors strive increasingly to collaborate when responding to disasters and their impacts (Balcik et al., 2010).

Supply chain studies confirm that collaboration can achieve mutually beneficial outcomes such as new product development and joint inventory management (Fawcett et al., 2015), as well as supplier involvement in more rapid and successful development of new products (McIvor and McHugh, 2000). Firms that collaborate in a supply chain report higher levels of trust, strengthening the buyer-supplier relationship (Lechner and Dowling, 2003). Collaboration also facilitates resource sharing to create value in socially sustainable supply chains (Rodríguez et al., 2016). Supply chain collaboration can be defined as ‘two or more chain members working together to create a competitive advantage through sharing information, making joint decisions, and sharing benefits which result from greater profitability of satisfying end customer needs than acting alone’ (Simatupang and Sridharan, 2005, p. 19). Although extensively studied over the
last two decades, understanding of collaboration in the long term aid context remains fragmented (Moshtari, 2016).

Some of the benefits of commercial supply chain collaboration also apply to long-term aid operations. Beyond routine information sharing, efficient long-term aid depends on working effectively together. Moshtari (2013) showed that collaborative initiatives can be long-term, and that more interaction among partners promotes stronger relationships. Examples include IKEA’s financial and/or in-kind support for UNHCR’s work in countries that include Bangladesh, East Sudan, Kyrgyzstan, and Tunisia, which also provides IKEA’s partners with access to technical expertise in logistics, supply, packaging, and warehousing. In the same way, GlaxoSmithKline collaborate with Save the Children, sharing expertise, resources, and influence to tackle some of the causes of child mortality (Save the Children, 2013).

However, multiple actors can diminish response efficiency (Van Wassenhove, 2006) because of their differing priorities and goals (Balcik et al., 2010) and differing organisational cultures (Dowty and Wallace, 2010). Fawcett et al. (2015) found that differences in organisational culture can potentially lead to the failure of collaborative endeavours, with negative outcomes for the actors involved. In humanitarian contexts, these differences can hamper effective aid provision (Rodon et al., 2012) — for example, Fawcett et al. (2015) showed that differences in organisational culture can result in poor trust between buyer and supplier, making collaboration difficult. Differences in organisational culture can also lead to tension and mutual blaming (Madupalli et al., 2014; Koulikoff and Harrison, 2008), and Kabra and Ramesh (2015) found that cultural differences can be a barrier to HSC collaboration. As the influence of organisational culture on HSC collaboration has not generally been studied in depth, this thesis examines the collaboration between buyers and suppliers in humanitarian supply chains for long-term aid.

The term organisational culture refers to an organisation’s style of working and how it defines success — in terms of profitability, sales volume, market share, or non-profit goals. Other differences may relate to leadership style or organisational structures (Cameron and Quinn, 2006). Schein defined organisational culture as

\[
\text{a pattern of shared basic assumptions, invented, discovered, or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid, and therefore is to be taught to new members of the group as the correct way to perceive, think, feel in relation to those problems'}. \text{(1992, p. 247)}
\]

A strong cultural fit between actors in the supply chain is often important for lasting collaborative relationships (Cadden et al., 2010). Although widely used, the term cultural fit is not well defined (Cartwright and Cooper, 1993) but generally refers to a ‘lack of cultural gaps’ (Detert et al., 2000, p. 858). Goodness of fit can enhance buyer-supplier relationships (Pressey et al., 2007; Inemek and Matthyssens, 2013), facilitating activities such as joint planning for inventory management and development of new products (Cadilhon et al., 2005, Wang et al., 2008).

As an inter-organisational phenomenon collaboration is influenced by norms, practices, assumptions, values (Nicholls and Huybrechts, 2016), beliefs, and rules. Beyond this organizational level, these norms, values, assumptions, and practices can be understood as institutional logics at industry or field level (Hinings, 2012). defined by Thornton and Ocasio, institutional logics are ‘the socially constructed, historical patterns of material
practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality' (1999, p. 804). Inter-organisational relationships both mirror and support these institutional arrangements, and this theoretical account informs the present research.

1.1 Aim of the Thesis

The overarching aim of the thesis is to examine the influence of organisational culture on buyer-supplier collaboration in long-term aid. The thesis is both timely and relevant for a number of reasons. First, the increasing occurrence of natural and manmade disasters has led to a corresponding increase in long-term aid programmes. Second, long-term aid requires collaboration among multiple actors from differing organisational cultures. Finally, unlike commercial supply chain collaboration, this process has not yet been perfected in HSC contexts. The thesis investigates how differences of organisational culture influence collaboration in long-term HSC aid provision.

A thorough review of the literature at the intersection of organisational culture and supply chain collaboration identifies research gaps, informing further investigation from dyadic and three-echelon perspectives. Figure 1 provides an overview of the relevant sources in relation to the following research questions.

RQ1: How does organisational culture influence supply chain collaboration?

This question addresses what is known and what remains unknown at the intersection of research on organisational culture and supply chain collaboration as elaborated in Article A.

RQ2. How can organisational culture influence collaboration in long-term aid humanitarian supply chains?

This question addresses the influence of organisational culture on collaboration in long-term aid provision. The issue is investigated from two viewpoints: a dyadic setting (Article B) and a three-echelon supply chain (Article C).

The thesis begins by addressing what is known at the intersection of supply chain collaboration and organisational culture and identifies research gaps in relation to long-term aid (Article A). This informs subsequent investigation of the influence of organisational culture on humanitarian supply chain collaboration in long-term aid provision in a dyadic setting and in a three-echelon setting (Articles B and C). As well as exploring how the finer aspects of organisational culture influence collaboration, the overarching mechanism of institutional logics serves to clarify these effects at a broader level.

It is anticipated that the findings of this study will have implications for research and practice in the context of collaborative long-term HSC aid provision. By helping to improving collaborative ties between actors, this should ultimately result in better long-term aid for the recipients.
The relationship between Organisational Culture and Humanitarian Supply Chain Collaboration in long-term aid

How does organizational culture influence supply chain collaboration?

How can organisational culture influence collaboration in long-term aid HSC?

Figure 1 Linkages between overarching theme, articles, and constructs
1.2 Scope of the thesis

This section explains the scope of the thesis. From a conceptual standpoint, the thesis explores the intersection of several areas of literature: supply chain collaboration, humanitarian supply chain management, organisational culture, and institutional logics. Figure 2 is a pictorial presentation of the conceptual scope of this thesis.

![Diagram of conceptual scope](image)

This thesis is positioned within supply chain management intersecting with organisational culture and institutional logics literature. Supply chain management is defined as “the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole” (Mentzer et al., 2001, p. 18).

Supply chain management literature encompasses several areas of research including supply chain collaboration, humanitarian supply chain management, supply chain strategy, supply chain finance, and logistics management. However, the focal positioning of this thesis is in the area of Supply Chain Collaboration (SCC) and Humanitarian Supply Chain Management (HSCM).

For the purpose of this thesis supply chain collaboration is defined as “two or more chain members working together to create a competitive advantage through sharing information, making joint decisions, and sharing benefits which result from greater profitability of satisfying end customer needs than acting alone” (Simatupang and Sridharan, 2005, p. 19). Supply chain collaboration results in an outcome that is favourable for the collaborating actors. A wide range of collaborative outcomes are examined in the literature (for example, new product development, joint cost reduction, joint inventory management, and technology sharing) (Cao and Zhang, 2011).

Recently, the number of scholarly contributions to the field of supply chain management has been growing, particularly in humanitarian supply chain management (JSCM, 2017).
In the HSCM, this thesis is positioned in long-term aid. Long-term aid is a protracted (extended) form of aid that may or may not be a continuation of short-term aid (Haider, 2014). Meaning, long-term aid can be a continuation of a short-term aid as an immediate response to an emergency (such as an earthquake or tsunami). However, long-term aid can also be provided as a response to a slow onset disaster such as drought (FAO, 2015). However, this thesis does not make any distinction as to the reasons for long-term aid.

Since the 1980s, organisational culture research has gained research attention (Schein, 1984). Organisational culture research is important to supply chain management research as the organisational culture of a firm holds the key to understanding several practices including supply chain relationships, collaboration, implementation of manufacturing practices such as Just-in-Time with suppliers, and total quality management (Inemek and Matthyssens, 2013). For the purpose of this thesis, the definition proposed by Schein (1992) has been adopted: “the pattern of shared basic assumptions, invented, discovered, or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid, and therefore is to be taught to new members of the group as the correct way to perceive, think, feel in relation to those problems” (pp. 247).

Institutional logics serves as a theoretical lens in this thesis. Institutional logics provide a coherent set of organizing principles for a particular realm of society (Besharov and Smith, 2014), and such logics can be extended to the organisational or supply chain level. Defined as such, social construction of institutional logics goes hand in hand with supply collaboration in the humanitarian context. In a humanitarian context, the primary purpose of collaboration comes from the social need to restore the society that is receiving aid. Thus, examining the phenomenon of HSC collaboration through the lens of institutional logics provides answers to the research questions. Furthermore, institutional logics also help improve understanding of the effects of organisational culture on HSC collaboration from an inter-organisational level. This is because institutional logics operate on the inter-organisational level (Hinnings, 2012).

In summary, the scope of this thesis is set through two dimensions. Firstly, describing the intersection of concepts that this thesis encompasses (supply chain collaboration, humanitarian supply chain management, organisational culture, and institutional logics), and secondly providing specific definitions of each concept.

1.3 Structure of the Thesis

This section outlines the remaining contents of the thesis. The thesis is structured as follows. Core concepts are presented in the next chapter (chapter 2). The core concepts provide an outline of previous studies on supply chain collaboration, HSC collaboration, drivers of HSC collaboration, barriers to HSC collaboration, and the concept list for this thesis. This is followed by the context of the thesis (chapter 3). That chapter provides context on the buyer supplier relationship and procurement in humanitarian organisations.

Chapter 4 discusses the theoretical background. This chapter will provide theoretical background on organisational culture and collaboration, institutional logics, and links between these topics. Chapter 5 discusses the research design adopted in this thesis. Chapter 6 briefly provides the summary of findings. Chapter 7 goes into in-depth findings of each article. Chapter 8 includes discussion, conclusions, contributions, and limitations of this research.
1.4 Definitions of Key Concepts

Buyer-supplier relationship is “an ongoing relationship between two firms that involves a commitment over an extended time period and a mutual sharing of information and the risks and rewards of the relationship” (Ellram and Hendrick, 1995, p. 41).

Supply Chain Collaboration is defined as when “two or more independent organisations work jointly to plan and execute supply chain operations with greater success than when acting in isolation” (Simatupang and Sridharan, 2002, p.19).

Orchestration: Orchestration is the automated arrangement, coordination, and management of complex systems, middleware, and services (Msanjila et al., 2005).

Supply chain integration: Flynn et al. (2010, p. 58) define SCI “as the degree to which a manufacturer strategically collaborates with its supply chain partners and collaboratively manages intra- and inter-organization processes”.

Coordination: Coordination refers to alignment of the operational activities of a group of organizations in a way that increases efficiency or effectiveness; it also refers to the tools (e.g. incentives or mechanisms) used to manage this alignment (Ergun et al., 2014, p. 1003).

Cooperation: Cooperation is conceptualized as "a set of joint actions of firms in close relationship to accomplish a common set of goals that bring mutual benefits" (Mentzer, 2000, p. 139).

Organisational culture is defined “as a pattern of shared basic assumptions, invented, discovered or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid, and therefore is to be taught to new members of the group as the correct way to perceive, think, feel in relation to those problems” (Schein, 1991, p. 247).

Institutional logics is defined as the “socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality” (Thornton and Ocasio, 1999, p. 804).

Long-term aid includes life-sustaining and life improving activities (Bennett and Ebrets, 2015) to address developmental needs (Otto and Weingartner, 2013) over an average of seven years (Reliefweb, 2015).

Research articles are part of this thesis. Three research articles are added in the appendix. They are called Article A, Article B, and Article C.
2 COLLABORATION IN HUMANITARIAN SUPPLY CHAINS

This section explains the core concepts of this thesis. These include supply chain collaboration and humanitarian supply chain management.

2.1 Buyer-supplier Relationship

Buyer-supplier relationship literature stems from broad procurement literature. It is essential to understand the major types of procurement strategies in order to understand buyer-supplier relationships. Walker and Hampson (2008) present several types of procurement strategies in a buyer-supplier context. For example, in traditional fixed-price contracting, the procurement process involves design development, tender, contract award, and delivery phases. In a design-construct approach, the supplier is asked to completely design and construct the project. In a project management approach, which is a non-traditional procurement approach, suppliers are involved early in the design development process. As the importance of sustainability has increased, e-procurement and sustainable procurement literature has become more prominent.

The buyer-supplier (b-s) relationship is central to supply chain management. Several important activities lie outside the organisational boundary and are usually carried out by external suppliers (Saeed et al., 2005). Firms take an interest in cultivating this necessary relationship (Chang et al., 2010). The literature on the b-s relationship shows several trends. It is important to review the streams of literature to understand what each stream focuses on. The idea of showcasing these streams is not to show gaps in the b-s literature. For example, in the first trend, a stream of literature can be found on the impact of the b-s relationship on the supply chain from a financial perspective such as profit maximisation and financial investment in the suppliers (Chatain, 2011; Samrah et al., 2007; Caniels and Gelderman, 2007; Ho et al., 2008; Tunca and Zhu, 2017).

Literature on b-s relationships also includes discussions about sustainability-based research, such as sustainable supply chains and supplier sustainability practices (Ghadimi et al., 2016; Govindan et al., 2013; Genovese et al., 2013; Bai and Sarkis, 2010; Hsu and Hu, 2009; Kannan et al., 2013). Literature can also be found on collaboration related research that talks about efficiency and flexibility (Nyaga et al., 2010; Corston and Kumar, 2005; Hoegl and Wagner, 2005; Jap, 1999; Yan and Dooley, 2014; Yang, 2013; Carey et al., 2011; Narayanan et al., 2015). This stream of literature is relevant to this study as collaboration is a key construct of this thesis. However, this literature indicates that literature on long-term aid is rare.

B-s relationship typologies pave the way to dig deeper in the kind of typologies associated with supply chain collaboration. Extant research shows several b-s relationship typologies. These typologies were first developed in the early 1980s, including the early b-s relationship typology that was based on discrete versus relational exchanges (Macneil, 1980). Later, Helper and Sako (1995) developed the arm’s length and closer cooperative relationship typologies. Furthermore, the b-s relationship has been viewed from a transactional-relational continuum (Palmer, 2007). Kaufman et al. (2000) show that the b-s relationship can be divided into commodity supplier, collaboration specialist, technology specialist, and problem-solving supplier roles.

Cannon and Perreault (1999) show that b-s typology can be based on a continuum from basic buying/selling, contractual transaction, custom supply, cooperative systems, collaborative, mutually adaptive, and “customer is king” perspectives. Lambert et al. (1996) have developed a b-s typology that describes these relationships as arm’s length,
partnerships, joint ventures, or vertical integration. Palmer (2007) show that the b-s relationship can be divided into three types: transactional, sustained transactional, and relational. Tong et al. (2008), indicate that there are different relationship types associated with different degrees of reciprocity leading to four types of b-s relationships: market/discrete relationship, captive b-s dominant relationship, captive supplier-buyer dominant relationship, and strategic/bilateral partnership. These typologies drive the central idea of this thesis clearly: that a relationship between buyer and supplier is necessary to collaborate toward a common goal.

Table 1 provides a summary of the typologies. Relational variables such as relational norms and trust and collaboration are often used in b-s typologies that focus on the relational side of exchange relationships, whereas power, dependence, and transaction-specific investment have been used in the typologies that focus on the power-dependence side of such relationships (Tangpong et al., 2015).

<table>
<thead>
<tr>
<th>Study</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macneil (1980)</td>
<td>Discrete versus relational exchange relationships</td>
</tr>
<tr>
<td>Helper and Sako (1995)</td>
<td>Arm’s length versus close-relationship</td>
</tr>
<tr>
<td>Lambert et al. (1996)</td>
<td>Arm’s length, partnerships, joint ventures, and vertical integration</td>
</tr>
<tr>
<td>Cannon and Perreault (1999)</td>
<td>Basic buying/selling, bare bones, contractual transaction, custom supply,</td>
</tr>
<tr>
<td></td>
<td>cooperative systems, collaborative, mutually adaptive, and “customer is king”</td>
</tr>
<tr>
<td>Kaufman et al. (2000)</td>
<td>Commodity supplier, collaboration specialist, technology</td>
</tr>
<tr>
<td></td>
<td>Specialist, and problem-solving supplier</td>
</tr>
<tr>
<td>Palmer (2007)</td>
<td>Transactional, sustained transactional, and relational relationships</td>
</tr>
<tr>
<td>Tong et al. (2008)</td>
<td>Market/discrete relationship, captive b-s dominant relationship, captive</td>
</tr>
<tr>
<td></td>
<td>supplier-buyer dominant relationship, and strategic/bilateral partnership</td>
</tr>
</tbody>
</table>

Table 1 Buyer-supplier typologies
Collaborative relationships take a strategic view with other actors to create unique outcomes that actors cannot create alone (Corsten and Kumar, 2005). Simatupang and Sridharan (2002) share this view of the relationship-based definition of supply chain collaboration. Firms involved in a long-standing relationship obtain their business objectives through relationship-based exchanges (Ganesan, 1994).

Spekman and Carraway (2006) show the b-s relationship has transitioned from traditional relationships to more collaborative relationships. The important drivers for this transition are system-wide thinking and performance metrics. This transition is facilitated by the presence of the mind set that it is necessary to embrace the next level of relationship, the right skill sets, facilitating processes, organisational structure, and information technology.

![Figure 3](Transition from traditional relationship to collaborative relationship (source: Speckman and Carraway, 2006)]

Barratt (2004) shows that organisations collaborate in two basic ways: horizontal and vertical. In a vertical collaboration, collaboration typically happens between customers, suppliers, and internal customers. Horizontal collaboration refers to collaboration with competitors or with other unrelated firms.

*Procurement in humanitarian organisations:* Although actors in the HSC collaborate for mutual benefits, humanitarian organisations also follow public procurement policies. These policies influence the magnitude of collaboration between actors. Many humanitarian organisations (i.e. UNICEF, UNOPS, UNHCR) follow public procurement practices. Public procurement is a vehicle through which organisations ask for supplies from government entities (Loader, 2013). In a similar way, governments also use contracts to produce desired social policy outcomes through public procurement (McCrudden, 2004). Public procurement rules and regulations can create requirements for transparency, fair competition, and best value-for-money purchases (Erridge and McIlroy, 2002).

Public procurement can be used as a vehicle to trigger innovation and solve social problems when the government requests a specific new product (Edquist and Zabala-Iturriagagoitia, 2012). The problems addressed through public procurement projects can be as big as global warming, food and water supply shortages, the challenges of aging societies, and public health concerns (Lund Declaration, 2009). In early 2004, three governments issued a position paper to the European Council calling for the use of public procurement across Europe to spur innovation (Edler and Georghiou, 2007). A typical public procurement process includes the following steps. First, the requesting party identifies a challenge (a human need or societal problem). Second, the requesting party translates the identified challenge into functional specifications. Third, the government establishes the tendering process for this project. Fourth, the respective government agency assesses tenders and awards contracts. Finally, the delivery process includes
product development and production (Edquist and Zabala-Iturriagagoitia, 2012). UN agencies, like many government entities, also follow public procurement policy (UNOPS, 2017).

Cooperative procurement also exists in humanitarian organisations (Pazirandeh and Herlin, 2014). In cooperative procurement, humanitarian organisations join together to procure the required aid materials (Balcik et al., 2010). The benefits of cooperative procurement include a reduction in the duplications of procurement activities among humanitarian organisations and cost reductions (Gustavsson, 2003, Balcik et al., 2010). Schultz and Soreide (2008) further claim that cooperative purchase can mitigate the risk of corruption and improve integrity. Merkx and Gresse (2012) suggest that partners in cooperative procurement can benefit from decreased purchasing complexity, reduced lead time, new learning opportunities and capacity sharing.

2.2 An Overview of Supply Chain Collaboration

Definitions of Supply Chain Collaboration

Supply chain collaboration has been defined in various ways that can be categorized into two broad groups: process focus and relationship focus. Supply chain collaboration has been viewed as a business process whereby two or more supply chain partners work together toward common goals (Mentzer et al., 2001, Stank et al., 2001, Manthou et al., 2004, Sheu et al., 2006).

Process oriented definitions of supply chain collaboration consider process as the primary connecting mechanism between collaborating actors. Collaboration “is a process of decision making among interdependent parties. It involves joint ownership of decisions and collective responsibility for outcomes” (Gray, 1991, p. 227). In a similar way, Schrage (1990) defined supply chain collaboration as “an affective, volitional, mutual shared process where two or more departments work together, have mutual understanding, have a common vision, share resources, and achieve collective goals” (p. 116). Simatupang and Sridharan (2005) define supply chain collaboration as “two or more chain members working together to create a competitive advantage through sharing information, making joint decisions, and sharing benefits which result from greater profitability of satisfying end customer needs than acting alone” (p. 19). Process focused definitions of supply chain collaboration establish the process through which buyer and supplier are connected. Process focus accounts for the tangible benefits to the partners, mutual risks, and specific processes such as information sharing and joint decision making during collaboration. This thesis considers Simatupang and Sridharan’s (2005) definition of process focus. This definition is helpful because the thesis examines the mechanism through which organisational culture influences supply chain collaboration.

Relationship oriented definitions of supply chain collaboration refer to the relationship as the key mechanism of collaboration. Supply chain collaboration has also been defined as the formation of close, long-term partnerships where supply chain members work together and share information, resources, and risk to accomplish mutual objectives (Bowersox et al., 2003, Golicic et al., 2003). Golicic et al. (2003) define collaboration as “two or more organisations in the group or class of relationships that share common traits or characteristics” (Golicic et al., 2003, p. 57). Cao and Zhang (2011) define collaboration as “a partnership process where two or more autonomous firms work
closely to plan and execute supply chain operations toward common goals and mutual benefits” (Cao and Zhang, 2011, p. 164). In relationship-oriented definitions, the focal point is the relationship between the partners. Common traits are necessary to form relationships between partners. The goal is the same as process focused definitions, but relationships in pursuit of common goals are emphasized.

Collaboration is a process of decision making among interdependent parties. It involves joint ownership of decisions and collective responsibility for outcomes. Schrage (1990, p. 116) defines it as “an affective, volitional, mutual shared process where two or more departments work together, have mutual understanding, have a common vision, share resources, and achieve collective goals”.

SCC consists of:

- information sharing (Manthou et al., 2004);
- goal congruence (Angeles and Nath, 2001);
- decision synchronization (Stank et al., 2001);
- resource sharing (Sheu et al., 2006);
- and incentive alignment (Simatupang and Sridharan, 2005) among independent supply chain partners.

Supply chain collaboration is an essential component of achieving a well working supply chain (Matopoulos et al., 2007). Since the early 2000s “collaboration” has made the transition from a purely theoretical concept to a widely adopted supply chain practice (Bagchi and Skjott-Larsen, 2005).

An increasing body of literature indicates that a number of companies are beginning to reap benefits from their collaborative initiatives (Narasimhan and Jayaram, 1998; Vereecke and Muylle, 2006; Simatupang and Sridharan, 2005; Sanders, 2007, 2008). Furthermore, collaboration between organizations can lead to increased performance (Forrester, 1961; Pagell, 2004), whereas a lack of collaboration leads to inefficiencies in the supply chain (Forrester, 1961; Lee and Billington, 1992; Frohlich and Westbrook, 2001). By collaborating, supply chain partners can work as if they were a part of a single enterprise (Lambert and Christopher, 2000). Firms strive to achieve greater supply chain collaboration to leverage the resources and knowledge of their suppliers and customers (Lejeune and Yakova, 2005) and enjoy their associated benefits, such as enhanced firm performance (Cao and Zhang, 2011).

Collaboration has been referred to as the driving force behind effective supply chain management (Ellram and Cooper, 1990; Horvath, 2001) and, as such, may be considered the ultimate core capability (Sanders and Premus, 2005). The fundamental rationale behind collaboration is that a single company cannot successfully compete by itself. Customers are more demanding and competition is escalating (Kumar et al. 2000). Thus, many firms seek to collaborate on cross-firm activities and work reciprocally over time to produce superior performance (Anderson and Narus, 1990). Firms enter into inter-firm collaborative arrangements in order to share risks and rewards (Lambert et al., 1998).

For the purpose of this study, the definition of supply chain collaboration from Simatupang and Sridharan (2002) has been adopted: “collaborative supply chains refers to two or more independent organisations working jointly to plan and execute supply
chain operations with greater success than when acting in isolation” (Simatupang and Sridharan, 2002, p. 19).

This definition takes a process based view of supply chain collaboration (Cao and Zhang, 2011). When collaboration is seen as an inter-organisational process, its connection to organisational culture becomes clear. Organisational culture manifests in an organisation’s practices and routines (Schein, 2004). Such practices and routines are the processes that the organisation carries out to run its business on a day-to-day basis (Giorgi et al., 2011). Because an organisation also carries out routines in an inter-organisational context, such as knowledge sharing and information sharing with other organisations (Powell, 1998), a process-based collaboration emerges between the collaborating organisations (Simatupang and Sridharan, 2002).

Researchers have differentiated supply chain collaboration into three variants: vertical, horizontal, and lateral. Vertical collaboration explores the collaborative outcomes from a dyadic perspective, typically the buyer-supplier relationship (Barros et al., 2011; Fugate et al., 2012). Horizontal collaboration is largely confined to transportation management (Wen, 2011; Lozano et al., 2013). Lateral collaboration examines supply chains from a functional perspective (e.g. inventory management) (Chan and Prakash, 2012).

There is an innate need for organisations to collaborate with each other. The necessity for collaboration arises from the need to improve in comparison to past performance. This drive requires organisations to pool resources outside the principal organisation and look at suppliers and customers to identify and match resources and build upon them. Such resource sharing leads to collaboration and function specific-purchasing, manufacturing, and logistics (Ellinger, 2002; Fawcett and Magnan, 2002; Barratt, 2004). The need to smooth out inventory pile-up across different supply chain partners also involves inventory-holding costs. Information sharing is necessary to forecast demand and plan supplies for inventory management accordingly (Horvath, 2001).

A majority of studies in supply chain collaboration are concerned about vertical collaboration, typically within the supply chain (Barratt, 2004). Specifically, these studies argue that collaboration can improve the existing buyer-supplier relationship. For example, Lechner and Dowling (2003) found that for a collaborative relationship to exist over an extended period, it is essential to have a value-adding relationship. Such relationships also explain the mutual growth in a dyad. Vlaar et al. (2006) show that beliefs and assumptions between organisations influence the buyer-supplier relationship; moreover, other factors such as coordination, control, and legitimacy are also highlighted between dyadic relationships.

Beugelsdijk et al. (2006) show that when positive orientations towards innovation, stability, and predictability are aligned, they improve the collaborative relationship between partners. Strategic fit between collaborating partners is influenced by operational aspects such as the quality and delivery of goods and services within the dyad (Pressey et al., 2007). Halter et al. (2009) found that shared business ethics within the collaborative relationship are essential and help develop a positive relationship with other stakeholders. Moreover, compliance with the buyer’s code of conduct also keeps the collaborative relationship going.

Some studies in supply chain collaboration focus on supplier contracts. For example, Wuyts and Geyskens (2005) found that when organisations want to extend contracts, especially for a new purpose, a new joint product is developed, which limits the opportunistic behaviour of the supplier. Lee and Kwon (2006) developed a framework
consisting of formalization, reuse, and problem-solving phases. The framework first formalizes TAKBN (tacit knowledge about B2B negotiation) with both Primary Negotiation Terms and Secondary Negotiation Terms, and outlines these terms in a cognitive map and case studies. These case studies can be retrieved for later use and problem-solving. Baraldi (2008) indicates how buyers are able to manage innovation through strong collaborative ties with suppliers. Furthermore, Laryea and Watermeyer (2014) found that when firms engage suppliers at the design stage, they educate the whole team, improve safety awareness and shared understanding, and insist on adherence to the project budget.

Collaboration within the dyad results in product innovation. For example, Macpherson et al. (2004) found that relationships established through the supply chain enable knowledge linkages between firms and facilitate innovation through procedural interaction and relationships based on trust and collaboration. Brettel and Cleven (2011) show that a firm’s orientation towards technological innovation has a significant and positive relationship to a firm’s collaborative activities with customers, universities, and independent experts. The results of this study also reveal that a firm’s willingness to take risks has a positive correlation to successful collaboration with customers and independent experts. Inemek and Matthysens’ (2013) findings demonstrate that inter-firm knowledge sharing routines, relation-specific investments, and governance mechanisms promote supplier innovativeness by expanding the supplier’s knowledge resources and encouraging the supplier to invest in innovative activities.

Several studies investigate performance as an outcome of collaborative relationship. Lee et al. (2008) show that in a collaborative relationship, knowledge creation is measurable. Knowledge management and product-process management that align with the selected New Product Development (NPD) project are necessary to achieve efficient NPD. Shub and Stonebreaker (2009) propose a model that depicts a relationship between human resources and organisation variables of buyers and suppliers that improves the dyad’s performance. Cao and Zhang (2011) show that collaborative relationships improve the knowledge base of suppliers, which in turn lead to improved firm performance.

Supply chain collaboration has also attracted sustainability-linked research. Collaboration in the sustainable supply chain depends on a convergence, a match between organisational structure, organisational culture, and organisational commitment (Cheung and Rowlinson, 2011). Van Hoof and Thiell (2014) support the notion that collaboration may contribute to inter-organisational dynamics by strengthening knowledge absorption capacity, structuring solutions, and motivating activity around a commonly defined problem or goal such as cleaner production. Prajogo et al. (2014) found that the diffusion of environmental management systems to suppliers is influenced by the principal idea of sustainability driven by the buying organisation.

In some instances, collaboration can go wrong. It can be detrimental to support collaboration without any clearly defined aim. For example, the Apple iPod was the result of a great collaboration within Apple and with outside vendors and the company was able to produce the first iPod within nine months. Sony, in contrast, tried to do the same thing, but they could not successfully collaborate across five divisions within Sony. The product that they produced, called Sony Connect, flopped because Sony did not have a culture of collaboration (Hansen, 2010). Collaboration between actors is not as widely found in a humanitarian setting as it is in a commercial setting due to the differences in context between humanitarian and commercial sectors (McLachin and Larson, 2011).
The mechanism through which collaboration manifests could be attributed to the contracts between the actors focused on the transaction and the mutual exchange of rights, and on the relationship. Such contracts also act as a mechanism through which information flows and mutual adjustments take place (Powell, 1998). Contracts also delineate to a great extent whether common assets are pooled or different resources traded, what stage of development a project is at, and whether some form of ownership is involved (Williamson, 1991). The contractual mechanism concerns formal, explicit, and legally enforceable inter-organisational agreements that define the roles, rights, and responsibilities of exchange parties and establish safeguards against potential opportunism (Poppo and Zenger, 2002). Inter-organizational structures are associated with sustained and continuous contracting between two or more organizations. Within these structures a specific group of actors, labelled ‘boundary spanning managers’ (Williams, 2002; Marchington et al., 2004), form an inter-organizational agency that maintains the exchange during transactional changes.

Another mechanism through which collaboration manifests is based on inter-organisational relationships (Cao and Lumineau, 2015; Wacker et al., 2016; Chakkol et al., 2018). Relational mechanism refers to informal, socially derived norms in managing exchange risks and uncertainty and managing inter-organisational collaboration (Zhou and Xu, 2012). The notion of relational mechanism is multi-dimensional and includes several socially derived mechanisms, such as trust, commitment, flexibility, norms, and information and knowledge sharing (Wacker et al., 2016). For example, trust, commitment, and shared understanding are perceived as the prime factors influencing the success of collaborative project initiatives (Ansell and Gash, 2008). Such mechanisms include encouraging personal means of interaction through informal project meetings, job rotations, and top management support along with shared events, workshops, conferences, and technological platforms (Müller et al., 2014).

It is also necessary to note that in some instances collaboration between partners is a disadvantage. Rice and Hoppe (2001) show that collaboration hinders efficiency in the following ways: service providers face difficulty providing unique offerings, a compromise must be made between business plans and intimate business intelligence, and it poses a barrier to open information sharing with customers.

**Supporting Mechanisms of Collaboration**

*External and internal trust:* Collaboration between actors stands due to inter-organisational relationships. For inter-organisational relations to exist, trust between actors is essential (Smeltzer, 1997). Trust can contribute significantly to the long-term stability of an organisation both internally and externally at the inter-organisational level (Heide and John, 1990; Barratt, 2004).

*Mutuality:* Organisations collaborate with each other with the expectation of gaining a benefit. The benefits of the collaboration are expected to be mutual (Sparks, 1994; Ellram and Edis, 1996). Research in supply chain collaboration has documented several mutual benefits that collaborating firms enjoy. Collaborating actors not only mutually share benefits but also share risks mutually (Crewe and Davenport, 1992; Boddy et al., 1998; McIvor and McHugh, 2000).

*Information sharing:* The extent to which a firm shares a variety of relevant, accurate, complete, and confidential information in a timely manner with its supply chain partners (Angeles and Nath, 2001; Cagliano et al., 2003; Sheu et al., 2006; Cao and Zhang, 2011). Information sharing is described as the “heart” (Lamming, 1996), “nerve centre” (Chopra
and Meindl, 2001), and “foundation” (Lee and Whang, 2001) of supply chain collaboration.

Terms Closely Related to Collaboration

Buyer supplier relationship: Buyer supplier relationship (BSR) research has provided several typologies (the next chapter discusses these typologies in detail). These typologies are typically based on a few key attributes or dimensions that characterize the exchange relationships between buyers and suppliers. The common attributes that have been used by previous BSR typology research can be divided into two major categories: relational attributes and power-dependence attributes (Tangpong et al., 2008, 2015).

Relational attributes such as cooperative efforts, relational norms, trust, commitment, and integration were studied (Webster, 1992; Morgan and Hunt, 1994). Power-dependence attributes used in previous typologies include power-dependence and transaction-specific investment (Heidi, 1994; Cox, 2001). Relational and power-dependence attributes are arguably important to the functioning of BSRs as they can influence dynamics critical to the performance of both buyer and supplier firms such as control, cooperation, power exploitation and opportunism prevention (Tangpong et al., 2015; Provan and Skinner, 1989; Wang and Wei, 2007; Wathne and Heide, 2000).

Supply chain co-operation: Cooperation has been defined as joint striving toward a common object or goal (Stern, 1971). According to Stern and Reve (1980), cooperation is an activity in which potential collaborators are viewed as providing the means by which a divisible goal or object desired by the parties may be obtained and shared. In summary, cooperation is conceptualized as “a set of joint actions of firms in close relationship to accomplish a common set of goals that bring mutual benefits” (Mentzer, 2000, p. 139).

Supply chain coordination: Coordination refers to alignment of the operational activities of a group of organizations in a way that increases efficiency or effectiveness; it also refers to the tools (e.g. incentives or mechanisms) used to manage this alignment (Ergun et al., 2014, p. 1003). Coordination within a supply chain is a strategic response to the problems that arise from inter-organizational dependencies within the chain. Coordination takes place between two or more firms where tight control is involved through a coordination mechanism that synchronizes two or more specific functions (Mentzer, 2000).

Supply chain integration: Flynn et al. (2010, p. 58) define SCI “as the degree to which a manufacturer strategically collaborates with its supply chain partners and collaboratively manages intra- and inter-organization processes”. The goal of SCI is to achieve effective and efficient flows of products and services, information, money, and decisions, and to provide maximum value to the customer at low cost and high speed (Bowersox et al., 1999; Frohlich and Westbrook, 2001; Naylor et al., 1999).

Orchestration: Orchestration is the automated arrangement, coordination, and management of complex systems, middleware, and services (Msanjila et al. 2005). This concept has been applied to the supply chain in recent years due to the increasing complexity and scale of SCNs. An orchestrator is like the conductor in a symphony and the firms being orchestrated are like its members (Li et al., 2016). Orchestration describes how web services can interact with each other at the message level, including the business logic and execution order of the interactions (Peltz, 2003). These interactions may span applications and/or organizations, and result in a long-lived, transactional, multi-step process model.
In spite of all these terms that indicate two organisations working together, supply chain collaboration is the best fit in the context of this thesis. As indicated, this thesis takes a process-based view of inter-firm relationships. First, the process based dimension of supply chain collaboration has the power to explain why two organisations collaborate in a specific way. The process of information sharing, commitment, mutuality, and sharing of resources must be specifically understood to grasp the aim of this thesis. All of the above terms which are closely related to collaboration fall short in explaining the inter-organisational relationship in a long-term aid context. Also, collaboration surpasses the scope of the terms explained above, thus leaving more room to take the thesis closer to the actual phenomenon in the practical aspects of long-term aid.

2.3 An Overview of HSC collaboration

The humanitarian supply chain (HSC) aims to supply necessary goods like water, food, tents, blankets, and medicines in case of natural and man-made disasters. The humanitarian supply chain stretches beyond preparedness, response, and recovery to long-term aid. There is no single form of humanitarian supply chain, although a typical supply chain follows this sequence: donations from the government pass through an international agency, international NGOs, local NGOs, community based organisations, and finally reach aid recipients (Olaruntoba and Grey, 2006). The HSC takes a multilateral approach through international agencies and NGOs, although aid is often given on a bilateral country-to-country basis and delivered in several ways. The stability of the HSC is often questioned. Sometimes the supply chain breaks down at the receiving end (Munslow and Brown, 1999), or it may also be unstable at its origin for two main reasons: politicised donations by governments and the competitive nature of fund-raising from private donors (Bennett and Daniel, 2002). Many of the processes in commercial supply chains are similar to, although not necessarily directly transferable to, the HSC. The direct transfer of business logistics concepts to HSC would be problematic (Olorotunba and Gray, 2002).

The significant differences are that humanitarian response generally operates in a context of voluntary contributions of finance and labour. Typically, the “end consumers” are people who will not be party to any commercial transaction. However, there is a recent debate on cash-based incentives for the beneficiaries when they play a role of the consumer. Final delivery of aid could take place in countries without any established logistics community or infrastructure. Moreover, governments and the military may be involved at a significant level and the environment may be both politically and militarily unstable (Olorotunba and Gray, 2002; Long and Wood, 1995). Pettit and Beresford (2007) identify several critical success factors for humanitarian supply chains. First, strategic planning is the foremost success factor. A long-term approach is adopted which allows an organisation to be prepared for what must be done when an emergency occurs (Long, 1997). Inventory management through pre-positioning of stocks is a critical factor (Schulz and Heigh, 2007). Information management is crucial in planning and delivering aid. The speed with which it is used can have a critical impact on the effectiveness of the response (Perry, 2007). Pettit and Beresford (2007) argue that collaboration is seen as a key differentiator in supply chain best practice and in achieving integration and efficiency in logistics networks (Power et al., 2003).

Collaboration within the HSC can work in a number of ways. The importance of having close supplier relations is widely acknowledged and collaborative bidding can help to lower purchase costs (Soin, 2004). Aid agencies collaborate with commercial logistics
organisations in order to improve the effectiveness of their distribution networks. For example, the WFP has been using such an arrangement to redesign both the use of its warehouses to increase capacity and their distribution network (Cottrill, 2004). The American Red Cross uses commercial logistics contractors in many crisis situations (Gooley, 1999). Where collaboration occurs, the Fritz Institute (2005) indicates that the outcome is generally positive. Collaboration can occur with a variety of organisations including local authorities, the military, the private sector, and other relief agencies.

In the HSC, collaboration refers to a process in which two or more independent actors come together to formulate and implement their joint activities (Simatupang and Sridharan, 2002). Collaboration helps actors negotiate and agree on common goals and resource sharing, thereby allowing actors to align their actions with their desired outcomes (Gulati et al., 2012). HSC literature also shows the presence of a low level of collaboration by indicating the benefits of collaboration among the HSC actors (Kapucu et al., 2010; Kovacs and Spens, 2011; Maon et al., 2009; Pettit and Beresford, 2009; Van Wassenhove, 2006).

HSC collaboration literature highlights several aspects of collaboration. For example, Battini (2007) and Moore et al. (2003) show the importance of inter-organisational relationships as fundamental to HSC collaboration. Ngamassi et al. (2010) show that organisational motivation is important to promote collaboration among HSC actors. Waugh and Streib (2006) indicate that leadership support is a necessary factor for collaboration. Jahre and Jenson (2010) propose a cluster system as a way for HSC actors to collaborate. The central idea of the cluster concept is to create several clusters. Each cluster focuses on a specific function like water and sanitation, health, shelter, or nutrition (Jahre and Jenson, 2008).

Gazley (2010, p. 53) suggests that collaboration between actors in long-term aid can yield many benefits such as “economic efficiencies, greater service quality, organizational learning, access to new skills, diffusion of risk, improved public accountability, the ability to buffer external uncertainties, and conflict avoidance.” Collaboration among actors in the HSC can reduce the uncertainties that arise due to fluctuations in the availability of supplies, conditions of supply networks, and the availability of human resources to provide aid (Thevenaz and Resodihardjo, 2010).

HSC collaboration can also benefit actors by providing a review of best practices used by peer organisations that promote peer learning and eventually result in improved organizational capabilities (Fujimoto 2001).

In the humanitarian setting, humanitarian organisations (HOs) may simultaneously compete and collaborate with one another. HOs compete over donors’ funds, aid material, media attention and local networks (Altay and Labonte, 2014). This competition can discourage actors from pursuing collaborative efforts if they have their own funding resources or if there are no incentives for them to collaborate with other actors (Hicks and Pappas 2006). Few studies highlight failures in HSC collaboration. The existing literature in this area suggests that failure can be attributed to (a) the organisational governance and leadership (Farazmand, 2007), (b) lack of donors’ coordination with the humanitarian organisation (Stolk, 2006), or (c) NGOs’ failure to collaborate in the final steps of a project (Cordoba, 2010).

The relevance of collaboration in humanitarian supply chains as well as the challenges of designing and employing collaborative initiatives has prompted a considerable number of studies from the perspectives of scholars and practitioners. Studies also
emphasize the current low levels of collaboration among HOs and stress the importance of collaboration in improving the level of humanitarian relief services (Kapucu et al., 2010; Kovács and Spens, 2011; Maon et al., 2009; Perry, 2007; Pettit and Beresford, 2009; Van Wassenhove, 2006). Some studies consider one or more aspects of collaboration, such as motivation (Ngamassi et al., 2010), the structure of inter-organizational relations (Battini, 2007; Moore et al., 2003; Stephenson and Schnitzer, 2006), leadership (Waugh and Streib, 2006), permanent and temporary networks (Jahre et al., 2009), and swift trust (Tatham and Kovác, 2010).

Some studies have also investigated collaboration between the actors in the HSC from a performance evaluation or performance of collaborative initiatives (Balcik et al., 2010; Jahre and Jensen, 2010; Lee and Low, 2006; Perry, 2007; Simo, 2009; Simo and Bies, 2007). In addition, few studies provide an account of the drivers or impediments related to collaboration and proposed solutions for dealing with them (Balcik et al., 2010; Cooley and Ron, 2002; McLachlin and Larson, 2011; Thévenaz and Resodihardjo, 2010).

Public-private collaboration is significant for developing and maintaining supply chain solutions along the entire course of a humanitarian response. It “involve[s] complex interactions among people, materials, and money” (Altay and Green, 2006, p. 477). Cornall (2005) argues that public private collaboration could be a way to provide aid. According to Steigenberger (2016), public-private collaboration is a general approach used to reduce budgets and increase efficiency, but most importantly to reduce the number of public agencies, actors, and other organizations that are often involved in response operations. Ergun et al. (2014) argue that potential economies of scale also constitute grounds for collaboration across all levels of public authority, as they offer the basis for creating efficiency, adaptability, and profitability.

Public-private collaboration has been widely viewed as a business strategy wherein collaborative partners work together toward common goals with mutual benefits (Min and Mentzer, 2004). Collaborative developments include joint decision making (Stank et al., 2001), joint problem solving (Spekman et al., 1997), and the extension of information sharing among partners (Sabath and Fontanella, 2002).

Collaboration in the humanitarian setting can sometimes be found between international non-governmental organizations and local non-governmental organizations. For example, international and local non-governmental organizations collaborate to enhance their organizational capacities, alongside the effectiveness and efficiency of their relief operations (Snively and Tracy, 2000; INTRAC, 2001; UK Charities Commission, 2009). Governments including military collaborate when they lack the ability to deliver aid individually (Collier, 2007, 2010). However, some scholars argue that challenges such as lack of mutuality, poor communication, and resource uncertainty arise between such actors (Kovacs and Spens, 2010; Balcik et al., 2010).

Recently, collaboration between international and local NGOs has received great attention because international NGOs have access to global resources but lack knowledge and experience about newly affected regions (Crowther, 2001; Svoboda and Pantuliano, 2015). Local NGOs, on the other hand, possess the relevant knowledge but lack resources (Libal and Harding, 2011; Charles et al., 2014; Svoboda and Pantuliano, 2015; ICRC, 2017). Thus, collaboration within and between organizations is argued to improve efficiency and effectiveness in resource allocation, creating benefits that cannot be achieved by individual organizations (Adem et al., 2018).
2.3.1 Drivers of HSC Collaboration

This section examines the drivers of HSC collaboration. Beck and Plowman (2014) show that creating super-ordinate goals, deploying portable structures, and experimenting with different ideas can enable collaboration among actors. Super-ordinate goals are goals shared by several organisations. The list of shared goals must be highly visible to all actors. The very visibility of these goals helps actors get motivated and work together. McEntire (2002) shows that humanitarian operations are carried out smoothly when there is political support for the necessary emergency management, preparedness measures, technology, networking, and collaborative relationships.

Sanchez and Medina-Borja (2008) indicate that collaborations benefit from clear objectives and boundaries and from partnering with an organisation that is well respected and well known in the community. Additionally, having a valued, recognized local partner and upper management that shows interest and commitment leads to better collaboration among actors. Nolte and Boenigk (2013) suggest collaboration between HSC actors benefits from the openness to collaborate, the experience gained during past collaborations, the mutuality in the relationship, and task clarity. Mutual trust between HSC actors enhances collaboration (Murdie, 2014).

Information sharing between actors plays a central role throughout the humanitarian aid process because the partners’ propensity to exchange information and the cluster's information processing roles influence information diffusion among the collaborating actors (Altay and Pal, 2014). Information exchange between actors in humanitarian aid is composed of data collection, information processing, and information sharing. These activities directly influence resource flows (Day et al., 2009) and collaboration (Schulz and Blecken, 2010). When information is dispersed across responding organizations, relief capacities are strengthened as a result of collaboration (Thevenaz and Resodihardjo, 2010). McLachlin and Larson (2011) found that compatibility between organisational cultures leads to compatibility of management philosophies and mutuality between actors, aiding collaboration.

2.3.2 Barriers of HSC Collaboration

This section looks into barriers to HSC collaboration. Strategic barriers include a lack of: top management commitment, understanding in the supply chain, collaborative planning, and clear policies, experts, or personnel available within humanitarian organisations. These strategic barriers could be re-grouped under the leadership dimension of organisational culture (as per Cameron and Quinn, 2006). The leadership dimension takes a strategic place in organisational culture and has an influence on several aspects of the organisation, including on policies, procedures, employees, etc.

Technological barriers to HSC collaboration include technological patents that restrict collaboration at the operational level (Linux, 2012). For example, Apple has acquired a huge number of small-sized suppliers that develop mobile applications. Such acquisitions effectively remove the concept of collaboration (Apple Acquisition, 2018). Technological barriers can dampen collaborative relationships in humanitarian settings. For example, poor information technology infrastructure results in poor information sharing between actors (Balcik et al., 2010; Schulz and Blecken, 2010).

Individual barriers to HSC collaboration are mainly due to humanitarian personnel’s poor skills. These barriers include lack of personnel training, education, or motivation;
resistance to change; resistance to adopting new skills; and poor verbal and written communication skills, etc., (Thevenaz and Resodihardjo, 2010; Overstreet et al., 2011).

Organisational barriers are caused by poor organisational structures for knowledge sharing, poor employee retention, and a lack of knowledge management systems (Balcik et al., 2010).

In summary, the chapter provides in depth literature about the buyer-supplier relationship, supply chain collaboration, collaboration in the HSC, and finally drivers and barriers to HSC collaboration. This review helps to understand what research informs us about a major concept used in this thesis. This helps build the theoretical and managerial implications of the phenomenon of collaboration in long-term aid.
3 CONTEXT OF THE LONG-TERM AID

This section provides contextual information for this thesis and establishing its connection to existing literature. This thesis examines long-term aid from a humanitarian perspective, particularly focusing on the intersections between HSC collaboration and organisational culture. HSC can include activities ranging from disaster management to long-term aid to health care operations in emergencies and public sector management (Tabaklar et al., 2015). Hence, the context of the thesis is well within the HSC’s ambit. For instance, after the destructive Haiti earthquake in 2010, the country needed long-term aid to address malnutrition in children (UNICEF, 2017). Long-term aid also involves developmental aid. For instance, the Food and Agriculture Organization (FAO) provides assistance to a number of countries in West Africa including Ghana to launch a National Aquaculture Development Plan (FAO, 2014). The thesis reviews various typologies of long-term humanitarian aid.

Humanitarian literature often refers to a typology that makes distinctions between slow and rapid onset disasters (Van Wassenhove, 2006). This typology provides four types of disasters based on whether the disaster had a slow onset or rapid onset and whether the disaster was natural or man-made. This typology does not capture the full context and complexity of disasters or of the collaboration required for handling these disasters (Hermetie et al., 2014). Hermetie et al. (2014) propose a new typology that captures the geographic scope of the disaster (localised or diffused) and the time available for action (emergency or protracted). This typology helps to capture the logistical scope and scale of the situation, but fails to describe the collaboration required. Third, Kovacs and Spens (2007) distinguish between three phases of disaster relief operations: preparation, immediate response, and reconstruction. However, this typology is based on the temporal dimensions, resources, and skills required to handle each phase of disaster management. Kovacs and Spens (2007) indicate that the reconstruction phase extends to a period of three months. However, long-term aid activities are beyond the scope of the reconstruction phase which extends to an average of seven years (as shown in table 2). Hence, this typology also falls short of distinguishing between short-term and long-term aid.

Since none of the three typologies discussed above entirely encompass all of the factors covered by this thesis, a new typology that explains the characteristics of long-term aid is presented below. Although the list of long-term aid characteristics shown in Table 2 are not exhaustive, the list provides the reader with a clear perspective about the elements of long-term aid that this thesis addresses.

First, the principle objective of long-term aid is to sustain and improve beneficiaries’ lives (Bennett and Ebrets, 2015). For example, UNICEF collaborated with local NGOs, undertaking eight years of long-term aid to address the cholera epidemic in Cameroon (UNICEF, 2010). Short-term relief can develop into long-term developmental aid (Otto and Weingärtner, 2013).

Second, long-term aid is characterised by long periods of aid. Long-term aid extends to an average of seven years (Relief Web, 2015).

Third, long-term aid is characterised by developmental activities that focus on community self-sufficiency. These activities include establishing permanent and reliable transportation, healthcare, housing, and food (Bryman et al., 2000). Examples include UNICEF’s rebuilding projects after the Nepal earthquake (UNICEF, 2017), an NGO’s work to improve the livelihoods of salt farmers in Gujarat, India (SEWA, 2017), or
drought relief work in Sudan (Reliefweb, 2015). Long-term aid activities can include restoration of infrastructure, which helps build community self-sufficiency by establishing permanent and reliable transportation, healthcare, housing, and food (Beamon and Balcik, 2008).

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Long-term aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Life-sustaining and life improving (Bennett and Ebrits, 2015), to address the long-term needs (Otto and Weingartner, 2013)</td>
</tr>
<tr>
<td>Period</td>
<td>Average 7 years (Reliefweb, 2015)</td>
</tr>
<tr>
<td>Illustrative activities</td>
<td>Restoration of infrastructure, focusing on community self-sufficiency and sustainability, establishing permanent and reliable transportation, healthcare, housing, and food (Beamon and Balcik, 2008)</td>
</tr>
<tr>
<td>Goals</td>
<td>Achieving sustainable social and economic development (Khang and Moe, 2008; Ahsan and Gunawan, 2010)</td>
</tr>
<tr>
<td>Alignment of objectives</td>
<td>Needs to be aligned with the local culture of the community (Abbasi and Al-Mharmah, 2000)</td>
</tr>
<tr>
<td>Effectiveness of aid</td>
<td>Combination of poverty, a good policy environment, and better institutions (Burnside and Dollar, 2004; Collier and Dollar, 2001)</td>
</tr>
</tbody>
</table>

Table 2 Long-term aid

The concept of long-term aid dates to the colonial era. Modern development originated in the context of Post-World War II and the Cold War. In 1948, the United States launched the European Recovery Program, the first large-scale development aid program. It was concerned with strengthening ties to West European states to contain Soviet influence. In long-term aid, the aid program agreed to provide military advice and equipment to free nations which would cooperate in maintaining peace and security. Long-term aid was made available for the improvement and growth of underdeveloped areas. The aid focused on improving food supply, providing health care, and relieving the people’s general suffering (Truman, 1949).

Long-term developmental aid is understood as aid expended in a manner that can reasonably be anticipated to promote development (understood as improvements in human well-being, whether achieved through economic growth or other means). Geopolitical aid is defined as all other kinds of aid. Developmental aid is in practice presumed generally to be undergirded by a developmental motive and geopolitical aid is in practice presumed generally to be undergirded by other motives (Reddy and Minoiu, 2006).
Humanitarian and long-term aid sectors are often viewed as ‘two different worlds’, characterised by very different approaches, language, and priorities (Bennett, 2015; Mowjee and Randel, 2010; Levine et al., 2013). Some of these differences can be linked to the very ethos of humanitarian and long-term development action: as Macrae and Harmer (2004, p. 3–4) assert in their review of the relief–to-development debate, long-term aid was designed to support national sovereignty. Philosophical and political differences in humanitarian and long-term aid approaches (such as those related to engagement with state actors, timelines, and security) manifest in and are compounded by operational ones (Victoria et al., 2017).

For example, long-term aid actors are accused of being ill-prepared to shift their programming in response to a humanitarian emergency (Derderian and Schockaert, 2010), and humanitarian actors are commonly criticised, even by themselves, for the short-term attitudes and approaches that obstruct more integrated or better-connected humanitarian and development interventions (MSF, 2013).

The literature highlights that some agencies, such as the International Committee of the Red Cross (ICRC), are starting to apply more integrated approaches to their programming (ICRC, 2016). The literature also suggests some key programmatic areas where greater humanitarian and development collaboration is both possible and desirable. These include security of tenure arrangements for displaced people (NRC, 2011), education in emergencies, and communication for development initiatives in schools (GCER, 2016). The findings of article B on humanitarian institutional logics (HIL) clearly define the phenomenon of the central actor influencing its suppliers through logics that are driven by values, assumptions, and beliefs. The collaborative behaviour depends on the phase of the disaster relief, connecting organisations irrespective of the differences in organisational cultures (Prasanna and Haavisto, 2018).

Organisational and institutional structures also hamper more integrated approaches to engagement in protracted crises. Some donors are already working to address this problem: for example, the Danish Ministry of Foreign Affairs merged its humanitarian and long-term aid policy departments in 2008–2009 in an effort to promote greater cross-working and more integrated approaches (Mowjee and Randel, 2010). Mowjee et al. (2015) suggest that the modus operandi for donors in crisis-affected countries should always be mixed humanitarian and development teams with the right incentives and senior leaders with joint responsibility.

Short-term aid represents a response to a serious and unexpected natural or man-made emergency that demands an immediate reaction to reduce suffering and loss of life in the short term. Aid workers must be skilled at rapid assessment and treatment under difficult environmental conditions at times compounded by violence and/or lack of adequate essential resources. Planning and actions are designed to produce rapid results through immediate treatment and life-saving activities provided by medical care, potable water, shelter, food, clothing, and security. In sum, short-term aid is fast-paced, reactive, and focused on meeting immediate basic needs and preventing morbidity and mortality (Kopinac, 2013).

Capacity building capacity is a key component of development and can be defined as the transfer of knowledge and resources through mentoring, workshops, trainings, and infrastructure development, etc. Sustainability is the ultimate goal of all development aid (Table 3). Deep cultural immersion and collaboration with the host government and other stakeholders by aid workers is necessary to identify and prioritize needs and set goals that will maintain/improve health and wellbeing. Hence activities are targeted
toward enabling positive outcomes for the target population through the provision of basic necessities, advice, and mentoring with regard to health, education, equity, governance, infrastructure improvement, and security (Kopinac, 2013).

<table>
<thead>
<tr>
<th>Short-term aid</th>
<th>Long-term aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast pace</td>
<td>Slow pace</td>
</tr>
<tr>
<td>Emergency relief</td>
<td>Rehabilitation / development</td>
</tr>
<tr>
<td>Causal</td>
<td>Reactive / Proactive</td>
</tr>
<tr>
<td>Actions are focused on immediate basic needs</td>
<td>Actions are focused on root causes</td>
</tr>
<tr>
<td>High media attention</td>
<td>Low media attention</td>
</tr>
<tr>
<td>Majority of aid workers are non-nationals</td>
<td>Majority of aid workers are nationals</td>
</tr>
</tbody>
</table>

Table 3 Comparison between short-term aid and long-term aid (adapted from Kopinac, 2013)
4 ORGANISATIONAL CULTURE AND INSTITUTIONAL LOGICS

In this section, the theoretical background regarding the buyer supplier relationship, organisational culture, and institutional logics is discussed. This section explains the theoretical linkages between organisational culture and institutional logics.

4.1 Organisational Culture

Organisational culture has been studied by several researchers since the 1980s, leading to a plethora of definitions and understandings (Hofstede, 1998; Chatman and Jehn, 1994; Quinn, 1988; Schein, 1992). This section reviews the relevant literature explaining the various conceptualisations of organisational culture and introduces the three types of methodological approaches used in organisational culture in the extant literature.

Literature on organisational culture describes five ways to conceptualise organisational culture: as values, stories, frames, toolkits, or categories (Lamont and Small, 2008; Small et al., 2010). Table 4 (shown in this section) gives an overview of the five kinds of conceptualisation.

First, the understanding of organisational culture conceptualised as values centres around “what we prefer, hold dear, or desire” (Giorgi et al., 2015, p.5). This conceptualization emphasizes constraint and predictability, a ‘web of meanings’ or ‘software of the organisation or nation’, stability, and scriptedness as a source of organisational distinction or competitive advantage. Socialisation, leadership, and rituals are seen as mechanisms for perpetuating consistent cultural values (Vaisey, 2009; Rohan, 2000; Cameron and Quinn, 1999; Barney, 1986; Schein, 1985).

Second, organisational culture conceptualised as stories defines organisational culture as “verbal or written narratives with causally linked narratives, sequences of events that have a beginning, middle, and end” (Giorgi et al., 2015, p. 5). The dominant focus is on the flexible transmission of ideas and meanings as a mechanism for constructing identity and conveying a vision. The focus is also on dynamism as a key to influencing others to achieve favourable outcomes, which are embedded in the macro-cultural setting and influenced by proximate factors and audience (Creed et al., 2014; Anteby and Molnar, 2012; Vaara and Tienari, 2011; Lounsbury and Glynn, 2001; Suddaby and Greenwood, 2005).

The third conceptualization of organisational culture defines it as “filters or brackets that delimit what we pay attention to” (Giorgi et al., 2015, p. 6). This conceptualization emphasizes collective negotiation and the understanding of a contextual situation. The contextual situation is the central event for defining meaning and actions and provides meaning that aligns with existing cultural codes (Smets et al., 2012; Rao and Giorgi, 2006; Lounsbury et al., 2003; McAdam 1994).

Fourth, organisational culture conceptualised as toolkits defines organisational culture as “sets or ‘grab bags’ of stories, frames, categories, rituals, and practices that actors draw upon to make meaning or take action” (Giorgi et al., 2015, p. 6). This category of organisational culture predominantly focuses on the flexibility of culture’s uses. Moreover, this conceptualization comes with a stockpile of ideas and practices that can be mixed and matched towards the required outcomes. According to this understanding, organisations have the ability to put together the toolkit’s bits and pieces to create meaning in a practical manner. This understanding also shows how organisational
Finally, organisational culture conceptualised as categories defines organisational culture as “social constructions or classifications that define and structure the conceptual distinctions between objects, people, and practices” (Giorgi et al., 2015, p. 7). In this understanding of organisational culture, the dominant focus centres on locating an entity within a broad system of meaning to delineate both similarities and dissimilarities with other category members. Categories enable judgement of value, legitimacy, and normalcy through simplification of cognitive inputs. This conceptualisation also focuses on sense-making as a mechanism for deeper understanding and change (Wry et al., 2014; Navis and Glynn, 2011; Rao et al., 2005; Lounsbury and Rao, 2004). Table 4 was developed based on Giorgi et al.’s (2015) work on organisational culture.

<table>
<thead>
<tr>
<th>Organisational cultural conceptualisation</th>
<th>Definition</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values</td>
<td>Statements of how things ought to be, what we hold dear</td>
<td>Vaisey, 2009; Rohan, 2000; Cameron and Quinn, 1999, Barney, 1986; Schein, 1985</td>
</tr>
<tr>
<td>Stories</td>
<td>Verbal or written narratives with causally linked narratives, sequences of events that have a beginning, middle, and end</td>
<td>Creed et al., 2014; Anteby and Molnar, 2012; Vaara and Tienari, 2011; Lounsbury and Glynn, 2001; Suddaby and Greenwood, 2005</td>
</tr>
<tr>
<td>Frames</td>
<td>Filters or brackets that delimit what we pay attention to</td>
<td>Smets et al., 2012; Rao and Giorgi, 2006; Lounsbury et al., 2003; McAdam, 1994</td>
</tr>
<tr>
<td>Toolkits</td>
<td>Sets or ‘grab bags’ of stories, frames, categories, rituals, and practices that actors draw upon to make meaning or take action</td>
<td>Seidel and O’Mahony, 2014; McPherson and Sauder, 2013; Rindova et al., 2011; Weber et al., 2008</td>
</tr>
<tr>
<td>Categories</td>
<td>Social constructions or classifications that define and structure the conceptual distinctions between objects, people, and practices</td>
<td>Wry et al., 2014; Navis and Glynn, 2011; Rao et al., 2005; Lounsbury and Rao, 2004</td>
</tr>
</tbody>
</table>

Table 4 Organisational culture conceptualisations
Research based on organisational culture can be grouped according to three approaches (Schein, 1992). In the survey-based approach, researchers quantify culture as they developed the definition of culture. The works of Hofstede (1980), Kilmann (1984), and Cameron and Quinn (2006) reflect this approach. In the initial phase, culture is conceptualized and later measured using factor analysis.

In the analytical descriptive approach, researchers define and measure organisational culture by breaking down definitions into analytically measurable and empirically traceable components (Harris and Sutton, 1986; Schall, 1983; Trice and Beyer, 1984). While this approach is practical, on a conceptual level it leads to assumptions that may not be valid from other points of view.

Finally, the ethnographical, rooted in anthropology and sociology, assumes that there are deeper structures that cannot be unravelled or understood without extensive observation (Geertz, 1973). This approach focuses more on the management of emotions in an organisational context and gives little importance to defining or conceptualizing culture (Barley, 1983; Van Maanen and Kunda, 1989). A core assumption of this approach is that culture can be deciphered only when it is lived and that culture does not exist conceptually but only in observed behaviour manifested by the members of that culture.

For the purpose of this study, Schein’s (1992) definition of organizational culture will be used: “a pattern of shared basic assumptions, invented, discovered, or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid, and therefore is to be taught to new members of the group as the correct way to perceive, think, feel in relation to those problems” (pp. 247). This definition is relevant to this study since buyer and supplier collaborations in the humanitarian setting dynamically change as the needs of the beneficiaries change and require different types of collaborative outcomes at different stages of disaster relief.

Schein (1992) shows that organisational culture can be divided into three levels: artefacts, values, and underlying assumptions. Artefacts include visible organisational structures and processes. Artefacts are seen at the surface level when someone encounters an unfamiliar culture. For example, if an organisation has an “employee-first” organisational culture, then artefacts (visual boards) will emphasize the culture of “employee-first”. Values include the strategic goals and philosophies (espoused justification). Values are more latent compared to artefacts and represent what ‘ought to be’. Unlike artefacts, visual examples cannot be presented as values. Underlying assumptions include unconscious views taken for granted, including beliefs, habits of perception, thoughts, and feelings. Assumptions are extremely latent and not measurable.

Schein’s (1992) and Cameron and Quinn’s (2006) works on organisational culture are based on the values model of organisational culture shown in Table 4. Cameron and Quinn (2006) show the dimensions in which organisational cultural values and beliefs manifest in an organisation. This thesis also uses work by Cameron and Quinn (2006) on organisational culture. Based on the competing values framework, six dimensions are identified as a result of existing organisational culture: dominant characteristics of the firm, organisational leadership, management of employees, organisational glue, strategic emphasis, and criteria for success.
Organisational culture is composed of values, beliefs, and assumptions (see definition above) that manifest in an organisation through these six dimensions. For example, the values of the organisation can be seen in the leadership style of an organisation or through the organisation’s vision and mission statement. Hence the work of Schein (1992) and Cameron and Quinn (2006) is naturally tied together, offering a theoretical foundation for this study.

Other concepts related to organisational culture include organisational routines, corporate culture, and organisational climate. Organisational routine is defined as a guideline or pattern of regular and predictable activity, formed by a series of coordinated actions that are put into practice before a specific problem or stimulus (Nelson and Winter, 1982). This is also arguably congruent with organisational culture (Claver et al., 1998). Feldman states that “routines are repeated patterns of behaviour that are bound by rules and customs and that do not change very much from one iteration to another” (2000). Routines are the manifestations of organisational culture (Hinnings, 2012). Routines can be sources of inertia and inflexibility or alternatively sources of flexibility and change (Feldman and Pentland, 2003).

Corporate culture “is a pattern of beliefs and expectations shared by the organisation's members. These beliefs and expectations produce norms that powerfully shape the behaviour of individuals and groups in the organisation” (Schwartz and Davis, 1981). Corporate culture can also act as a behavioural control and as a way to establish the norms and values of the organisation in place. It can also be a means of control for headquarters over their subsidiaries (Baliga and Jaeger, 1984; Doz and Prahalad, 1984; Schneider, 1988).

Organisational climate indicates the working conditions expected by the employees versus the actual working conditions. It helps inform employee motivation, organisational goals, compensation, and advancement opportunities (Schwartz and Davis, 1981; Barney, 1991; Schein, 2010). Organisational climate is formed by employee observations about how the organisation acts on a daily basis and its various objectives. The climate is sometimes defined as “the feel of an organisation” (Schneider et al. 1996, p. 8) or “the ‘feeling in the air’ one gets from walking around a company...” (Schneider et al., 1994, p. 18). Climate is assumed to be a result of organisational culture. In this way, culture comes from employees’ understandings of cultural elements such as values, beliefs, and assumptions “that produce the climates they experience” (Schneider et al. 1994, p. 19). Climate also differs from organisational culture to the extent that culture exists at a deeper level of people's psychology (Schneider et al., 1996).

In summary, organisational culture has been divided into several different descriptive dimensions and through various approaches. For this thesis, organisational culture will be conceptualised as values (Giorgi et al., 2015) as understood by Schein (1991) and Cameron and Quinn (2006). The roots of organisational culture will be understood as a set of values, assumptions, norms, and beliefs which are in sync with institutional logics.

### 4.1.1 Organisational Culture in the Supply Chain Literature

The literature in the intersection of organisational culture and supply chain management can be grouped into several streams. The first stream of literature discusses the concept of quality management. The research focuses on the Total Quality Management (TQM)
of a firm and its implementation, follow up, and advantages, etc. (Baird et al., 2011; Corbett and Rastrick, 2000; Yong and Pheng, 2008; Bortolotti et al., 2015).

The second stream of literature relates to how an organisation’s human resources can be grouped. Topics within this body of literature include the influence of organisational culture on employee behaviour, motivation, knowledge transfer, employment contracts, teamwork, succession planning, employee productivity, and leadership (Clarke, 2003; Yong and Pheng, 2008; Lucas, 2010; Kagaari, 2011).

The third stream of literature in this area focuses on the performance of firms as it relates to organisational culture (Baird et al., 2011; Bortolotti et al., 2015; Skerlavaj et al., 2011; Kagaari, 2011; Yunus and Tadisina, 2016). Structural equation modelling and partial least squares are used in this body of research to analyse the relationships between organisational culture and other constructs. These studies show that organisational culture can be measured quantitatively using structural equation modelling (Nahm et al., 2004; Braunscheidel et al., 2010; Skerlavaj et al., 2011).

The fourth stream in this body of literature overlaps with the other streams and focuses on the use of the competing values framework proposed by Cameron and Quinn (2006). This framework identifies the type of organisational culture based on competing values and divides the total range of organisational culture into six dimensions: dominant characteristics, organisational leadership, management of employees, organisational glue, strategic emphasis, and criteria for success. These dimensions identify an organisation’s culture as one of the four types: clan, adhocracy, hierarchy, and market. This stream of literature utilizes this framework to understand supply chain integration, quality management, contingencies, product development, collaboration, organisational performance, and knowledge transfer within a firm (Braunscheidel et al., 2010; Yong and Pheng, 2008; Cao et al., 2015; Lukas et al., 1996). This stream of research is important to this thesis in supporting the linkages between the constructs.

In the fifth stream of literature in this area, organisational culture is studied in relation to broader aspects of supply chains. This area of research specifically focuses on supply chain disruption and humanitarian aid, buyer-supplier relationships, alliances, and drivers of supply chain integration (Dowty and Wallace, 2010; Cadden et al., 2013; Sambasivam and Nget, 2010; Kattman, 2014).

4.1.2 Research on the Intersection of HSC Collaboration and Organisational Culture

This section presents the literature relating to the intersection of HSC collaboration and organisational culture. In a humanitarian context, there is little research related to organisational culture (Prasanna and Haavisto, 2018); however, Walkup (1997) describes the ways in which the organisational culture of humanitarian organisations can impede the learning and innovation of the organisation. Tatham and Kovacs (2010) demonstrate the importance of swift trust between actors in the HSC. Stephenson (2005) indicates that humanitarian organisations need to rethink their organisational cultures, which actively encourage improved inter-organisational trust leading to effective cooperation. Dibble and Gibson (2013) found that organisations that successfully collaborate with other actors in an HSC are characterised by an organisational culture that aids internal adjustment to external challenges.
Bharosa et al. (2010) provide a literature review, field level observation, and surveys that find that collaboration is enabled by incentives for information sharing, distribution of benefits, and understanding the partner’s organisational culture and associated work processes. McLachlin and Larson (2011) show that compatibility between organisational cultures facilitates collaboration between HSC actors through a sense of mutuality and symmetry. For example, in their study, they found that the compatibility of organisational cultures between international and local NGOs enhances mutual responsibility and sharing of long-term aid activities.

Akhtar et al. (2012) show that organisational culture can act as a barrier when, for example, cultural conflicts lead to delays in decision-making and delay overall humanitarian aid. Kabra and Ramesh (2015) demonstrate several different types of organisational level barriers, such as a lack of organisational structure to create and share knowledge and a lack of knowledge management within an organisation. These barriers hinder collaboration with other actors. Schulz and Blecken (2010) indicate that organisational cultural differences between actors can manifest in mutual distrust that leads to lack of transparency, poor collaboration between actors, and delays to relief aid.

Research at the intersection of organisational culture and HSC collaboration is rare (Prasanna and Haavisto, 2018). However, existing research supports the argument that similar organisational cultures between actors can help collaboration in humanitarian supply chains. This argument echoes the findings in the commercial supply chain literature that similar organisational cultures facilitate collaboration (Cadden et al., 2015).

In summary, this section presents an overview of the literature on supply chain collaboration, humanitarian supply chain collaboration, procurement practices in humanitarian organisations, drivers and barriers to HSC collaboration, literature on the intersection of organisational culture and supply chain management, and literature on the intersection of organisational culture and HSC collaboration. The next section provides theoretical background on organisational culture and institutional logics.

4.2 Institutional Logics

For this thesis, institutional logics serve as the theoretical lens for understanding collaboration. This section explains institutional logics from a theoretical perspective.

Institutional logics expand the institutional theories first established by Meyer and Rowan’s (1977) work, which delineates that organisations are faced with socio-cultural and commercial expectations that are often not aligned. DiMaggio and Powell (1983) build on this work and provide an analysis of the mechanisms of diffusion of socio-cultural prescriptions to set the stage for institutional theory. Friedland and Alford’s work (1991) on institutional logics as a composite of practices and structures provides the space for institutional logics as a theoretical lens.

Institutional logics can be traced back to Meyer and Rowan’s (1977) observation that organisations face expectations from two dimensions: financial and socio-cultural. These are fundamentally the result of the formal structures present in the institutional environment. Meyer and Rowan (1977, p. 341) claim that “institutionalization involves the processes by which social processes, obligations, or actualities come to take on a rule-like status in social thought and action”.
According to Friedland and Alford (1991), logics are hierarchical in form. Although various organizational fields and industries could have their own logics, these logics are broadly embedded within the “central institutions of the contemporary capitalist West” (Friedland and Alford, 1991, p. 232). Moreover, Thornton (2004, p. 12) indicates that “Western society is comprised of multiple institutional orders or societal sectors, each of which has a central logic—both material practices and symbols that comprise its ongoing principles and that are available to individuals and organizations to elaborate”. According to Thornton (2004, p. 12) the key institutional orders are “the market, the corporation, the professions, the family, the religions, and the state”.

DiMaggio and Powell (1983) developed arguments that were foundations for institutional theory: what makes organisations so similar? They show that as a set of organisations emerge as an industry, actors make rational choices to change themselves in ways that make the organisations become increasingly similar. This means that the actors within the newly emerged industry try to change their organisational structure so that every organisation in that industry has similar practices. This similarity between organisations is achieved through the mechanisms that are coercive, mimetic, and normative (DiMaggio and Powell, 1983). As explained by DiMaggio and Powell (1983), each of the three mechanisms has its own antecedents: coercive isomorphism results from political influence and legitimacy needs, mimetic isomorphism results as a response to handling uncertainty, and normative isomorphism results from professionalization.

However, institutional theorists offer a counter-explanation for isomorphism. They view society as an inter-institutional system that permits sources of heterogeneity of logics and that is made up of contradictions between the logics of a variety of institutional orders (Meyer et al., 1997). Instead of showcasing homogeneity and isomorphism, the institutional logics approach argues that societal context is influenced by a variety of logics which could be contradicting (Scott et al., 2000). Such contradicting logics within an organisation lead to organisational complexity (Giorgi et al., 2011). A variety of institutional logics typically originates within societal sectors such as the market, the state, family, religion, corporations, and professions, which have shared rules and assumptions (Thronton et al., 2005). This traditional view of institutional logics has grown with the development of the notion of institutional complexity (Greenwood et al., 2011). The principle idea of institutional complexity is that “organisations operate in multiple institutional spheres, each of which provides different logics that play out in the organisation as persistent and deep-rooted tensions” (Jarzabkowski et al., 2009, p. 285).

A basic assumption of institutional logics is that “the interests, identities, values, and assumptions of individuals and organizations are embedded within prevailing institutional logics” (Thronton and Ocasio, 2008, p. 100). In this argument, institutional logics explain that the decisions made in an organisation and the outcomes of the decision are the result of the interaction between the decision-maker in the organisation and the prevailing institutional structure (Jackall, 1988; Friedland and Alford, 1991).

Another key assumption of the institutional logics perspective is that each of the institutional orders in society has both material and cultural characteristics (Friedland and Alford, 1991). For example, markets, not often considered part of the cultural sphere, are directly shaped by culture and social structure, including networks of social relationships, structures of power, and status (Granovetter, 1985). Rather than privileging material or cultural explanations of institutions, the institutional logics perspective recognizes that institutions develop and change because of the interplay between both of these forces (Thronton and Ocasio, 2008). Further, institutional logics
are versatile on a variety of levels. This flexibility allows for a wide variety of mechanisms to be emphasised in research and theoretical development (Kuhn, 1962).

Institutional theory also assumes the notion of historical contingency. A few studies reveal that findings that are valid in one historical time may not be valid in others (Thornton, 2004). For example, in modern society, emphasis lies on the corporate and business world, but in earlier societies, family and religion were prioritized (Scott et al., 2000; Zajac and Westphal, 2004).

Institutional logics provide the organizing principles for an organisational field (Friedland and Alford, 1991). They are the basis of the assumed rules that guide the behaviour of field-level actors (Reay and Hinings, 2009) and they “refer to the belief systems and related practices that predominate in an organisational field” (Scott 2001, pp. 139). A community of actors constitutes an organisational field jointly held by common values and beliefs (Scott, 2008). Field-level logics influence behaviour on the organisational level. Greenwood et al. (2002) also note that institutional change occurs as the movement from one dominant logic to another.

When the fundamental values and assumptions of the logics complement each other, the interaction between organisations is smooth (Beshrov and Smith, 2014). On the other hand when organisations employ logics with clashing values and assumptions, there is always a contest as to which one of the logics should dominate (Cloutier and Langley, 2013). It is possible for more than one institutional logics to exist, but in that context, there is a dominant institutional logic and one or more competing institutional logics (Reay and Hinings, 2009).

Institutional logics exert influence on the collective identities of an organisation, profession, industry, or population (Tajfel and Turner, 1979; March and Olsen, 1989). Collective identities arise out of social interactions and communications between members of a social group (White, 1992). Since members are a part of collective identities, it is very likely that they follow the norms and prescriptions (Kelman, 2006) of the institutional logic. Organisational forms and managerial practices are manifestations of, and legitimated by, institutional logics (Greenwood et al., 2010).

Institutional logics are necessary as they help explain the connections that create a sense of common purpose and unity within a field. Organisational fields tend to develop a dominant logic of their own although only a few competing institutional logics can exist at the same time (Thornton and Ocasio, 1999). Institutional logics also influence the practices that an organisation carries out (Lounsbury, 2007). Identification of actors with the respective institutional logics occurs directly, as identification with the collective is equivalent to identification with the institutional logic prevailing in the collective, whether they are organisational forms, market competitors, or professional associations, or any other social grouping (Thornton and Ocasio, 1999).

Institutional logics has been used to understand supply chain management in recent years. The rudimentary literature on institutional logics in the supply chain area shows that institutional logics converge in the supply chain and that there are often contesting logics that lead to pressure on smaller actors (typically the suppliers in the supply chain). For example, Sayed et al. (2017) found that focal organisations exert more pressure on suppliers than suppliers do on the focal organisation and typically no single logic dominates the supply chain. Saldhana et al. (2015) found that the unmet needs of actors in the supply chain arise due to the institutional isomorphic pressure leading to incompatibility in the supply chain. Glover et al. (2014) found that in a dairy supply
chains, the supermarkets are the central firms and that they play an important role in exerting pressure on suppliers to drive the logic of cost minimisation. Such institutional pressures lead to formalisation initiatives that in turn put pressure on the actors in the supply chain and can lead to conflicting institutional logics and supply chain complexity (Pemer and Skolsvik, 2016).

Mechanisms of Institutional Logics

Institutional logics are central to the field level of analysis which Wooten and Hoffman (2008) argue is the central concept of institutional theory. Scott (1991) also defines a field as "a community of organizations that partakes of a common meaning system and whose participants interact more frequently and fatefuly with one another than with actors outside the field" (p. 56). So, a field is a set of structured relationships between organizational actors, bound together by a common meaning system, currently conceptualized primarily as an institutional logic. From this set of definitions, we are taken in two directions in terms of possible relationships between institutional theory and organizational culture. The first is to emphasize the role of cultures outside/beyond/above the organizational level. The second is to problematize the relationship between the field-level institutional logic and its actuality at the organizational level.

The point that organizations are part of a wider social system is an important one. Institutional theory recognizes this in a very strong way. And the concept of institutional logics has re-established the cultural/cognitive component of fields, away from the purely structural. It would be interesting to see how such a view could be incorporated into debates about organizational cultures; to recognize and examine them as part of, springing from, and influencing the wider cultures and social systems of which they are a part. The existence of logics and zeitgeists informs the content and structure of organizational cultures and vice versa.

Organizational cultures are set within networks of organizations and subject to the influence of industry and societal values and beliefs. The work in institutional theory on logics within fields has much to offer the study of organizational culture by emphasizing the wider context within which cultures originate.

Organisational Practices as a Mechanism for Institutional Logics

Organisational culture acts as an intermediary between institutional logics and organisational practices. For example, Prasanna and Haavisto (2018) show that organisational culture and institutional logics are both embodiments of values, beliefs, and assumptions, operating at two levels. Organisational culture operates at an organisational level and institutional logics operate at an inter-organisational level (Scott, 1991, Thronton and Ocasio, 1999). Organisational practices are the mechanisms through which institutional logics influence an organisation (Hinnings, 2011; Raey and Hinnings, 2009). Dyer and Hatch (2006) found that knowledge sharing as a form of organisational practices between the buyer and the supplier leads to better-quality final products; defects decreased by 50%, compared to another supply chain where no knowledge sharing routine existed. Wang et al. (2008) found that knowledge-sharing routines in the dyadic relationship improve inter-organisational creativity. At a fundamental level, organisational routines help in a higher level of inter-organisational coordination (Schilke and Goerzon, 2010). Inter-firm knowledge-sharing routines promote supplier innovativeness by expanding the supplier's knowledge in a specific
domain (Inemek and Matthyssens, 2013). In sum, attributes of organisational culture are linked to specific collaborative outcomes.

Institutional Environment

The institutional environment is composed of regulations, customs, and taken-for-granted norms prevalent in states, societies, professions and organizations, which impinge upon and shape organizational behaviour and outcomes (Swaminathan and Wade, 2016). The institutional environment was portrayed as an exogenous force that shaped and constrained organizational actions and policies (Barnett and Carroll, 1993). More recently, however, researchers have suggested that organizations can take steps to shape the institutional environment in which they are embedded. Institutional environments “are characterized by the elaboration of rules and requirements to which individual organizations must conform in order to receive legitimacy and support” (Scott, 1991). The institutional environment also acts as a mechanism for institutional logics to influence the organisation.

How do these mechanisms influence supply chain collaboration? Supply chain collaboration requires information sharing, trust, commitment, and mutuality (Barratt, 2004). Since both organisations exist in a society that is influenced by institutional environment, the actors are bounded by the rules, norms, and regulations of the institutional environment. For example, the institutional environment of China dictates that the companies that collaborate with Chinese companies are required to share their technological secrets with Chinese partners (Forbes, 2018). Apple Inc. was required to share its technological expertise with the Chinese companies for manufacturing Apple iPhones (Economic Times, 2018). Such boundedness influences the capabilities of supply chain collaboration.

Organisational practices play an important role as a mechanism that connects organisations through collaboration. The diffusion of particular practices throughout a given organizational field (Boxenbaum & Jonsson, 2008) shows how social norms and prescriptions become translated into activities that connect organisations (Sahlin & Wedlin, 2008). It can be argued that institutional processes are at work, but do so without explicitly connecting organizational practices or structures to an overall mode of thinking, although that idea is sometimes implicit. For instance, Fligstein (1985) refers to a totalizing worldview of managers or entrepreneurs that causes them to filter the world’s problems in a certain way (Jackall, 1988). When actors collaborate, it is the organisational practices that manifest, for example, as information sharing, mutuality, trust, and commitment which are the foundations of collaboration.

4.3 Institutional Logics and Constellations of Institutional Logics

It is increasingly acknowledged that many organizations, by their very nature, embody multiple logics (Kraatz and Block, 2008). Where these logics are in conflict and claim jurisdiction over a single situation, the resultant “jurisdictional overlap creates institutional complexity” (Thornton et al., 2012, 57). Therefore, it can be argued that institutional complexity refers to those situations in which divergent prescriptions from multiple institutional logics collide (Greenwood et al., 2010; Greenwood et al., 2011; Thornton et al., 2012).

Examples of such complexity include hospitals, where logics of family, law, and medicine (e.g. Heimer 1999) or logics of professionalism and managerialism (e.g. Kitchener, 2002;
Reay and Hinings, 2009) may collide in decisions over neo-natal intensive care or general practice, respectively; or multinational corporations that operate across regulatory regimes and value systems (e.g. Kostova and Zaheer, 1999). From a long-term aid perspective, the commercial actor that interacts with several non-commercial actors face such contradictory situations (Prasanna and Haavisto, 2018). In these organizations, contradictory prescriptions from different legitimating audiences systematically collide in everyday operations and institutional complexity must be continuously managed (Smets and Jarzabkoski, 2013). The collision of multiple institutional logics, which creates institutional complexity, can be seen as a constellation of logics.

The term constellation is used to describe the combination of institutional logics guiding the behaviour of an actor at a given time. Constellation refers to a position of “stars” (or potentially other elements) in regard to one another (Oxford American Dictionary, 2005). Goodrick and Raey (2011) argue that the term “constellation” is useful to conceptually describe items that are scattered when looked at from a particular viewpoint, they show a pattern (Goodrick and Raey, 2011).

Viewing institutional logics as constellations that guide behaviour contrasts with previous explanations that have conceptualized variation in logics in terms of different geographical locations, different actors, or different types of organizations (Lounsbury, 2007; Marquis & Lounsbury, 2007; Reay & Hinings, 2009). It is also argued that the society is composed of a variety of “meta-logics” (Scott, 2008; Thornton and Ocasio, 2008), but the relationships among the multiple logics and their collective influence on a social actor are not accounted for. Hence, taking a perspective of viewing coexisting logics as constellations helps to see the ways that logics can combine to simultaneously influence professional work, since the concept of a constellation captures the pattern in which these multiple logics are combined at a given time (Goodrick and Raey, 2011).

Goodrick and Raey (2011) show that three different types of constellations are observable. First, a constellation where one logic is dominant over the others. Second, a constellation where two logics exercise relatively equal and significant influence on an actor’s behaviour. Third, a constellation where one logic exercises moderate influence and others show some, but less influence.

The Logic of Aid and Trade

The convergence of the trade and development agenda took place only in the past decade. Aid and trade policies were promoted by different constituencies, who were represented in different institutions, the General Agreement on Tariffs and Trade (GATT) and the WTO on the one hand, and development agencies on the other (Hoekman, 2007). As a result, the current state of the world is still one where aid and trade are targeted towards different countries. Thus, aid and trade in the data appear largely as substitutes.

4.4 How does Institutional Logics Fit as a Theoretical Lens for This Study?

This section provides theoretical linkages between institutional logics, organisational culture, and collaboration.

Institutional logics are the composite of values, beliefs, and assumptions (Scott, 2001). Institutional logics operate within a field. A field is defined as “a community of
organisations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field” (Scott, 1991, p. 56). A field is the relationship between organisations that is structured through norms and beliefs, and held together by a common meaning system (Hinnings, 2012). In a supply chain, the institutional logics give rise to belief systems that influence the belief systems of the organisations nested within a field. Organisational culture, which is composed of values, beliefs, assumptions, and norms, is the embodiment of an organisation’s belief systems (Giorgi, et al., 2015).

The values and assumptions of an organisational culture are harder to detect for outsiders of an organisation or even to other organisations (Hofstede 1998; Schein 1992). However, values and assumptions manifest as practices within an organisation, which are easily detectable (Trice and Beyer 1993). Practices are “how we do things” and refer to routine activities which are largely unconscious and automatic (Swidler 2001). These organisational routines play an important role in collaboration and collaborative outcomes. “Routines are repeated patterns of behaviour that are bound by rules and customs and that do not change very much from one iteration to another” (Feldman, 2000). Information exchange between partners, as organisational routines, helps improve collaborating efficiency (Bisogno et al., 2015). Knowledge sharing as an organisational routine between the buyer and the supplier improves supplier innovativeness (Inemek and MatthysSENS, 2013). Knowledge-sharing improves supplier learning and reduces the number of defects (Dyer and Hatch, 2006).

To provide the linkage between institutional logics, organisational culture, and collaboration, it is necessary to state that institutional logics are the composite of values, beliefs, and assumptions (Scott, 2001). Institutional logics operate within a field, and the field refers to “a community of organisations that partakes of a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field” (Scott, 1991, p. 56). A field is the relationship between organisations that is structured, through norms and beliefs, and held by a common meaning system (Hinnings, 2012). In a supply chain, the institutional logics give rise to belief systems that influence the belief systems of the organisation nested in the field (an actor in the supply chain). Practices and structures are tangible manifestations of institutional logics. Friedland and Alford (1991) conceptualized western society as an “inter-institutional system” comprised of “the capitalist market, bureaucratic state, democracy, nuclear family, and Christian religion” (p. 232). They also emphasized that each is associated with a distinctive “institutional logic”. Multiple institutional logics are available and can interact and compete for influence in an organisation (Nigam & Ocasio, 2010). Organisational culture, which is composed of values, beliefs, assumptions, and norms, is the embodiment of an organisation’s belief systems (Giorgi et al., 2015).

The values and assumptions of an organisational culture are hard to detect for outsiders of an organisation or even to other organisations (Hofstede, 1998; Schein, 1992). However, values and assumptions manifest as organisational practices within an organisation, which are easily detectable (Trice and Beyer, 1993). Practices are ‘how we do things’; they refer to routine activities which are largely unconscious and automatic (Swidler, 2001). The diffusion of particular practices throughout a given organizational field (Boxenbaum & Jonsson, 2008) showed how social norms and prescriptions became translated into activities that connect organisations (Sahlin & Wedlin, 2008).

In sum, it can be argued that institutional processes worked without explicitly connecting organizational practices or structures to an overall mode of thinking, although that idea was sometimes implicit. Organisational practices manifest as organisational routines
(Giorgi et al., 2015). These organisational routines play an important role in collaboration and collaborative outcomes. As defined by Feldman (2000), “routines are repeated patterns of behaviour that are bound by rules and customs and that do not change very much from one iteration to another”. In order to collaborate with a partner, an organisation would share information; mutuality exists in terms of sharing risks and benefits. Information sharing as an organisational routine is one of the fundamental requirements of collaboration (Barratt, 2004). Information exchange between partners, as organisational routines, helps improve collaborating efficiency (Bisogno et al., 2015). Knowledge sharing as an organisational routine between the buyer and the supplier improves supplier innovativeness (Inemek and Matthyssens, 2013); furthermore, it improves supplier learning and reduces the number of defects (Dyer and Hatch, 2006). The framework development of Article B provides integration of all three concepts (institutional logics, organisational culture, and collaboration).

In summary, this section outlines the theoretical background of organisational culture and institutional logics and concludes by showcasing the theoretical links between organisational culture, institutional logics, and collaboration. The next section explains the thesis’ research design.
5 RESEARCH DESIGN

This thesis examines the effects the buyer’s and supplier’s respective organizational cultures on the outcomes of collaborative humanitarian projects. This chapter presents the research paradigm, which provides a background into the epistemological and ontological stance taken in this thesis. This chapter also describes the methods used in this thesis, including the type of data collection and data analysis used.

5.1 Research Paradigm

A research paradigm helps to situate the thesis viewpoint within existing theory and research and to explain the underlying ontological and epistemological positions the thesis presents. This thesis follows a critical realism research paradigm and will include qualitative research methods to provide a way to better understand the research question (Guba and Lincoln, 1994).

Ontology refers to a consideration of what is knowledge or the “nature of knowledge” (Arlbjorn and Halldorsson, 2002). Social sciences can be divided into two ontological camps: nominalism and realism. Nominalism defines the social world in terms of names and labels to give a structure to reality. However, realism defines the social world as external to social cognition and as made up of tangible structures (Burrell and Morgan, 1979). Epistemology aims to explain the dissemination and creation of knowledge (Steup, 2014). Researchers are divided into two different epistemological understandings of knowledge: positivist and interpretivist. This thesis is aligned with the ontological idea of critical realism that rests at the intersection of positivist and interpretivist ontological standpoints.

Two key assumptions of critical realism support the choice of this paradigm and the method. First, “social science must be critical of its object. To be able to explain and understand social phenomena we must evaluate them critically” (Sayer, 1992, p.5). Accordingly, this thesis will explore the social phenomenon introduced in the research question through qualitative methods, including interviews and case studies.

Second, critical realism takes the view that:

social phenomena such as actions, texts and institutions are concept dependent. We not only have to explain their production and material effects but to understand, read or interpret what they mean. Although they have to be interpreted by starting from the researcher’s own frames of meaning, by and large they exist regardless of researchers’ interpretation of them (Sayer, 1992, p.5).

From a critical realist base, the thesis provides an opportunity to view the relationship between several phenomena from a midpoint between positivist and interpretivist epistemologies. Critical realism is particularly well suited to undertaking case study research (Easton, 2010).

5.2 Articles and Thesis Timeline

The doctoral program started in January 2015. As shown in figure 4, the mandatory doctoral course work was finished by August 2016. The idea of writing a systematic
review article (Article A) was conceived during Oct 2015. The course work provided a worldview from a midpoint between positivist and interpretivist epistemologies. This manifested in collecting interview data for Article B. Furthermore, from Article A, the phenomenon of influence of organisational culture on long-term aid in the HSC was found to be under researched, thus prompting an in-depth study. Based on the same worldview, the idea for Article C was conceived and the case study approach chosen to examine a three-echelon setting for the same phenomenon. For article C, data collection was completed during August 2016. Analysis and writing the first draft was completed during September 2017. Kappa writing started during July 2017 and was submitted as a first draft during Oct. 2017. After three rounds of revisions, a manuscript seminar was held during Feb. 2018. Based on comments in the manuscript seminar, revisions are completed and submitted for pre-examination during June 2018. The thesis (Kappa) is revised based on pre-examiners’ comments and submitted for final defence at the end of October, 2018.
**Figure 4  Articles and thesis timeline**

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<td>Doctoral course work</td>
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5.3 Research Articles and Method

This thesis is based on qualitative methods in summary. Three articles together form the thesis. The first article (article A) uses a systematic literature review. The second article (article B) uses qualitative interviews. The third article (article C) uses case study as the research method.

This section of the thesis is divided into three broad sub-sections. In sections 5.3 to 5.5, the method is introduced from the literature. Then, an explanation of each step is provided. Table 5 describes the research question, the methods used, and the sources of data collected.

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<th>Research question</th>
<th>Article</th>
<th>Method</th>
<th>Place of Data collection</th>
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<tr>
<td>RQ1. How does organisational culture influence supply chain collaboration?</td>
<td>Article A</td>
<td>Systematic literature review</td>
<td>Desk research</td>
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<tr>
<td>RQ2. How can organisational culture influence collaboration in long-term aid humanitarian supply chains?</td>
<td>Article B</td>
<td>Qualitative research</td>
<td>AidEx Exhibition, Brussels</td>
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<td>Article C</td>
<td>Case study</td>
<td>Ahmedabad, India</td>
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Table 5 Research questions, articles, and methods

5.4 Article A: Systematic Literature Review

A systematic literature review (SLR) provides clearly defined steps to identify relevant scholarly articles from the database used in this thesis. SLR helps capture what we know and do not know, thus synthesizing the literature into a coherent body of knowledge. The steps followed in SLR are so transparent that any researcher can replicate them to narrow down the literature to a similar final list of articles for review (Tranfield et al., 2003). A conventional literature review tends to miss important contributions to the literature and cannot be replicated in the same way to get the same results (Denyer and Tranfield, 2009). SLR is conducted in three broad stages: planning the review, conducting the review, and reporting and disseminating the reviews (Tranfield et al., 2003).

In this thesis, planning the review was performed in three steps as suggested in Tranfield et al. (2003). First, the need for the review was established. Second, a proposal for a review was developed. This proposal explains the objectives of the review. Third, a protocol was developed to indicate objectivity and the specific research questions to be studied. The protocol also explains the explicit steps to taken to conduct the review.

Conducting the review was done in five steps: research problem identification, selection of studies used, quality assessment, data extraction, and progress monitoring and data
synthesis. Appropriate studies are identified by using keywords and searching for the studies in appropriate databases. After several stages of removing non-relevant studies, the search results in a final list of studies. The studies that pass all the filter criteria become the dataset used in the research. The assessment of the quality of studies also evaluates the non-bias of the studies found fit to be reviewed. This quality assessment can be performed through random checks of selected articles against all the inclusion criteria. Data extraction and monitoring progress break down the raw data into meaningful relationships. Data extraction and progress monitoring can be performed by using a rubric that breaks a study down into different topic areas. In the synthesis stage, these topic areas can be assessed to determine relationships between articles to better highlight the trends in research, the emergence of certain research areas, and the suppression of certain research areas or topics that demand more research (Tranfield et al., 2003).

According to Tranfield et al. (2003) reporting and dissemination of the results was completed in two steps. First, findings were presented through developing demographic analysis and thematic analysis based on the final list of articles for review. Second, the research questions were answered and the implications for theory and practice were presented.

The objective of this SLR is to examine how organisational culture influences supply chain collaboration. In planning for the SLR, a protocol was developed that provides definitions for supply chain collaboration (Simatupang and Sridaran, 2008) and organisational culture (Schein, 1985), alongside a list of keywords and databases chosen for the search (Denyer and Tranfield, 2009). This step provides a foundation for the search process. Two sets of keywords were used for the search: key words related to supply chain collaboration and keywords related organisational culture (Figure 5). The keywords were finalised after an extensive literature search and discussion with subject experts. The data bases used for the SLR were Ebscohost (Business Source Complete), Scopus, Proquest (ABI/INFORM), and Google Scholar. Keywords were combined with AND and OR operator between the two sets of words (Figure 5).


The second set consisted of words relating to organisational culture which included: “collaborative culture”, “organisational culture”, “organisational climate”, “corporate culture”, “organisational routine”, and “firm culture”.
As suggested by Tranfield et al. (2003) and Denyer and Tranfield (2009), this thesis review was conducted in five steps: identification of research, selection of studies, study quality assessment, data extraction, and monitoring progress and data synthesis. The keywords were used to search in all the databases and the resulting articles were aggregated. A total of 891 articles came up in the search. Relevant articles were then separated from this total number of articles. Inclusion criteria used to separate relevant articles included limiting the research articles that were scholarly business and management articles written in English. Additionally, duplicates were removed. This filter criteria narrowed the total to 171 articles. This list was further narrowed to 122 by reading the title and abstract of the articles for relevance to this thesis's aims. Finally, after reading the complete articles, 87 articles were found fit for analysis. Figure 6 shows the steps.
Data extraction was performed in the following way. The 87 articles were loaded into an excel sheet and broken down into various headings, such as abstract, key research question, key findings, theory used, industry addressed, year of publication, unit of analysis, aspects of collaboration, collaborative outcomes, and aspects of organisational culture addressed in the article. Information from all 87 articles in the excel sheet were used for analysis and synthesis.

**Reporting** was performed by broadly grouping the articles under various themes and sub-themes. For example, articles that focused on the buyer-supplier relationship in general and the organisational cultural fit in particular were grouped under the theme ‘buyer-supplier relationship’ and the sub-theme ‘fit’. Articles that focused on outcomes of collaboration and more specifically on product innovation were grouped under the theme ‘collaborative outcomes’ and the sub-theme ‘innovation’. Denyer and Tranfield (2009) refer to this process as thematic analysis. All the articles were analysed and were categorised into a theme and a sub-theme. Further thematic analysis included dividing by publication trends during the years, unit of analysis, theories used, industry addressed, method, and journal title.

Next, the research questions were addressed. Aspects of organisational culture, collaboration and collaborative outcomes found in the excel sheet were analysed in sequence to better understand what previous researchers have found. This analysis showed that attributes of organisational culture (such as information sharing, organisational routines, leadership, and organisational learning and flexibility) were
previously found to help supply chain collaboration. Each of the above attributes were
examined in depth by reading the full article to see how the relationships between
organisational culture and supply chain collaboration were constructed and argued. In a
similar way, the other research questions were explored.

It is necessary to examine the study’s validity and reliability. Validity is defined as the
“extent to which an instrument measures what it is supposed to measure” (Kassarjian,
1977, p. 15). The research’s validity was compared to other research from within and
outside the field (Seuring and Muller, 2008; Kassarjian, 1977). In Article A, the study’s
validity is maintained through comparing constructs from similar literature review
articles and other seminal articles in the field of supply chain management and
management (Power, 2005; Croom et al., 2000). Moreover, presenting this research at
various conferences also allowed other researchers in the same area to comment on it,
directly improving its validity (Seuring and Muller, 2008). The research’s reliability was
also important to establish as it reduces the researcher’s subjectivity. All the steps for the
systematic literature review were carried out by the principal researcher, and the steps
were randomly verified by another researcher, which seemed to be agreeable in most
coding as suggested in Seuring and Muller (2008).

5.5 Article B: An Interview Study

Article B uses qualitative interviews to examine research questions through semi-
structured interviews. Semi-structured interviews provide another rich way to explore
research questions without the rigidity of a structured interview (Bygrave, 1989). In a
structured interview, the interviewer is given a structure to stick to through the interview
and not permitted to move out of the structured questions. Such rigidity may stop the
unravelling of the social reality that the research question intends to investigate
(Opdenakkar, 2006). On the other hand, exploratory interviews that totally lack
structure also create challenges. In unstructured interviews, there is a tendency to
deviate completely from the main focus of the research question and move into a
completely different plane, wasting precious time with the respondent (Corbin and
Morse, 2003). Semi-structured interviews provide a balance with enough rigidity to stay
on topic as well as enough room to open the discussion to learn more about the research
question (Soosay et al., 2008, White, 2000).

5.5.1 Data Collection

Semi-structured interviews were conducted at the AidEx exhibition and meeting in
Brussels in 2015. AidEx is an annual exhibition for humanitarian buyers and sellers
(past, current, and prospective). Participants in the exhibition included the UN agencies
UNHCR and UNOPS and several other international agencies such as the Red Cross,
Oxfam, and Doctors Without Borders. Also present at the exhibition were a plethora of
organisations that supply aid materials to humanitarian organisations. The exhibition
included organisations and suppliers that provide different types of humanitarian care,
including cleaning water and sanitation solutions, energy solutions, flood control
solutions, healthcare, personal protective equipment, fund transfer services to
beneficiaries, 4x4 vehicles, refrigeration solutions, portable hospital provision,
temporary housing tents for refugees and internally displaced people, packaging
solutions, and emergency logistics provision.

The sampling strategy for data collection consisted of two criteria. First, the organisation
had to currently or previously be supplied by or be a supplier to a UN agency. Second,
the interview respondent had to be a procurement manager from a buyer organisation or a sales manager from a supplier organisation. Most participants in the exhibition were suppliers in the past and/or present for UNHCR and/or UNOPS. Out of the 127 suppliers that exhibited at AidEx, 93 suppliers met the sampling criteria. Among these 93 suppliers, 27 suppliers agreed to participate in this study. The supplier response rate was 29%. Twenty-seven supplier interviews and two buyer interviews added to a total of twenty-nine interviews that comprised the data for this study. The selection of interviewees within the selected buyer/supplier organisation was based on their job function. The respondents from the supplier group were national managers who handled sales functions and heads of sales. The buyers group included senior purchasing managers from UNHCR and UNOPS. The interviews lasted between 12 and 30 minutes. The interviews were recorded using an electronic device with respondents’ permission (n=26). Respondents who did not agree to record on an electronic device gave permission for the researchers to take notes during the interview (n=3). Appendix 5 provides the list of respondents for the study.

A semi-structured interview guide was developed based on supply chain collaboration and organisational culture literature. The author developed an initial draft of the guide which was commented on by subject experts for revision. The revised semi-structured interview guide (see Appendix 1) focused on the two main constructs of this study: organisational culture and supply-chain collaboration. The purpose of data collection was to capture Schein’s (2010) and Cameron and Quinn’s (2006) dimensions of organisational culture (dominant characteristics, organisational leadership, management of employees, strategic emphasis, and criteria for success). The interviews also captured aspects of buyer-supplier collaboration, organisational cultural differences, and potential barriers to collaboration and collaborative outcomes.

5.5.2 Data Analysis

The interviews were recorded by electronic devices or with notes. The recorded interviews were transcribed into 46 pages. Content analysis using Atlas.Ti, a qualitative research software, was performed to analyse the data. Open coding was used to allow for as much text mining as possible. The open coding resulted in meaningful units of data and were later assembled to form higher level conditions, concepts, and properties (Krippendorff, 2004). These higher-level codes were further divided to identify core categories (Saldanha et al., 2015) through axial coding (Pratt, 2008) that were directly linked to various constructs of the study: organisational culture and supply chain collaboration. The coding process is shown in Figure 7.

The raw data shown in Table 6 is open-coded for meaningful units of sentences. These open codes were grouped under different codes. These codes were further divided on the second level. One final code was offered to the specific response to the construct as suggested in Saldanha et al. (2015). Table 7 shows how the organisational success criteria are coded for each supplier. This follows the steps as explained in Saldanha et al. (2015) and Pratt (2008) (shown below). All interviews were coded and assigned to different categories under each dimension of organisational culture and collaboration. The final codes can be found in the findings section for article B. The following table provides the steps followed in data analysis. The raw data is processed and analysed into free codes. Later, the free codes are grouped into aggregate codes. Further aggregate codes are reduced to final aggregate codes that represent the data (Saldhana et al., 2015).
Sequence Data analysis process

**Step 1** Interviews were transcribed into raw data

**Step 2** Raw data is entered into the qualitative software – Atlas.ti.

**Step 3** Using the software, each response is broken into meaningful units. Each meaningful unit within a response is given a free code. A response might have one to several open codes depending on the length of the response.

**Step 4** Atlas.ti provides the next step to group the codes together in aggregate codes.

**Step 5** The aggregate codes from all respondents for a single question are grouped. The column of codes represents all the aggregate codes obtained from all respondents for a single question.

**Step 6** In a second level coding, the aggregate codes are reduced in such a way that overall representation of aggregate codes is not missed.

**Step 7** In the final aggregate coding, the second level codes are compressed in such a way that less representative codes are removed, and the like ones are finally grouped into final aggregate code. This column provides the most representative of codes for every question in the semi-structured guide.

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Data analysis process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>Interviews were transcribed into raw data</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>Raw data is entered into the qualitative software – Atlas.ti.</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td>Using the software, each response is broken into meaningful units. Each meaningful unit within a response is given a free code. A response might have one to several open codes depending on the length of the response.</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td>Atlas.ti provides the next step to group the codes together in aggregate codes.</td>
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</tr>
</tbody>
</table>

Table 6 Coding process was undertaken as suggested in Saldhana et al. (2015).

As seen from the semi-structured interview guide, the first question about organisational culture asks ‘how do you define success in your organisation?’ The table below illustrates how the response for a question was coded. A random response to a question was chosen for an illustration of the coding process.
Success for us is defined as helping the most vulnerable and needy become self-sufficient and empowering them to make decisions in their own lives for sustainable development that lasts long-term and that’s what we are working towards with all our major programs.

Table 7 In this illustration, the response from Supplier – A, for a question, ‘how do you define organisational success?’ is coded.

5.5.3 Quality Assessment

In article B the quality of data analysis is captured through its reliability and validity. From a reliability and validity standpoint, three types of validity need to be met: construct validity, internal validity, external validity, and reliability. Construct validity is obtained through using multiple sources of evidence (Hipp, 2007; Erlandson et al., 1993). Several interviews were conducted from each organisation ensuring the requirement of multiple source of information was met. Internal validity is established through pattern matching in the data analysis stage (Eisenhardt, 1989). This is done in the coding process for every question asked across all the respondents. External validity is achieved through using theory background. Theoretical background is adequately taken in order to support external validity. Finally, the study’s reliability is established through using a structured plan in the data collection stage that details every step (Yin, 2007; Seuring and Müller, 2008). Since more than one researcher is involved in the data...
collection, transcription, and coding, reliability is established through constant comparison of coding. Any discrepancies were resolved through constant comparison (Seuring and Müller, 2008).

5.6 Case Study - Article C

Article C provides a case study related to the research questions presented in this thesis. The research question examined in article B from a dyadic perspective is examined in article C from a three-echelon perspective. The study method is appropriate for this study because it provides a specific example of how organisational culture influences supply chain collaboration between an NGO as the focal actor and two tiers of commercial suppliers. The case study method helps illustrate the relationships between the constructs in a way that establishes theory on this topic (Yin, 2009). However, it is also necessary to note the limitations of generalizing study findings based on a single case (Yin, 2009).

In the case study method, the central tendency is to illuminate a phenomenon and answer the question of why such a phenomenon exists and what the implications for such a phenomenon were (Eisenhardt, 1989). Case study as a method is chosen because the case study is an empirical inquiry that investigates a contemporary phenomenon in depth and adds a real-life context. According to Yin (1981), “case study investigates a contemporary phenomenon in-depth within its real-life context when the boundaries between the phenomenon and the context are not clearly evident”. This method supports a critical realist perspective (Yin, 2009).

Case studies help develop theories through presenting frameworks and propositions (Yin, 2009). Case studies can involve either single or multiple cases, and numerous levels of analysis (Yin, 1984). Single case studies are best suited to situations where the study reveals a phenomenon that was not previously reported (Yin, 2009). Single case studies are also worth conducting because of the richness of information they can yield (Yin, 1981).

Robust case study analysis first needs to attend to all the evidence. Second, the case analysis must eliminate major rival interpretations or alternate explanations for the phenomenon. Third, it needs to address the most significant aspects of the case study and to contextualize that information within the body of existing work (Yin, 1999).

5.6.1 Case Description

In this article, the case study method helps explore in depth the supply chain collaboration between an NGO and its two tiers of suppliers. In this case, the primary motive of the NGO-business relationship was to improve the livelihood of a community of salt farmers. The total number of actors in the supply chain studied was limited (n=6 – the NGO, one tier 1 supplier, and 4 tier 2 suppliers in the upstream supply chain).

In order to understand how organisational culture influences the collaboration in a supply chain level in the long-term aid context, a humanitarian organisation needs to be at the centre of the supply chain. Existing literature suggests that actors with similar organisational culture collaborate better (Fawcett et al., 2015; Cadhilon et al., 2011). Since the suppliers in this case are for-profit and the NGO is non-profit, there is a fundamental difference in organisational cultures (Cameron and Quinn, 2005). Such
differences provide a rich contrast in the organisational cultures of the central actor and its suppliers. The contrasting organisational cultures in the supply chain are an essential criterion in selecting this case for study.

The organisation studied in this case is an NGO in Ahmedabad, India that helps salt farmers (locally called as *agariyas*) improve their livelihood by reducing the total cost of salt production. This is achieved by replacing the existing diesel salt-water pumps with more efficient solar salt-water pumps. The NGO-led supply chain consists of two tiers of commercial suppliers with for-profit businesses with organisational cultures that differ from the focal actor, the NGO.

In order to achieve that price point, the challenge for the supply chain will be to develop high quality solar pumps at a low cost. The supplier Z (tier 1 supplier) was willing to supply solar pumps that matched the technical specification at a low cost. Supplier Z has signed contracts with four tier two suppliers (Suppliers A, B, C, D) that supply solar panels, saltwater pumps, and the required accessories for assembly. Both tier 1 and tier 2 suppliers are for-profit suppliers.

Figure 8 depicts the NGO led supply chain. The NGO also collaborates with a bank to finance salt farmers. However, this case study does not focus on the NGO-bank relationship because the bank could not be contacted.

![The NGO led supply chain](image)

### 5.6.2 Data Collection

The principal NGO gave the lead for the suppliers. Because of snowballing, the suppliers readily agreed to participate in the interview. Snowballing is common in a case study setting (Patton, 2005).

Semi-structured interviews were conducted with the NGO and with two tiers of suppliers. These interviews followed the same interview guide (Appendix 1) used for article B. Using the same interview guide allowed a similar assessment of organisational culture and supply chain collaboration within the same constructs used elsewhere in this study. On average, the interviews lasted between 25-45 minutes. The interviews were recorded in an electronic device after gathering respondents’ permission. Twelve semi-structured interviews were conducted with the NGO and its two tiers of suppliers with the intention of better understanding how organizational culture influences collaboration in a supply chain with an NGO as the focal actor with for-profit suppliers.
5.6.3 Data Analysis

For article C, data analysis coding is shown in Figure 7 and Table 6. Data coding and analysis was performed in the same manner as it was for article B.

5.6.4 Validity and Reliability

In article C the quality in data analysis is captured through its reliability and validity. From a reliability and validity standpoint, three types of validity need to be met: construct validity, internal validity, external validity, and reliability. Construct validity is obtained through using multiple sources of evidence (Hipp, 2007; Erlandson et al., 1993). Several interviews were conducted from each organisation ensures the requirement of multiple source of information is met. Internal validity is established through pattern matching in the data analysis stage (Eisenhardt, 1989). This is done in the coding process for every question asked across all the respondents. External validity is achieved using theory background and theoretical background is adequately gathered to support the external validity. Finally, the study’s reliability is established using a structured plan in the data collection stage that details every step (Yin, 2007; Seuring and Müller, 2008). Since more than one researcher is involved in the data collection, transcription, and coding, reliability is established through constant comparison between the researchers (Seuring and Müller, 2008).

5.7 Generalisability

Yin (2002) explains that in case study research analytical generalization is most suitable to understand the issues at hand. This is done by replicating previously developed theory in subsequent case settings that support plausible claims for the initial theory. In light of his recommendation, the framework has been tested for generalization by applying the theoretical framework to a different case study to better understand if it would apply outside of the disaster relief context. This provides a more robust logic to the development of the framework. Theory development does not only facilitate the data collection phase of the case study. It also supports generalisability.

The findings of Article B are applicable to contexts with respect to the buyer-supplier dyad in long-term aid. The results apply to the collaborative relationship between actors: either humanitarian buyer and humanitarian supplier, or humanitarian buyer and commercial supplier. It is also applicable regardless of the industry the suppliers represent. The framework developed in article B captures both. The study’s findings are applicable to dyads where the suppliers are multinational since all suppliers in article B were of multinational background. The new concept of humanitarian institutional logics as described in article B captures the nature of the business-to-business collaborative relationship in any long-term aid operation.

Article C’s results are analytically generalizable. The results are applicable to three contexts. First, in the context of collaboration between for-profit and non-profit organisations where non-profit is the focal firm. Second, when the focal NGO is working towards long-term aid. Third, since the data collected is only from India, the study is generalizable to NGO-for profit collaboration only in India. The thesis as a whole is applicable to an extent that involves collaboration between buyers and suppliers in long-term aid irrespective of humanitarian buyer-humanitarian supplier collaboration, or humanitarian buyer—commercial supplier collaboration in long-term aid.
6 FINDINGS

6.1 Summary of Appended Articles

In this section, the findings for the research aim of this thesis is presented. This is an aggregate of the findings of the individual articles.

The aim of the thesis was to examine the relations between organisational culture of buyers and suppliers and collaboration in humanitarian supply chains during long-term aid. The aim was reached through two research questions. The first research question (RQ1) was, how does organisational culture influence supply chain collaboration? Article A is answers this research question. The findings included a framework that explained how organisational cultural attributes influence supply chain collaboration. The organisational leadership, or antecedent, influences organisational learning and organisational flexibility (organisational cultural elements). These elements influence information sharing (collaborative behaviour) through organisational routines. It can be further argued that there are four mechanisms through which organisational culture develops: organisational routines, organisational practices, organisational flexibility, and organisational learning. These mechanisms influence mechanisms of supply chain collaboration: information sharing, trust, mutuality, and commitment.

The article finds that the influence of organisational culture on supply chain collaboration is twofold. First, the studies with the dyadic relationship as a unit of analysis indicated that for better collaboration, partners must have congruent organisational cultures. This means that partners with similar organisational cultures collaborate well. Second, the studies with a triad as a unit of analysis reported that the organisational culture between the partners needed to be complementary in order to collaborate better. Therefore, article A finds that complementing organisational cultures are the foundation of superior collaboration. Moreover, organisational cultural values are the fundamental aspects of organisational culture that must be complementing each other for a strong collaboration.

Article B and C answer the research question RQ2. How can organisational culture influence collaboration in long-term aid humanitarian supply chains? Article B takes a dyadic perspective and article C takes a three-echelon perspective. In both articles, the findings converge at one answer. The organisational culture of the buyer influences the organisational culture of supplier.

The framework developed in article B posits that organisations are faced with multiple institutional logics. One dominant logic influences the organisational culture of the organisation (buyer or supplier). When the two actors want to collaborate, one logic (the principal firm) dominates the supplier's logic. The principle firm’s logic traverses along the upstream supply chain members, thus dominating a few tiers of suppliers’ logic. However, the logic successfully dominates in spite of the differences between the buyer and its suppliers (non-profit vs. for-profit). The reason for the successful collaboration is found due to humanitarian institutional logics.

The humanitarian institutional logics of the buyer dominates the logics of the supplier by allowing a single logic to operate within the collaborative relationship. This results in successful collaborative outcomes in spite of the differences between the organisational cultures of buyer and supplier. There was no difference found between a dyadic view and
a three-echelon view. Article C through a single supply chain found that humanitarian institutional logics exist. The effects of humanitarian institutional logics are found in the organisational culture. Finally, supporting mechanisms of a collaborative relationship such as trust, commitment, mutuality, and information sharing are found to bolster the phenomenon. The collaborating suppliers’ flexibility is demonstrably influenced by the dominant institutional logics of the principal firm.

6.2 Findings of Article A

The aim of this systematic literature review is to investigate how organisational culture influences supply chain collaboration. Based on thematic analysis, there are five attributes that help supply chain collaboration: information sharing, leadership, organisational routines, organisational learning, and flexibility. These five attributes are linked together in a framework that explains the relationship between them. Figure 9 shows the framework. Organisational cultural mechanisms and supply chain collaboration mechanisms together deliver supply chain collaboration leading to collaborative outcomes. The organisational cultural mechanisms are organisational practices, organisational routines, organisational learning, and organisational flexibility. Supply chain collaboration mechanisms are information sharing, trust, mutuality, and commitment.

Figure 9  A framework showing helpful organisational cultural attributes
6.2.1 Organisational Culture Attributes that Help Supply Chain Collaboration

Although scholars agree that the ‘values’ level of culture is the richest source of information (Schein 1996), they also acknowledge that this level of organisational culture is hard to detect. However, values manifest as practices within an organisation and can be noticed (Trice and Beyer 1993). The following attributes of organisational culture help supply chain collaboration.

Information sharing is one of the key attributes of successful supply chain collaboration and is woven into the organisational culture fabric. Information sharing begins with sharing of information and knowledge within the organisation. The culture of willingness to share information in a firm’s cultural fabric holds the key (Fawcett and McCarter, 2008). Cross-functional information sharing influences the sharing behaviour with other partners of the supply chain thus strongly supporting collaborative behaviour (McCarter et al., 2005; Eng, 2006). Information sharing at the organisational level helps develop a participative culture among employees (Eng, 2006) and bolster teamwork and coordination (Mariotti, 2007).

Stene (1940) introduced organisational routines as a concept. It is regarded as the primary means by which organisations achieve much of what they do on a regular basis (Nelson and Winter, 1982). "Routines are repeated patterns of behaviour that are bound by rules and customs and that do not change very much from one iteration to another" (Feldman, 2000). Routines could be a source of inertia and flexibility, but they can also be a source of flexibility and change (Feldman and Pentland, 2003) that is, when routines are the basis for continuous change in an organisation, for example the implementation of total quality management (Hackman and Wageman, 1995). Routines act as a delivery mechanism for transferring knowledge and information.

Leadership style always matches the corresponding organisational culture type. For example, when an organisation is influenced by clan culture, parent figures are the most efficient leaders. Clan culture also supports team builders, facilitators, mentors, and supporters (Cameron and Quinn, 2006). Organisational leadership influences the organisational culture through four dimensions: charisma or idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Yukl, 1998; Hyypia and Pekkola, 2011). Leadership also acts as a mechanism that drives collaboration.

In the presence of appropriate factors, a firm is more likely to engage in learning activities integral to the development of inter-firm partnering competence. The conditions for building partnering competence are found in the firm’s culture in the form of learning intent, receptivity, and transparency (Johnson and Sohi, 2003). Buyers and suppliers can improve their joint learning activities by facilitating information exchange and by developing common learning arenas. Scholars also found that relationship learning can be promoted and accelerated through collaborative commitment and a high level of trust (Selnes and Sallis, 2003).

Flexibility to adapt to change greatly improves a firm’s collaborative outcome. Vaccaro et al. (2010) indicated that along with mutual trust, a culture for change—the readiness of the organisation to accept and modify changes in technology—has a positive effect on financial performance and time to market. Moreover, firms that intend to adopt e-SCM
are exposed to normative and coercive institutional pressures that can be mitigated through flexibility, thus attaining better performance at a faster rate (Liu et al., 2010).

6.2.2 Does Organisational Cultural Similarity or Complementarity Provide an Edge for Collaboration?

The articles reviewed show mixed results. Several studies found a positive influence of congruent organisational cultures on supply chain collaboration. Overlapping similarities of organisational culture between the buyer and the supplier support joint inventory management during sales promotion periods as a highlight of collaborative commerce in Vietnamese vegetable supply chains (Cadilhon et al., 2005). Cultural fit between buyer and supplier organisational cultures helps firms more closely scrutinize their supply relationships across a broad range of attributes to monitor important issues such as quality and delivery (Pressy et al., 2007). Consistent organisational cultures between partners in the financial services industry improved inter-organisational coordination (Aghajani et al., 2014). In the construction sector, a contractor-subcontractor relationship is fostered through similar organisational cultures that reflect high levels of business ethics involving financial transactions (Manu et al., 2015).

Broadly, extant research agrees that divergent organisational cultures between two partner firms have a negative influence on collaboration. For example, people issues, such as culture, trust, aversion to change, and willingness to collaborate, lead to strains in the collaboration (Madupalli et al., 2014) and in some instances trigger a break-up of the collaboration (Fawcett et al., 2008; Fawcett et al., 2015). “Blame culture” and cultural differences impact the buyer-supplier relationship by creating tension at the inter-organisation level (Koulikoff-Souviron and Harrison, 2008). Differences in organisational cultures in a dyad, manifested through a lack of trust and understanding, lead to difficulties in developing a collaborative culture with suppliers that contributes to barriers to performance (Ulgen and Forslund, 2015).

Studies based on a dyadic view showed that similar cultures lead to better collaboration, as cultural similarity becomes a good predictor of collaboration. However, Cadden et al. (2013) argued that in situations beyond the dyadic relationship in the supply chain, each organisation may have its own identity, but only the compatibility of the organisational cultures matters for better performance. Cadden et al. (2013) found that similarities between organisational cultures are indicative of high-performing supply chains. To support Cadden et al.’s (2013) assertion regarding complementarities of organisational culture at the supply chain level, Powell (1998) argued that in a biotechnology network of firms, firm routines and norms support knowledge sharing in the network that complements each member in developing innovative solutions. Such routines and norms (a manifestation of organisational culture) deliver the internal capability that complements external collaboration.

However, McAfee et al. (2002) indicated that cultural consistency between a firm’s employees and its channel partners is necessary to manage the business relationship between partners. Interestingly, this study took a supply chain perspective rather than a dyadic view, and thus showed a different phenomenon from Cadden et al.’s (2013) work. Such competing results call for further research at the supply chain level, to inform theory and practice in the supply chain domain. It can be deduced from this review that in a dyadic view cultural congruence helps collaboration, and at the supply chain level, the question of organisational cultural congruence or complementarily that helps collaboration remains inconclusive.
The systematic literature review shows that there is only a handful of research studies at the intersection of organisational culture and supply chain collaboration in the humanitarian context. While the existing research establishes that organisational culture plays an important role in keeping the collaboration between the actors alive, further research is necessary to better understand the linkages between organisational culture and collaborative outcomes in the humanitarian context.

In addition, the systematic literature review also highlights that the influence organisational culture has on a dyadic level of collaboration is different from the influence that organisational culture has on a triadic level of collaboration. The literature review reveals research gaps in understanding the influence of organisational culture on HSC collaboration both on a dyadic level and from a three-echelon perspective.

In order to fill these gaps shown by the systematic literature review, article B explores the influence of organisational culture on humanitarian supply chain collaboration from a dyadic perspective. Similarly, article C examines the influence of organisational culture on humanitarian supply chain collaboration from a three-echelon perspective.

6.3 Findings of Article B

The findings of article B show that the mechanisms of organisational culture and mechanisms of supply chain are essential in developing collaborative behaviour leading to collaborative outcomes. The mechanisms of organisational culture are organisational routines, organisational practices, organisational learning, and organisational flexibility. These mechanisms are manifestations of organisational values. The mechanisms of supply chain collaboration are information sharing, trust, mutuality, and commitment. These mechanisms, when they interact with another organisation, result in collaborative behaviour. Collaborative behaviour results in collaborative outcomes. In depth findings are presented below and also in the individual articles.

6.3.1 Framework on Organisational Culture in HSC Collaboration

A framework was developed to obtain a better understanding of organisational culture and supply chain collaboration (Figure 10). The framework links supply chain level institutional logics with organisational culture. Based on the institutional logics literature, organisations that have a common set of goals can create a community that shares the same logic of values and beliefs (Giorgi et al., 2015). Organisational culture can influence an organization’s collaborative culture and thus the collaborative behaviour of a firm at the inter-firm level, as well as the expected collaborative outcomes. Figure 10 below represents the framework linking institutional logics, organisational culture, and supply chain collaboration.
The buyer organisation B1 stated that there was one major difference between the organisational culture of B1 and the organisational culture of its suppliers. According to B1, the fundamental difference was that the suppliers were “there to make a profit,” while B1 functioned on a non-profit basis. Furthermore, B1 mentioned that the organizations had different bureaucratic structures. B1 indicated that their non-profit organization has a reputation for rigorous processes, particularly in the procurement function, while suppliers often have more flexible structures. B2 shared similar experiences.

Several suppliers described differences and similarities between their goals and outcomes and those of the buyer organisations. For example, although they felt their organisational cultures were different, they also felt that customer satisfaction was important to both buyers and suppliers: Supplier 1 stated that, “basically we are looking for the same ends – satisfy the needs of the customers and customers satisfy our needs, too”. Furthermore, suppliers who believed that their organisational cultures were different than those of their buyers stated that this was due to differences in values related to making profits versus a non-profit goal. Supplier C expressed that, “with regards to our customers, we mainly supply to the UN. They have their own culture
that is different from our profit-making culture”. Supplier F expressed the same line of thought: “Maybe since we are a commercial company and they are NGOs, there is a difference right there. But I can’t think of anything else”.

Furthermore, it should be noted that three suppliers defined organisational culture similarly to Hofstede’s (1980) definition of cultures. For example, these suppliers discussed differences between the geographical locations of headquarters versus field locations. Supplier D stated that, “The factory is based in Denmark, and of course we have a very different culture compared to places we serve, like Africa or India”.

In addition, some suppliers perceived their organisational cultures to be distinct. Supplier R stated that their organisational culture is based on family values because it is a family business. Another supplier, Supplier W, stated that their operations are based on transparency, but whether that was true and whether other suppliers operated in the same way was unclear.

The interviews revealed that there were both suppliers who shared their buyers’ organisational culture and suppliers who differed in organisational culture due to profit/non-profit differences. There tended to be greater differences between buyers and sellers when the sellers served both the humanitarian community and the commercial sector. Suppliers that only served humanitarian actors as customers indicated that their organisational cultures were more similar to those of the buyers. This could be because despite their for-profit status, these organisations solely serve the humanitarian sector and might share other values with their buyers and serve the beneficiaries. As Supplier O stated, “we don’t really have customers so much as we have beneficiaries”. Table 8 provides an overview of the ways the organisational cultures differed across different dimensions of organisational culture.
Table 8 Buyer and supplier view of organisational culture dimensions

<table>
<thead>
<tr>
<th>Supplier type</th>
<th>Suppliers</th>
<th>Organizational culture dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Dominant characteristics</td>
</tr>
<tr>
<td>Commercial</td>
<td>D, E, G, H, J, L, R, T and V</td>
<td>Entrepreneurial, result-oriented</td>
</tr>
<tr>
<td>Humanitarian</td>
<td>A, F, I, K, O, Q, S, Y, ZA</td>
<td>Result-oriented, personal place</td>
</tr>
<tr>
<td>Humanitarian and commercial</td>
<td>B, C, M, N, P, U, W, X and Z</td>
<td>Entrepreneurial, result-oriented</td>
</tr>
<tr>
<td>Buyer</td>
<td>B1 and B2</td>
<td>Structured, controlled</td>
</tr>
</tbody>
</table>

Table 8 Buyer and supplier view of organisational culture dimensions

6.3.3 Collaborative Behaviour and Outcomes

As also seen in previous studies (e.g. Bstieler and Hemmert, 2010), the findings indicate that a similar organisational culture leads to enhanced collaboration, which can positively influence joint efforts. Supplier T stated: "We collaborate with our customers to reduce the cost and time. We also plan the movement of goods jointly". Supplier K reflected on both inter- and intra-level collaboration: "We try to understand the requirement from them and develop products that suit them. So, our engineering team and technical team work closely with them".

The interviews also illustrated how some suppliers put considerable effort into achieving the common goal of improved relief delivery to beneficiaries. Supplier K stated that: "We work together. We assume that they are a part of our company, and they assume the same – we are part of their organisation".

The interview data also indicated that in an HSC, collaborative outcomes, such as new product development, inventory management, and product/service delivery, can be influenced by elements of the buyers’ and suppliers’ organisational cultures, such as trust, information sharing, and commitment. Table 9 shows the findings specifically related to collaboration between buyers and suppliers.
Table 9 Collaborative outcomes and enablers

As seen in Table 9, there is a limited range of outcomes of the collaborations undertaken by the interviewed organisations. The outcomes of these collaborations included: product and service delivery with customization, joint cost reduction, and occasional joint new product development. The limited range of collaborative outcomes could be because buyers have fairly hierarchical organisational culture and “go by the books” (as indicated by B1). While suppliers expressed interest in engaging in a higher level of collaboration, the fairly short periods of collaboration (about three years) discouraged suppliers from making a large investment.

None of the supplier types (H, C, H & C) mentioned any problems with the buyers (B1 and B2) due to differences in organisational cultures. The respondents indicated that a seamless buyer-supplier relationship was facilitated by information sharing, trust, commitment, flexibility, transparency, and mutual respect, in addition to contracts and agreements.

6.3.4 Institutional Logics in the Humanitarian Context

Both buyers interviewed were characterized by institutional logics related to their non-profit status and the assistance they provide to beneficiaries. The suppliers categorized as Humanitarian (see Table 9) followed the same institutional logics as both buyers;
however, types C and H&C followed institutional logics characterized by innovation and achievement of financial targets.

Thus, it appears that some actors in the humanitarian buyer-seller relationship function and collaborate with different institutional logics. Because the buyer organisations (B1 and B2) were large, they could have caused a dominant “humanitarian” logic to dominate the supply chain level and influence supply chain collaboration and outcomes. But instead, actors with differing logics co-exist and collaborate rather well according to the respondents despite the fact that this is a mature field and B1 and B2 have been active humanitarian organisations for more than 50 years. This contradicts previous findings, such as the literature by Meyer et al. (1987) which argues that that mature fields possess congruent logics at the supply chain level.

Institutional complexity exists when several institutional logics converge (Giorgi et al., 2015). Institutional logics characterized by non-profit and beneficiary assistance goals can be referred to as humanitarian institutional logics. Within humanitarian institutional logics, institutional complexity can exist in terms of disaster specifics (e.g. which actors are involved), sectoral specifics (different product types, e.g. shelter might be influenced by industry-specific logics), and phase specifics (different goals in the immediate aftermath of a disaster than in a long-term development phase). Among the organisations interviewed, the suppliers had different institutional logics, leading to institutional complexity.

### 6.3.5 Humanitarian Institutional Logics (HIL)

Based on the literature review, the data, and the proposed view of humanitarian institutional logics, humanitarian institutional logics are understood as fluctuating patterns of behaviour that are disaster-phase specific embodied with norms, values, and beliefs influenced by non-profit and helping people in need goals influenced by a hierarchy as well as power and the size of the central actor the overarching mechanism that connects organisations regardless of their organisational culture (Prasanna and Haavisto, 2018). As seen in the context of this thesis, several actors participate in long-term aid. The principle actor influences both commercial and humanitarian suppliers through institutional logics which are referred to here as HIL. The HIL is an overarching mechanism that connects organisations in long-term aid irrespective of differences in individual organisational cultures.

### 6.4 Findings of Article C

The findings of the case study analysis show how the organisational culture of the focal actor (NGO) influences supply chain collaboration in the NGO led supply chain in a three-echelon perspective. The findings of the article C show that organisational values are the key factor in binding the collaborative ties between the NGO and the commercial supplier. Complementary organisational values manifest in organisational cultural mechanisms that support supply chain collaboration mechanisms. The organisational cultural mechanisms are organisational routines, organisational practices, organisational learning, and organisational flexibility. Supply chain collaboration mechanisms are information sharing, trust, mutuality, and commitment.
6.4.1 Influence of Organisational Culture on the Dyadic Collaboration (NGO and Tier 1 Supplier)

In this case study, the organisational cultures of the NGO and its suppliers are fundamentally different (for instance, the non-profit organisational culture of the NGO and for-profit organisational culture of the suppliers). A close look at the dimensions of the organisational cultures of the NGO and the supplier Z (Table 11) shows the similarities and differences across organisational cultures.

The CEO of the NGO described the organisation’s culture as follows:

...we have a culture of running our operations in a low cost mode. Our employees know this well and we believe that we can do good to the community without raising our costs. In all our internal meetings the idea of keep costs low is passed to our employees. Also, when we meet our suppliers we emphasise that we always look for ways to do business at low cost.

Organisational culture as described by Schein (1991) has three layers: artefacts, values, and assumptions. Assumptions are hard to decipher by people outside the organisation. Thus values must be made accessible to understand the organisational culture (Hinnings, 2011). The values of the NGO are to run an efficient NGO at low cost. As indicated by the Procurement Manager of the NGO,

...we are driven by the values of our founder. We are a low cost organisation. We try our level best to save money in every transaction and every investment, and we always negotiate for a better price. We sit with our suppliers and discuss how to develop a low cost pump. For us, uplifting the lives of the poor farmers is priority and it is ingrained in our culture....

...we never take a business class flight. We save cost by taking a train and in unavoidable situation a low cost flight for meetings...

The NGO’s values are clearly running a low cost business and helping the farmers (Table 10). Thus, setting clear communication in terms of what the NGO values the most and does not want to compromise is important. The NGO collaborating with Supplier Z has clearly set out the requirements.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO</td>
<td>Low cost operations, improve livelihood of the farmers, be inclusive</td>
</tr>
<tr>
<td>Supplier Z</td>
<td>Innovation, openness to ideas</td>
</tr>
<tr>
<td>Supplier A</td>
<td>Leaders through market share</td>
</tr>
<tr>
<td>Supplier B</td>
<td>Product innovation, technological superiority</td>
</tr>
<tr>
<td>Supplier C</td>
<td>Standardisation of products, right people at the right department</td>
</tr>
<tr>
<td>Supplier D</td>
<td>Growth by volume</td>
</tr>
</tbody>
</table>

Table 10 Organisational values of the NGO and the suppliers
Supplier Z is driven by his organisational values of developing new products and openness to new ideas. As the CEO of the Supplier Z puts it,

... we want to be the manufacturer with highest amount of R&D facility in the country. Our founders are very clear in having a very strong R&D team which can meet the needs of our customers. This drives us to be open for new ideas, and our employees are encouraged to bring new ideas from the customers to the table...

Furthermore, the R&D Manager of Supplier Z indicated that the company leadership encourages open communication with lots of activity around being innovative.

...we have a monthly meeting that is only on the recent developments in our solar manufacturing industry. Our boss sends communication on a periodic basis to keep ourselves updated on the technology front....

Organisational cultural values are complementing the NGO and Supplier Z with the need to reduce total product cost (low cost solar salt water pumps) and to take up new challenges from a new product development perspective. The complementary organisational cultures of the buyer and supplier (values) are the starting point of collaboration in this scenario.

For the NGO, successful collaboration in this case would be to help improve the livelihoods of beneficiaries and to develop low cost, high-quality solutions for the salt farming community. For supplier Z, successful collaboration would mean the development of innovative products that suit a wide variety of market needs. As indicated by the CEO of the NGO,

.... It is livelihood generation. It also leads to a reduction in expenses and increase in income through higher output of brine pumped out in a day...

There is a natural fit between the criteria of success in both organisations. As indicated by the CEO of the NGO, “...we work with our suppliers very closely. We work with them at every level, at the state level, and national level…”

The NGO places a strategic emphasis on efficiency coupled with a high level of trust and participation. This emphasis ensures that the NGO can drive efficiency in product development activities while allowing participation and communication so that the supplier can discuss the issues that could deter a final product. As a complement to the buyer, the supplier Z emphasizes that its organisation encourages flexibility, thereby allowing the organisation to be open to new ideas. The sales manager of Supplier Z indicated that:

...We work with the NGO in this new product they need. We want to satisfy our customer, so we are flexible in our approach, and we have meetings regularly to come with the new design of pumps, moreover our Director also insists on developing this product successfully...

In this case, the NGO had perfected the product specification based on several years of trial and error on a small sample of salt farmers. Effectively communicating the product specification aided the collaboration process and helped to bring down the overall cost of the product. The NGO and supplier Z held joint quarterly review meetings. The joint review meetings brought together key personnel in both organisations to review the collaborative performance. This high level of collaboration was possible due to the complementary organisational cultures across the collaboration. Such joint meetings
enhanced transparency and encouraged accountability. Such meetings also strongly
discouraged a culture of mutually blame for inefficiencies and poor performance, leading
to strain in the collaborative relationship.

"Both Rohit and I will sit together and check with these people. Usually, things go
wrong when the one of the two teams is not working well. Then the blame game starts,
the finger pointing starts. Once the two teams get the message that looks the owners
are sitting together and asking why was it not done, then they will be forced to work
together. They have no choice. They better collaborate that is what exactly we are going
to do.

<table>
<thead>
<tr>
<th>Organisational cultural dimensions</th>
<th>Criteria for success</th>
<th>Strategic emphasis</th>
<th>Leadership</th>
<th>Employee management</th>
<th>Dominant characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO</td>
<td>Low-cost high-quality solutions for the community</td>
<td>Efficiency, high trust, participative</td>
<td>Facilitator, Mentor</td>
<td>Teamwork, participation</td>
<td>Personal place, result oriented</td>
</tr>
<tr>
<td>Supplier Z</td>
<td>Product innovation</td>
<td>Openness to fresh ideas, flexibility</td>
<td>Innovator, entrepreneur</td>
<td>Freedom to innovate, risk-taking</td>
<td>Dynamic, entrepreneurial</td>
</tr>
<tr>
<td>Supplier A</td>
<td>Achieving results, profits</td>
<td>Competitive action, achievement</td>
<td>Competitor, result oriented</td>
<td>Competitiveness, achievement of targets</td>
<td>Competitive, result oriented</td>
</tr>
<tr>
<td>Supplier B</td>
<td>To develop highly innovative products</td>
<td>Explore new opportunities</td>
<td>Innovator, entrepreneur</td>
<td>Freedom for new ideas, flexible</td>
<td>Flexible and dynamic, willing to test new ideas</td>
</tr>
<tr>
<td>Supplier C</td>
<td>Business volumes, total solution delivery</td>
<td>Stability, efficiency, and control</td>
<td>Coordinating, organizing</td>
<td>Conformity, stability, traditional</td>
<td>Highly structured, highly procedural</td>
</tr>
<tr>
<td>Supplier D</td>
<td>Customer satisfaction, flexibility</td>
<td>Reaching annual targets</td>
<td>Hard driver, result oriented</td>
<td>Achieving targets</td>
<td>Result oriented, competitive</td>
</tr>
</tbody>
</table>

| Table 11 Organisational cultural dimensions of the NGO and its suppliers |

The leadership qualities of both the NGO and the supplier Z complement one another.

"I will pick up the phone and speak to Rohit and vice versa. He is the CEO of the
company. Anytime day or night. We have spoken at 11pm in the night. That’s ok., we
understand this, there is an emergency, time doesn’t matter. Pick up the phone and talk.
There is no other way to resolve things...
The NGO’s strength in facilitation complements the supplier’s innovativeness, allowing mutual information sharing which leads to removing inefficiency in the product finalization and other processes. Coordination between the dyad extends at the employee level. Employee teamwork and freedom to innovate allows the end goal to be reached with ease. Such similarities in organisational culture between the NGO and supplier Z naturally differ from any expected difference between non-profit and for-profit organisations.

For instance, the sales manager at supplier Z indicated that,

... we had several meetings with the NGO and we understood that both of us have the same organisational values. Both of us want to embrace delivering sustainable solutions for the society. In our organisation, our leadership always insists on delivering sustainable solutions to the society, it is also one of the reasons for our existence in this business.

The findings provide concrete evidence that the organisational cultures of the NGO (buyer) and the tier 1 supplier complement each other. The complementarity of the organisational culture is the foundation for a reciprocal relationship and development of trust leading to a successful collaborative outcome. The findings show that the organisational cultures of the NGO and Supplier Z complement each other. This leads to better collaboration. This finding echoes the findings of Inemyk and Mattysens (2011) that complementing organisational cultures deliver collaborative outcomes. It also agrees with Wang et al. (2008) that knowledge sharing through organisational routines enhances collaborative relationships, as well as Koulikoff-Souviron and Harrison’s (2008) findings that blame culture is a result of poor communication and poor quality information sharing.

### 6.4.2 Influence of Organisational Culture on the Dyadic Collaboration (Tier 1 Supplier and Tier 2 Suppliers)

The organisational cultural values of supplier Z are compared to the organisational values of its suppliers. For the specific product that the NGO needs, the four suppliers are identified for supplying individual items such as solar panels, electric assembly, solar panel stand, and anti-corrosive steel. Table 10 indicates the organisational cultural values of all the four tier 2 suppliers.

**Organisational cultural compatibility between supplier Z and A:** the values of Z and A are complementary. As indicated by the Sales Manager of A,

..we are focussed on sales and increasing our market share. Our management pays its attention to quarterly sales targets. I can say that we are a sales organisation....

These organisational values push Supplier A to be competitive in the market. In this scenario, the collaboration with Supplier Z seemed complementary as they could get a sizable market share through this deal. This is in sync with Guo et al.’s (2014) findings that market orientation is a necessary element in holding up collaborative ties between buyer and supplier.

**Organisational cultural compatibility between supplier Z and B:** The organisational cultural values of Z and B are similar in nature. The sales manager of Supplier B vouches for this.
...we are a supplier to B. we think they are very similar to us in terms of values. We also emphasis on product innovation and our R&D facility is very strong...

Complementing organisational cultures lead to better collaboration (Caddilon et al., 2013). The data also echoes the same phenomenon between this dyad.

Organisational cultural compatibility between supplier Z and C: Supplier C’s organisational cultural values are very traditional and hierarchical. There is very little flexibility in accommodating customers. However, Supplier Z is flexible to procure the essential components for the pump. Moreover, the component that supplier C is supplying is highly standardised leaving very little room for any negotiation. The sales manager of supplier C stated that,

...we sell standardised products and our product margins are reasonable compared to the market. So, we don't want to negotiate on the price or the product, we simply deliver....

Cao et al. (2015) found that organisational flexibility is necessary for collaboration. However, in the case of the Supplier Z–C dyad, supplier Z is flexible and supplier C is not. The finding provides a new avenue for further research if this is the case with other types of organisations—family-owned, SMEs, and big enterprises.

Organisational cultural compatibility between supplier Z and D: Organisational cultural values of Z and D are complementing one another. Since supplier D is determined to grow by volume of business, for them every opportunity is a way to improve the sales volume.

...we are a small organisation and we want to grow by business volumes. So, we try to encash every opportunity, so we are flexible to meet the needs of our customer.

Yunus and Tadisina (2016) found that flexibility in an organisational culture could hold collaborative relationships as it is found in this dyadic relationship.

The organisational culture of supplier Z gels with its suppliers’ organisational culture. Among the four suppliers (A, B, C, D), the organisational culture of supplier B is very similar to the organisational culture of supplier Z (as seen in Table 11), leading to a strengthened buyer-supplier relationship. The high level of collaboration between suppliers Z and B resulted in joint product development. This finding echoes the previous research of Inemek and Matthyssens (2013), and Brettel and Cleven (2011).

The organisational cultures of A and D are predominantly similar in four cultural dimensions between the organisations sharing similar values as seen in Table 11.

...if you see that supplier (D) they have more or less same approach as we do. I have seen them since two decades and they have visited our factory. Doing business is very easy with that supplier as we understand each other...

As shown in table 11, supplier Z collaborates with supplier A and D, resulting in product customisation as the collaborative outcome. The organisational cultural dimensions of supplier C are different from Z in almost every aspect except for some similarities regarding leadership. Because of the differences in organisational cultures, the buyer-supplier relationship is limited to transactions only.
...the other supplier (C) is very old style and sells standardised parts. They have so many terms and conditions with us. So, we don't bother them so much. Right now we have a requirement (the electrical assembly) so we just buy from them. It is readily available with them. We just place an order and the stock arrives in two or three days...

6.4.3 Enablers of Supply Chain Collaboration with NGO as the Focal Firm

Throughout the supply chain, mutual trust in the buyer-supplier relationship is an invisible thread that connects all of its actors. Similar to previous studies based on commercial supply chains (Fawcett et al., 2008; Whitfield and Landeros, 2006; Wang et al., 2008), information sharing between the actors in the supply chain influences collaboration and collaborative outcomes in this NGO-led supply chain. Table 12 provides various collaborative outcomes and the enablers of collaboration between the actors.

Trust plays an important role in cementing the collaborative relationship between the actors, especially when the fundamental business motives are different (i.e. for-profit vs. non-profit). Information sharing and mutual trust between actors is important for both for-profit and non-profit organisations and act as key enablers of collaboration throughout the supply chain.

Between the partners there is a sense of commitment that drives the idea of new product development by supplier Z. For instance, a sales manager from supplier Z indicated that:

...when we saw the need of the salt farmers for a solar powered salt water pump, we felt we can deliver. We spoke to salt farmers to understand their requirements and current issues in the pump. The meeting made us feel committed to developing a solution.

The NGO interacts with the suppliers of Z: A, B, C, and D for sharing technical expertise that it gained over a period of seven years of field trails of solar powered salt water pumps. The technical expertise also helped the NGO in the meetings to drive the idea of keeping the cost low without compromising on the quality (table 12).

To bolster collaboration in the supply chain, suppliers A, B, and D stood committed to developing the final product. The transparency in communication between the focal actor and the two tiers of suppliers enabled achievement of the common collaborative outcome: the development of a new product, solar powered salt water pumps. The focal actor, the NGO, has also taken steps to show the suppliers how they can be a part of the collaborative goal.

As supplier A indicated:

...we went to Runn of Kutch and saw the need of the agariyas. We understood how the new salt water pump NGO that wants to develop can help the agariyas. We felt committed. Our organisation allows us to take decisions that are essential from a customer perspective, and we went ahead developing a low cost solar panel for our customer.

In a similar way, the NGO also invited suppliers B, C, and D to visit the salt farming area, however supplier C turned down the invitation.
Supplier B indicated that:

...our organisation works in an open way. Our company always supports developing new products, open to new ideas. So, we never had a problem in convincing my boss about taking up the project. Moreover, NGO need is very specific, and they talk to us once in a while to understand the updates on the project. They also saw our drawings of solar panels and gave their suggestions...

The NGO also highlighted that:

...supplier C is an old style company. They are not so flexible, but they deliver goods on time. Since they sell standardised goods we don’t bother to convince them to make a new design for us. The product quality is good and delivery errors are very rare, so we didn’t bother to give them a second invitation for visiting the salt farm.

It is found from the above evidence that factors such as commitment, flexibility, and transparency strengthen the collaboration in this NGO led supply chain. This finding echoes Barratt’s (2004) work on enablers of supply chain collaboration.

<table>
<thead>
<tr>
<th>Actor</th>
<th>Collaborative outcomes</th>
<th>Enablers of collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO</td>
<td>Low-cost high-quality product, joint review meetings</td>
<td>Trust, mutuality, commitment, transparency, communication</td>
</tr>
<tr>
<td>Supplier Z</td>
<td>New product development, periodic monitoring of product performance, installation at the field, educating farmers on operating the solar pumps</td>
<td>Trust, commitment, transparency, information sharing, flexibility</td>
</tr>
<tr>
<td>Supplier A</td>
<td>Product customization</td>
<td>Commitment, information sharing, trust</td>
</tr>
<tr>
<td>Supplier B</td>
<td>Product development</td>
<td>Trust, information sharing, commitment to agreements</td>
</tr>
<tr>
<td>Supplier C</td>
<td>Product supply</td>
<td>On-time product delivery, trust</td>
</tr>
<tr>
<td>Supplier D</td>
<td>Product customization</td>
<td>Information sharing, flexibility, trust</td>
</tr>
</tbody>
</table>

Table 12  Collaboration between the supply chain actors

6.4.4  Influence of Institutional Logics on Supply Chain Collaboration

Institutional logic plays an important role in directing collaboration in the NGO-led supply chain to the specific outcome of low-cost, high quality solar salt-water pumps. In this case, the community’s need for the solar salt-water pumps is captured by the focal
NGO and drives the supply chain. As the salt farming community is extremely price sensitive to the final product, the NGO has little room to adjust the final cost or the quality of the product.

In order to drive the cost down, the NGO has provided the supplier Z with the perfected product specifications, which are the result of a few years of trial and error in the field. Through frequent communication and transparency of process, the NGO has driven the logic of keeping the product cost to the minimum with its first-tier supplier Z.

As supplier Z stated:

...NGO wants the pumps in a lower price. As our top management visited the salt farm in Gujarat we understood we can provide pumps for salt farmers. We also know that the NGO operates a low-cost model. We have seen their offices and operations – everything is a cost cutting culture. So, we can understand that NGO can only operate in a low-cost environment. We have trimmed the new product a lot as per NGO's request – when you compare the cost of similar horse power salt water pump we supply to other companies - which has made us supply low cost pumps finally...

The NGO emphasizes the importance of keeping costs low as part of its organisational culture. This is evident in its operations and artefacts. The NGO’s CEO also reinstated the low-cost operations as its organisational culture, indicating that:

...we don’t have deep pockets. Our members are salt farmers and women who work in the agricultural fields, we cannot take a huge subscription fees – they will simply quit. So, we have from the beginning reinforced the idea that we can do good things at low cost with our employees. We also talk in the same way to our suppliers. You can see for yourself the office, the infrastructure are minimal. It helps us is reducing the overall cost. We rarely use flights, and even if we use it is a low-cost airline. We procure farm produce from nearby villages in bullock cart. We also understand that low cost comes with a delay, so we plan in advance...

The periodic meetings between the NGO and the tier 2 suppliers also emphasized the logic of low-cost, high quality product. Through salt farm visits, the NGO managed to convince the tier 2 suppliers the importance of developing a new product that meets the NGO’s price and technical specifications.

Supplier A indicated that,

...we initially found the idea of developing a new solar powered salt water pump interesting. But we could not match the low cost. The NGO came for a meeting with us and they demonstrated how can the idea be made reality, and still we could make a profit. The NGO provided technical specifications and also, they shared sources from where we could buy some key items which can lower our cost...

The NGO was successful in communicating with the tier 2 suppliers A, B, and D to reduce the cost of the products to lower the final cost to the salt farmers. However, supplier C was not flexible in reducing costs since it was a traditional organisation that specializes in manufacturing standardised products. However, all the other suppliers were able to reduce the cost of their product as the NGO provided technical knowledge about the product and shared information about low cost suppliers from other Indian states.


7 DISCUSSION AND CONCLUSIONS

The overall aim of the thesis is to examine the relationship between the organisational culture of buyers and suppliers and collaboration in humanitarian supply chains during long-term aid. This research question matters a lot due to the practical relevance. As shown in the introduction section several billion euros worth long-term aid has been spent by the actors. In the recent past long-term aid has extended to an average of seven years thus significantly extending the length of the aid program. During such a lengthy period, actors tend to collaborate towards delivering long-term aid. The actors that collaborate possess a variety of organisational cultures.

7.1 Conclusions of Article A

Article A’s research question is the first research question of the thesis: how does organizational culture influence supply chain collaboration? This article finds that organisational culture influences supply chain collaboration (Fawcett et al., 2015; Madupalli et al., 2014). The findings show that several favourable outcomes happen through collaboration. These include new product development (Brettel and Cleven, 2011), joint inventory management (Storey et al., 2005), joint cost reduction (Fawcett et al., 2008), technology implementation between partners (Vaccaro et al., 2010), and innovation (Whitefield and Farrell, 2010). The literature review also shows that failures in collaboration due to differences in the organisational culture between the buyer and supplier exist (Fawcett et al., 2015; Madupalli et al., 2011).

The framework developed in the article A shows how organisational culture influences supply chain collaboration. The influence of organisational culture starts from the organisational leadership as an antecedent for collaboration. The leadership influences organisational values that are focused on organisational learning and organisational flexibility. The organisational values influence organisational practices and organisational routines that are enabled by trust, information sharing, commitment, and mutuality, resulting in collaborative outcomes.

However, the existing literature remains inconclusive about what happens when the actors in the supply chain have complementary organisational cultures (Cadden et al., 2013) versus similar organisational cultures (McAfee et al., 2002). Moreover, at a dyadic level, the supply chain literature indicates that similar organisational culture is better for collaboration (McAfee et al., 2002). On the other hand, the findings of (Cadden et al., 2013) suggest that at a supply chain level, complementary organisational cultures are better for collaboration.

The systematic review findings (article A) show that there are very few studies that explore the intersection of organisational culture and supply chain collaboration in humanitarian contexts from a long-term aid perspective (Rodriguez et al., 2016; Perkins et al., 2011). Short-term aid and long-term aid have different characteristics as described in the introduction section, thus showing the need to fill the research gap regarding these relationships in the long-term aid context. The literature review also finds that there are five attributes of organisational culture that help supply chain collaboration. They are leadership (Storey et al., 2005; Lee et al., 2008), organisational learning (Johnson and Sohi, 2003; Selnes and Sallis, 2003), organisational flexibility (Vaccaro et al., 2010; Liu, et al., 2010), and organisational routines (Schilke and Goerzon, 2010; Shub and Stonebreaker, 2009).
7.2 Conclusions of Article B

The second research question of the thesis is RQ2: How can organisational culture influence collaboration in long-term aid humanitarian supply chains? Article B addresses this research question from a dyadic standpoint. A framework is developed based (Figure 10) on the attributes that help supply chain collaboration which were found from article A. The framework delineates that organisational leadership is the antecedent pushing the organisation to collaborate. Organisational leadership influences the organisational level of learning and flexibility in terms of being open to new ideas. Such an organisation uses organisational routines as a mechanism to share its information with the next actor in the supply chain, thus building collaboration. Organisational leadership, organisational learning and flexibility, and organisational routines are the manifestations of organisational culture that help in information sharing, which is the beginning of collaboration.

The findings further reveal that, at a firm level, organisational routines are the fundamental elements of an organisational culture that acts as a mechanism to bridge every day to day activity in a buyer-supplier collaboration. The finding shows that more research is required to understand how organisational culture influences a humanitarian supply chain collaboration. Hence the next two articles B and C are focused on the influence of organisational culture on HSC collaboration from a dyadic perspective and supply chain perspective.

Article B shows dyadic level collaboration exists in the upstream. In article B, the buyers interviewed were humanitarian organisations (UNHCR and UNOPS) while the suppliers included humanitarian suppliers, commercial suppliers, and humanitarian/commercial suppliers. Suppliers that were not from a humanitarian background have a different organisational culture which focuses on profit maximisation. But it is unexpected to find that such differences do not create any problem in collaboration. The framework developed from the literature that links institutional logics, organisational culture, and collaboration was supported. Humanitarian institutional logics play a vital role in ironing out the effects of differences in organisational cultures at an inter-organisational level. Hence the thesis makes a major contribution to long-term aid literature by introducing the concept of humanitarian institutional logics. Humanitarian Institutional Logics (HIL) is defined as:

- behaviour with fluctuating patterns;
- disaster-phase specific;
- embodied with norms, values, and beliefs influenced by non-profit and helping people in need with goals;
- influenced by a hierarchy as well as power and the size of the central actor;
- overarching mechanism that connects organisations regardless of their organisational culture.

HIL also results in collaborative outcomes such as new product development. HIL is unable to result in more collaborative outcomes due to the restrictions posed by public procurement policies of the UN (the buyers in the study). The subsection pertaining to article B findings presents more findings. This study reinstates the research question indicated by the systematic review: how does organizational culture influence collaboration in a supply chain with an NGO as the focal actor with for-profit suppliers.
7.3 Conclusions of Article C

Article C’s research question is the RQ2 of the thesis: how can organisational culture influence collaboration in long-term aid humanitarian supply chains? The findings show that in a NGO led supply chain with for-profit suppliers, differences in organisational cultures exist (for example, non-profit vs. for-profit). Although these differences should not cause the collaboration to fail or generate tension in the buyer-supplier relationship (as per supply chain literature), it is surprising when collaboration in the supply chain holds and produces a positive outcome such as solar powered salt water pumps for salt farmers, a significant new product development. This is attributed to the humanitarian institutional logics that trickle through the upstream supply chain. Cultural complementarities play an important role in keeping the upstream supply chain partners engaged in collaboration. Such organisational cultural complementarities also foster trust between the actors in the collaboration that makes the collaborative ties stronger. Section 4.3 presents more on findings from article C.

In summary, this thesis finds that organisational culture influences supply chain collaboration through four key attributes: organisational leadership, organisational learning and flexibility, organisational routines, and information sharing in a general supply chain view. In a dyadic context in the HSC, the study reveals that the organisational culture of the buying organisation extends its influence beyond the buyer to the supplier at an inter-organisational level which is found to be humanitarian institutional logics. HIL determines the depth of collaboration and the expected collaborative outcomes. The public procurement policies of UN agencies (a part of the UN organisational culture) limit the range of collaborative outcomes. At the supply chain level (three echelons), humanitarian institutional logics exist and open up the possibilities of collaborative outcomes in the absence of public procurement policies of the buyer. Organisational cultural complementarities are found to strengthen long-term aid collaboration in a three-echelon supply chain. The conclusions section discusses the implications of this thesis’s findings.

7.4 Discussion and Theoretical Contribution of the Thesis

This thesis aims to provide an understanding of the influence of organisational culture on long-term aid HSC collaboration. This thesis takes an organisational culture perspective to understand the phenomenon.

The findings of this thesis support the view that suppliers from various backgrounds have different organisational cultures compared to non-profit organisations. The differences in the organisational cultures manifest through a principle observable attribute: organisational leadership. This influences the organisational values. Organisational values influence organisational learning and flexibility, which in turn influence information sharing through the mechanism of organisational routines. The organisational culture of a firm not only influences the internal processes of the firm, but also influences relationships with other actors, including relationships with suppliers and customers. Hence, organisational culture is the foundation of supply chain collaboration.

It is intriguing to note that differences in organisational cultures between buyers and suppliers do not impede collaboration in the long-term aid setting. This may be explained by institutional logics. Institutional logics provide an explanation for why some processes are performed in a specific way. The institutional pressure is shared from one
actor (the central actor) in the supply chain to the other actors as a dominant logic. It is possible that every organisation has a way of working that is characterised by a logic. An organisation may also have more than one logic and in some instances, those logics can compete with each other. Of these logics, one becomes dominant.

Similarly, in a supply chain, the logic of the central firm (humanitarian buyer) may or may not compete (when it is also humanitarian supplier) with the supplier’s logic. When the logic competes, the logic of the central firm dominates the logic of the supplier firm. This domination of institutional logic affects the organisational culture to an extent that the institutional logic differences do not lead to conflict. In other words, the supplier firm acquires flexibility to handle the relationship with the buyer. This flexibility to work on a different logic gives the supplier firm (either commercial or commercial and humanitarian) the ability to collaborate with the buyer and work on collaborative outcomes. Some factors positively contribute to the collaboration: mutual trust, information sharing, openness and communication, and commitment. These are the enablers to the collaboration.

In a supply chain with an NGO as the central actor and for-profit suppliers also works in a similar way, but needs some binders. While the NGO is in the same humanitarian sector as a UN agency, the NGOs don’t enjoy the vast resources, power, visibility, and size that a UN agency commands. In such situations, the role of tier one supplier is the key to the success of the supply chain. The tier one suppliers interact with the buyer on one end and with suppliers on the other end. The organisational similarity between the two tiers of supplies (for-profit orientation) helps maintain a relationship with each other (say, S1 and S2). However, the organisational culture of the supplier S1 is critical in maintaining the relationship with the NGO (the central actor). This research demonstrates that complementarities between the organisational cultures of the NGO and S1 ensures enough binding happens between the dyad. Such complementarities diminish the S1’s for-profit nature and enhance the overall relationship with the central actor. The trade-off between profits versus working with a great partner (great partner because of complementing organisational cultures) arises. Choosing one side of the trade-off makes the collaboration while choosing the other side breaks the collaboration.

Theoretically, this thesis contributes in several ways. The first research question is how does organisational culture influence supply chain collaboration? In this sense, the thesis contributes to the theory by developing a framework that explains the relationships between elements of organisational culture and supply chain collaboration. The framework provides a finer theoretical link that is established between the antecedents, organisational cultural elements, and collaboration. Organisational leadership acts as a precursor (Hyypiä and Pekkola, 2011) for a unique organisational culture that supports organisational learning and organisational flexibility (Brettel and Cleven, 2011; Schilke and Goerzon, 2010).

In the long-term aid field, several actors work together to deliver the aid. This is different from short-term aid supply chains as initially shown in the context of this thesis. Much of the present-day literature is focused on short-term aid (Kovacs and Spens, 2009). This thesis also contributes to the collaboration literature in the long-term HSC. This thesis's findings are contrary to the commercial supply chain management literature. The commercial supply chain literature finds that organisations with different organisational cultures don’t collaborate and if they collaborate, it results in a short-term collaboration (Fawcett et al., 2015). However, in long-term aid, actors collaborate in spite of the differences in organisational culture. Collaboration in long-term aid with UN agencies as buyers does not result in a wide variety of collaborative outcomes unlike the commercial
supply chains. This could be attributed to the limitations posed by institutional environments and public procurement policies. However, collaboration between non-profit organisations and commercial suppliers is found to be longer than three years as there are no limitations of public procurement policies. Organisational values are the core of organisational culture, which enables collaboration between the buyer a supplier. Dyads with similar and complementary organisational cultural values benefit from collaboration.

The systematic literature review at the intersection of organisational culture and supply chain collaboration provides a synthesis of extant research. The major theoretical contribution of the article A is the development of a framework that synthesises extant research on the intersection of organisational culture and supply chain collaboration. The framework adds to theory in several ways. First, the framework has established that organisational culture is at the centre of supply chain collaboration. While the existing literature points out that organisational cultural differences between a buyer and supplier would result in poor collaboration and also in broken collaboration, this study points out exactly how and why such issues occur. Second, this study has identified four organisational cultural mechanisms that are at the core of collaborative behaviour. Existing literature has given this matter very limited attention, leaving the question of why collaborations break at a foundational level unanswered. The mechanisms identified are organisational routines, organisational practices, organisational flexibility, and organisational learning. These mechanisms are mission critical for supporting the collaborative behaviour of the firm. Third, this study finds that four mechanisms are key to supply chain collaboration: information sharing, trust, mutuality, and commitment. All of these four are critically important. In other words, absence of one of the mechanisms could break the collaboration.

Fourth, this thesis further contributes to existing theory by coining the term “Humanitarian Institutional Logics (HIL)”. As expressed in the previous section, HIL specifically applies to the humanitarian context. Collaboration between actors often happens in a disaster-specific context. Conversely, the same set of actors does not always participate in long-term aid at the same time as disaster aid. Thus, buyers and suppliers who participate in a specific type of aid (short-term aid versus long-term aid) do not necessarily interact regarding other types of aid (for example, an NGO and a commercial supplier do not necessarily always work together in every disaster management scenario). HIL is the phenomenon profoundly present in long-term aid. Understanding this phenomenon could enable better collaborative ties between non-profit and the commercial organisations. This helps in realising more collaborative outcomes that are essential to long-term aid.

In a dyadic context composed of an NGO and for-profit supplier, the influence of the supplier’s for-profit nature is mitigated by the institutional logics embodied within the norms, values, and beliefs that support the same goals as the non-profit NGO. As a result, the NGO and the supplier share many similar cultural attributes despite a different revenue model. Such supply chains are generally influenced by the coercive pressure of the institutional logics of the central actor power. These logics are a mechanism that connects humanitarian buyers with any type of suppliers (commercial, humanitarian, or commercial and humanitarian) that have different organisational cultures to work together to deliver relief to the beneficiaries.

Finally, the framework presented in article B captures linkages between institutional logics, organisational culture, and collaboration. This framework is a new contribution to the field of humanitarian supply chain management. It also helps advance
understanding of how organisational culture can influence collaboration. Moreover, multiple competing institutional logics from the buyer-supplier converge and influence the organisational culture of the supplier. The framework also captures this convergence and shows how collaborative outcomes are realised in the buyer-supplier collaborative relationship.

This research presents the effects of organisational culture on supply chain collaboration in the humanitarian context. While the role of organisational culture is important in the collaboration, humanitarian institutional logics also play a key role in driving successful collaboration in the humanitarian supply chains. The effects of differences in organisational culture are mitigated by the institutional logics, thus allowing the supply chain to deliver humanitarian relief.

7.5 Managerial Implications

First, for commercial supplier firms, this thesis shows the following. The mechanisms of organisational culture are essential to having a collaborative relationship with the buyers. They are organisational practices, organisational routines, organisational learning, and organisational flexibility. All of the four mechanisms are essential in maintaining the collaborative relationship. Furthermore, supply chain collaboration mechanisms such as information sharing, trust, commitment, and mutuality are essential in building a strong collaborative relationship. Supplier firms need to develop a strong foundation with all eight mechanisms for a successful collaborative outcome.

In addition, the thesis shows that it is necessary to sensitise that the phenomenon of HIL is in action. This understanding could help mitigate organisational cultural differences between the buyer and supplier. The supplier organisations need to show additional flexibility to cater to long-term aid. Other mechanisms of organisational culture such as organisational practices, organisational routines, and organisational learning are essential to holding collaborative ties in addition to trust, information sharing, commitment, and mutuality.

Second, for humanitarian procurers, this thesis shows the following. Unlike suppliers, buyers can demonstrate little or no flexibility as an organisational cultural mechanism. However, three other mechanisms are quite essential similar to supplier organisations: organisational practices, organisational routines, and organisational learning. All four mechanisms of collaboration are necessary for the collaborative relationship. Complementarity in these mechanisms would result in collaborative benefits.

Furthermore, this thesis shows the following. To create highly effective long-term aid, collaboration is the key. It must be noted that if the HIL phenomenon is in action, organisational flexibility can be reduced. The effect of organisational flexibility is balanced by the phenomenon of HIL. In addition, the mechanisms of organisational culture such as organisational practices, organisational routines, and organisational learning are necessary for reaching successful collaborative outcomes. Moreover, a collaboration mechanism such as information sharing needs to be supported in order to enhance collaborative outcomes. This is due to the limiting effects of public procurement policies.

This thesis creates an awareness about the influence of organisational culture on collaboration in the humanitarian context. The first research question (how does organisational culture influence supply chain collaboration?) contributes to the
managers that work in long-term aid through finding that organisational culture is at the heart of collaboration (Prasanna and Haavisto, 2018). Top managers need to responsibly convince their leadership that organisational learning and flexibility is necessary to adopt organisational routines that help collaboration through information sharing with the partners in the supply chain (Cao and Zhang, 2011). These routines can help mitigate the differences in organisational culture and help organisations reap the benefits of collaboration (Prasanna and Haavisto, 2018). Therefore, in this manner, the thesis helps build better collaboration between partners and a stronger buyer-supplier relationship due to organisational practices enabled through quality information sharing, trust, and commitment (Barratt, 2004). The thesis also sensitises the managers that institutional logics emerging from the buyer can mitigate the effects of differences in organisational culture.

Humanitarian institutional logics plays an important role in explaining the differences in organisational cultures between buyers and suppliers. The logics work from a humanitarian need to provide relief – either for immediate response, in preparation to face a disaster, or in the reconstruction phase (Prasanna and Haavisto, 2018). The ongoing collaboration between buyers and sellers in the humanitarian sector is affected by humanitarian institutional logics. Thus, understanding and appreciating differences will not only ensure that managers work more efficiently in the relief environment, but also collaborate to achieve higher level collaborative outcomes (Balcik et al., 2011). This framework and the concept of humanitarian institutional logics will help partners across the industry and improve collaborations.

This finding of this thesis is particularly relevant to managers in long-term aid in further ways. Almost all companies (for profit / not for profit) are in a supply chain in the business world. Therefore, it becomes essential to work with other actors (Olaruntoba and Grey, 2006). Every company has limited resources that makes them dependent on a partner to share the resources and achieve a mutually agreed upon goal. However, every organisation’s culture differs from its partner’s.

The second research question (how can organisational culture influence collaboration in long-term aid humanitarian supply chains?) contributes to the managers by finding that, from a long-term aid perspective, the scope of collaboration extends beyond coordination, cooperation, orchestration, and supply chain integration. This is due to the influence of humanitarian institutional logics (HIL). HIL is different from institutional logics in that HIL’s influence can be felt despite of the organisational cultural differences between buyer and supplier (Prasanna and Haavisto, 2018). Therefore, this thesis developed and defined a new concept: a humanitarian institutional logics that helps managers to understand the phenomenon of collaboration in long-term aid. For a collaboration to yield successful collaborative outcomes in a long-term aid project including new product development, product innovation, joint cost reduction, and joint inventory management, collaborative behaviour is essential as found in commercial supply chains (Fawcett et al., 2015). Article B discusses this in detail. Collaborative behaviour is a precursor to collaborative outcomes. In order to have healthy collaborative behaviour, managers need to ensure that the organisation collaborates internally and externally (Powell, 1998). Internal collaboration is necessary for working together as one organisation. This thesis contributes to the inter-organisational collaboration also called external collaboration (Powell, 1998).

Organisational practices are also called organisational routines and help keep collaborative ties (Hinnings, 2012) between the buyer and supplier healthy. Essentially, managers need to understand that organisational routines are the mechanism through
which collaboration occurs operationally. Sharing quality information is also called the backbone of the collaboration.

Often, differences in organisational culture can cause strain in sharing quality information (Inimek and Mathysens, 2013). This is the first stage of bringing in a blame culture between the dyad. In a blame culture, information hoarding causes tension between the buyer and supplier. Hence it is essentially a managerial task to reduce such tension between the dyad (Fawcett, 2015). If the organisational cultural values of the buyer and supplier are complementary, then collaborative outcomes are easily achievable in long-term aid operation. Article C discusses this finding deeply. Furthermore, it is essential to the managers to understand that organisational cultural values are the ones that drive the culture of the organisation. It is also relevant to note that congruent organisational cultures between the buyer and supplier also strengthen a collaboration (Caden et al., 2015). Other organisational cultural aspects such as organisational flexibility help in situations when the buyer or the supplier needs more clarity of information in order to keep the supply chain working (Barratt, 2004).

Managers of commercial suppliers in long-term aid need to acknowledge that institutional logics play an important role in supply chain collaboration and collaborative outcomes (Prasanna and Haavisto, 2018). For instance, the organisational practices of the suppliers can be in sync with the buyers. Such sensitization of humanitarian institutional logics could aid successful collaboration between buyers and suppliers (Prasanna and Haavisto, 2018). It is very much possible that there could be several institutional logics in a supply chain. For example, a large humanitarian organisation could have its own institutional logics that it expects its suppliers to adapt to during collaboration (Giorgi et al., 2015). Commercial suppliers adopt the logics and collaborate with humanitarian organisation to develop new products. However, for a supply chain to achieve a common goal, one logic dominates as shown in the example. Such a situation gives rise to the concept of a constellation of logics. In such a situation several logics co-exist (Scott, 2001).

### 7.6 Limitations of this Study and Future Research

Like all research studies, this research has limitations. Article B is developed through a qualitative research design. Only two buyers were interviewed (UNHCR and UNOPS). Including a larger number of buyers could further strengthen the findings. Secondly, other methods, including survey techniques across a wide sample of buyers and suppliers, could offer additional ways to test the hypothesis in this setting. The framework can be further expanded to check whether it holds true in a triadic situation or on a supply chain level with multiple tiers of suppliers. The framework also needs further validation from different geographic locations to strengthen it.

The case study in article C provided a preliminary understanding of the relationships studied in this thesis. The propositions presented in the article C needs to be tested empirically to better understand the impact of organisational culture on humanitarian collaborations between buyers and sellers. Moreover, the conclusions developed a need to test in settings outside of an emerging economy context to test the generalisability of those conclusions. In article C, a case study is used to answer the research question. In this case also, a mixed method involving quantitative methods could augment the findings through triangulation. Multiple case studies could have offered additional information in other settings so as to compare results between cases.
Humanitarian institutional logics could be further tested in other contexts and with other methods to solidify the concept in the area of humanitarian supply chain management. Further, humanitarian institutional logics can be examined on other aspects of collaboration in different stages of disaster management: disaster preparedness, immediate relief, and reconstruction. This could help the concept of humanitarian institutional logics grow more robust.

The framework presented in article B could be tested quantitatively, thus contributing to the theory of supply chain management. The framework can be further expanded to check whether it holds in a triadic situation or in a supply chain level with multiple tiers of suppliers. The framework needs further validation from different geographic locations to strengthen it.

The case study in article C provided a first level understanding of the phenomenon. The propositions presented in the Article C need to be tested empirically to understand how each proposition turns out at the field level. Moreover, the propositions need to tested beyond the emerging economy context so that the generalisability of those propositions can be expanded, leading to further theory development.

7.7 Status of Articles for Publication


Article B: Published, International Journal of Production Research


Article C: Submitted, Journal of Supply Chain Management. Co-author: Jennifer L. Green, MIT CITE
REFERENCES


UN System (2015). Total expenditure by category. Available at https://www.unsystem.org/content/FS-Foo-04


APPENDIX 1 SEMI STRUCTURED INTERVIEW GUIDE

Interview guide for the study linking Supply chain collaboration, Organisational culture and Flexibility

Name of the org:
Email-address of contact:
Name of the person:
Sectors you work in: (W&S)
Type: Commercial / NGO / UN / Govt. / University

1) How do you define success in your organisation?
   a. How is the organisational structure supporting XXX...
      i. Trust; Teamwork, Individual (are goals set on individual or team level); Leadership(centralized/ decentralized decision making), Freedom/ Regulation, Profit oriented/ Organic growth oriented, Rules/ Results orientation.

2) Which Humanitarian actors do you work with?

3) How do you work with them?
   a. How do you work with them jointly?
   b. How intensely do you work with them?
      i. (What activities (joint product assortment, common manufacturing, joint inventory management) information sharing, commitment, mutuality, trust, transparency, length of collaboration)

4) How does your organisational culture differ from that of your customers in the humanitarian sector?

5) If any problems arise (e.g. change in demand/specifications / requirements / quality issues...), how do you resolve these with your (humanitarian) customer? Examples/ stories?
   a. How do you ensure that your solution will result in the desired overall performance?
      i. Why did you choose that solution (differences)?
APPENDIX 2  THE ARTICLES

Article A: Sabari R. Prasanna: Supply chain collaboration and organizational culture: A systematic review


Article C: Sabari R. Prasanna & Jennifer L. Green: The role of organizational culture in supply chain collaboration: NGO context
Supply chain collaboration and organizational culture: A systematic review

**Purpose:** Collaboration between partners in a supply chain results in several outcomes. In addition, researchers have shown that organizational culture plays an important role in maintaining collaboration. As the research findings are scattered, a synthesis of extant research on this topic is required.

**Design/Methodology/Approach:** This article follows systematic literature review as suggested by Tranfield et al., (2003)

**Findings:** The results show that five attributes of organizational culture help successful supply chain collaboration: information sharing, organizational routines, leadership, organizational learning, and flexibility. However, the effects of organizational culture on collaboration from a dyadic perspective are different from a supply chain perspective. This ambiguity leads to new directions for future research and highlights under-researched areas that require more examination.

**Research implications:** This study contributes to the ongoing discussion about supply chain collaboration, success stories, and failures from an organizational culture perspective by bringing the less visible to light. A framework is developed through synthesizing literature in the intersection of organizational culture and supply chain collaboration.

**Originality / Value:** Integrating supply chain collaboration and organisational culture literature, this study synthesizes how mechanisms of organisational culture engage with mechanisms of supply chain collaboration towards collaborative relationships between organisations.

**Keywords:** Supply chain collaboration, Organizational culture, Systematic review
Introduction

Collaboration among supply chain partners has attracted interest from scholars since the 1990s (Barratt, 2004). The surge in interest in this topic culminated in several definitions of collaboration. These definitions can be grouped into two major groups: (a) process focus and (b) relationship focus (Cao & Zhang, 2011). Process focus considers two or more actors in a supply chain collaborate to achieve common goals (Mentzer et al. 2001; Stank et al. 2001; Manthou et al. 2004; Sheu et al. 2006). For example, Simatupang and Sridharan (2002, p.19) defined collaboration as ‘two or more chain members working together to create a competitive advantage through sharing information, making joint decisions and sharing benefits which result from greater profitability of satisfying end customer needs than acting alone’.

Relationship focus considers the inter-firm relationship, antecedents, factors influencing the relationship, long-term orientation, resource sharing, etc. (Bowersox et al. 2003; Golicic et al. 2003; Fawcett et al. 2008; Soosay et al. 2008). For example, Sandberg (2007) defined collaboration from a relational perspective as “relationship between independent firms characterized by openness and trust where trust, rewards and costs are shared between parties” (p.275).

Collaboration between firms results in a range of outcomes, such as new product development (Lee et al. 2008), joint cost reduction (McIvor and McHugh 2000; Fawcett et al. 2008), and joint inventory management (Storey et al. 2005; Shub and Stonebreaker 2009). Collaborative outcomes are also found in logistics (Naesens et al. 2007), sales promotion (Cadilhon et al. 2005), technology diffusion in the supply chain (Patterson et al. 2003), etc.

However, collaboration between partners is not necessarily long term. A critical reason found to disrupt a collaborative relationship between firms is differences in the organizational cultures (Fawcett et al. 2015). Some failures in supply chain collaboration come with a penalty. For example, in firms hit by a disruption in supplier relationship, on average, a lower profit of 6.920% is posted, costs increase by 10.66%, and inventory increases by 13.88% (Hendricks and Shingal 2005).

The concept of organization culture was borrowed from anthropology (Kluckhon 1951; Altman and Baruch 1998). Schein’s (1991) seminal work on organizational culture guided further theory development. According to Schein (1991), organizational culture is defined as “(a) a pattern of basic assumptions, (b) invented, discovered, or developed by a given group (c) as it
learns to cope with its problems of external adaptation and internal integration, (d) that has worked well to be considered valid and therefore, (e) it is taught to new members as the (f) correct way to perceive, think, and feel in relation to these problems” (p. 247). An organization’s culture can be a source of competitive advantage if the culture is valuable, rare, and imperfectly imitable (Barney 1986). These characteristics emphasize the importance of organizational culture in influencing the firm’s performance.

The motivation for the present study is to understand the intersection of two highly researched areas: organizational culture and supply chain collaboration. Organizational culture manifests in a firm at three levels—artifacts, values, and assumptions (Schein 1990) —making the broad term organizational culture more complex. The ambiguous nature of the manifestation of the organizational culture in supply chain collaboration presents an interesting context to probe further. The maturity of organizational culture and supply chain collaboration provides a rich ground to examine systematically. The aim of this systematic literature review is to investigate how organizational culture influences supply chain collaboration.

The rest of the paper is structured as follows. This section is followed by the methodology section that explains how articles were selected for review. Based on the final list of articles, a demographic analysis is provided followed by a thematic view. Directions for future research, managerial implications, and limitations of this review follow the findings section.

**Methodology**

In order to maintain research rigor, a systematic literature review as outlined by Tranfield et al. (2003) follows. This method minimizes researcher bias, ensures reasonable completeness, and provides reliability and replicability, compared to traditional narrative reviews (Tranfield et al. 2003; Denyer and Tranfield 2009). This study follows the five steps outlined by Denyer and Tranfield (2009): (a) defining the research question, (b) locating studies, (c) selecting and evaluating studies, (d) analyzing and synthesizing, and (e) presenting the results.

*Defining research questions*

A clear research question is a necessity for any research. For a systematic literature review, the research question establishes the focus. This study addresses the key research question: How does organizational culture influence supply chain collaboration? The following sub-questions are formulated to understand the research question:
Q1. What attributes of the organizational culture help supply chain collaboration?

Q2. Do organizational cultural similarities or complementarities between partners provide an edge in collaboration?

Locating studies

In this step, a search was performed to select and assess the contributions of articles that are relevant to the research question (Denyer and Tranfield 2009). Several databases, such as Proquest (ABI/INFORM), Scopus, EBSCO (Business source complete), and Google Scholar, were used. These databases are generally available to academic institutions, and previous studies have used these databases (Wong et al. 2012; Mandal 2014). These databases were supplemented with databases such as Emerald, ScienceDirect, Wiley Online, and Taylor and Francis. After few rounds of discussions with supply chain and management scholars, the following key words were found suitable for searching articles for the systematic review. Two sets of key words were used. The first set consisted of words relating to supply chain collaboration, such as “supply chain collaboration”, “collaborative behavior”, “inter-firm relationship”, “B2B relationships”, “inter-organizational relationship”, “supply chain integration”, “inter-organizational trust”, “inter-organizational commitment”, “inter-organizational dependence”, “buyer supplier relationship”, “supply chain coordination”, “cooperation”, and “supplier contracts”. The second set consisted of words relating to organizational culture, such as “collaborative culture”, “organizational culture”, “organizational climate”, “corporate culture”, “organizational routine”, and “firm culture”. All words were combined with an AND and OR operator between the two sets of words (Table 1). For example, all key words relating to supply chain collaboration were connected with the OR operator, and this was connected with the AND operator to the first keyword in the organizational culture set. In the second step, the second keyword was used instead of the first in organizational culture set, and the process was repeated until the final key word “firm culture”.

4
**Construct Keywords Operators Databases**

Supply chain collaboration

- Supply chain collaboration
- Collaborative behavior, inter-firm relationship, B2B relationships, inter-organizational relationship, supply chain integration, inter-organizational trust, inter-organizational dependence, buyer supplier relationship, cooperation, supply chain coordination, supplier contracts

- All keywords in this set operated by “OR” combined through “AND” operator with the each key word in the second set

- Ebscohost (Business source complete), Proquest (ABI/INFORM), Scopus, Google Scholar

Organizational culture

- Collaborative culture, organizational culture, organizational climate, corporate culture, organizational routine, firm culture

**Table 1. Keywords and operators**

**Selecting and evaluating studies**

The transparency and rigor in selecting the articles for this review were maintained through explicit selection criteria related to the research question (Denyer and Tranfield 2009). Articles published between 1980 and 2017 were searched. The date range was set to accommodate the research question as much as possible. The search was performed in mid-2017. The initial search results gave a total of 891 articles. Several filters were implemented to maintain the quality of the results: the articles were scholarly articles, the language was English, the domain was business management, and the articles were peer reviewed. After duplicates were removed, 171 articles remained. After the abstracts and conclusions were read, the list was reduced to 87 articles. Table 2 provides information about the steps and the inclusion criteria.

**Table 2. Inclusion criteria**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Rationale</th>
<th>No. of articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial search</td>
<td>Starting the search process</td>
<td>891</td>
</tr>
<tr>
<td>Filter 1: Scholarly Articles</td>
<td>To maintain rigor of articles</td>
<td>171</td>
</tr>
<tr>
<td>Filter 2: Year – 1980 to 2016</td>
<td>To be inclusive</td>
<td></td>
</tr>
<tr>
<td>Filter 3: Business management</td>
<td>To stay on the domain</td>
<td></td>
</tr>
<tr>
<td>Filter 4: English</td>
<td>To maintain contextual relevancy</td>
<td></td>
</tr>
<tr>
<td>Filter 5: Removing duplicates</td>
<td>Eliminate redundant papers</td>
<td></td>
</tr>
<tr>
<td>Reading title and abstract</td>
<td>To limit papers off topic</td>
<td>122</td>
</tr>
<tr>
<td>Reading full papers</td>
<td>To get more information from the articles for relevance and inclusion</td>
<td>87</td>
</tr>
</tbody>
</table>
Analyzing and synthesizing

In this step, the articles were analyzed with an aim of breaking down individual studies into constituent parts that relate to each other. Synthesis helps make connections with the parts identified in the individual articles (Denyer and Tranfield 2009). A Microsoft Excel spreadsheet was loaded with the final list of studies (87 articles), and information essential for this review was teased out. Patterns of research, integrating the heterogeneous types of articles for insights and answers to the research questions were synthesized. The integration approach is one of the several approaches that can be used in synthesizing systematic literature reviews (Rousseau et al. 2008).

Presenting the results

This step helps uncover what is known and what is not known about the research question. In the following sections, the contribution of this systematic review paper is presented through descriptive and thematic reporting (Denyer and Tranfield 2009).

Descriptive analysis

The findings of the systematic literature review are presented quantitatively and qualitatively. In the quantitative presentation, study elements such as publication date, source journal, methodology, location of the study, the type of sample used (industry), theoretical lenses used, and unit of analysis are shown. This information provides an understanding of the advancement of theory in the intersection of organizational culture and supply chain collaboration.

Date of publication

In this study, the article search period is between 1980 and 2017. However, the first articles related to supply chain collaboration and organizational culture were published in 1997. This indicates that when research interest in supply chain management was increasing, scholars also investigated organizational culture in a collaborative context. Based on the pattern observed in Figure 1, the number of articles in the future can be expected to increase. It can also be inferred that this area is set to contribute to theory in the coming years.
Only 12 journals published more than two articles per source journal. This constitutes about 38% of the total articles. Several key supply chain journals make up this list with *Supply Chain Management: An International Journal* heading the list (six articles). Table 3 lists the journals. The category ‘other journals’ contributed 62% of the total articles. This spread could be attributed to (a) the wide variety of context (industry), (b) a plethora of methods, and (c) global coverage.

<table>
<thead>
<tr>
<th>Journal</th>
<th>No. of papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Management Review</td>
<td>2</td>
</tr>
<tr>
<td>European Journal of Purchasing and Supply Management</td>
<td>2</td>
</tr>
<tr>
<td>International Journal of Production Economics</td>
<td>2</td>
</tr>
<tr>
<td>Journal of Cleaner Production</td>
<td>2</td>
</tr>
<tr>
<td>Journal of Knowledge Management</td>
<td>2</td>
</tr>
<tr>
<td>Journal of Marketing</td>
<td>2</td>
</tr>
<tr>
<td>Construction Management and Economics</td>
<td>3</td>
</tr>
<tr>
<td>International Journal of Operations &amp; Production Management</td>
<td>3</td>
</tr>
<tr>
<td>Journal of Business &amp; Industrial Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Organization Science</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Marketing Management</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 3. Publication titles

| Study location

Studies were carried out in all regions of the world, making the topic a global interest. About 28% of the studies were conducted out in the United States, which leads the list. The United Kingdom is second at 13%. Studies were carried out in Australia, the Netherlands, Germany, and Spain equally at 4%. Twenty other countries contribute to the rest of the list (about 1–2% each). Several studies were not country specific in terms of data collection, and they accounted for about 17%. This distribution shows that organizational culture and supply chain collaboration are of interest to researchers across the world.

Methodology

Researchers used several types of methods to understand the relationship between organizational culture and collaboration. Among these methods, about 47% of the articles used the survey method. Case study was the second most preferred method (about 22%). About 13% of the articles are conceptual. Table 4 shows that the research examining the relationship between organizational culture and supply chain collaboration was not limited by method.

<table>
<thead>
<tr>
<th>Method</th>
<th>No. of papers</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Survey</td>
<td>40</td>
<td>47</td>
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<tr>
<td>Case study</td>
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<td>22</td>
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<tr>
<td>Conceptual</td>
<td>11</td>
<td>13</td>
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<tr>
<td>AHP, Optimization</td>
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<tr>
<td>Depth interviews</td>
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<tr>
<td>Mixed method (Literature review + survey + interviews)</td>
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<tr>
<td>Descriptive</td>
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<td>Experimentation</td>
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<td>Field observation</td>
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<td>Literature review</td>
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<td>Longitudinal case-study approach</td>
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<td>Mathematical modelling</td>
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Several key theories were used. Forty-six articles used a theoretical lens to examine the relationship. Among these theories, three key theories frequently used in supply chain management appeared as expected: resource-based view and transaction cost theory with five articles each. Social exchange theory appeared in four articles. Three articles used dynamic capability theory. Given the nature of the research question of this review, theories such as institutional theory and organizational learning theory from the management literature were used in three articles each. Contingency theory and knowledge-based view were used in two articles each. Seventeen other theories were used in one article each. Table 5 shows the list of theories used.

<table>
<thead>
<tr>
<th>Theory</th>
<th>No. of papers</th>
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<tbody>
<tr>
<td>Resource based view</td>
<td>5</td>
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<tr>
<td>Transaction cost theory</td>
<td>5</td>
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<tr>
<td>Social exchange theory</td>
<td>4</td>
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<tr>
<td>Dynamic capability/resource-based view</td>
<td>3</td>
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<tr>
<td>Institutional theory</td>
<td>3</td>
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<tr>
<td>Organizational learning and the relational view of the firm</td>
<td>3</td>
</tr>
<tr>
<td>Contingency approach, and configuration approach</td>
<td>2</td>
</tr>
<tr>
<td>Knowledge based view</td>
<td>2</td>
</tr>
<tr>
<td>Componential theory of creativity</td>
<td>1</td>
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<tr>
<td>Collaborative theory</td>
<td>1</td>
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<td>Complexity theory</td>
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<tr>
<td>Force field theory, Threat-rigidity theory, Structural inertia theory</td>
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<tr>
<td>Karl Weick's theory of sensemaking</td>
<td>1</td>
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<tr>
<td>Learning theory</td>
<td>1</td>
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<tr>
<td>Organisational climate theory</td>
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<td>Organisational control theory</td>
<td>1</td>
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</tbody>
</table>
Resource dependence, relational marketing theory | 1
Role theory, attribution theory | 1
Social capital theory and the relational view, | 2
Social identity theory, reference group theory | 1
Systems thinking theory | 1
Theory of evolutionary system design | 1
Theory of transformational leadership | 1
Relational contracting theory | 1

Table 5. Theories used

Nature of the sample

Research articles were grouped under 15 industries. As expected, the manufacturing industry dominated with approximately 20% of the articles, followed by research that involved several industries (multi-industry accounted for about 17%). Surprisingly, the construction industry was investigated in about 7% of the articles. The chemical, hotel, maritime, and non-profit industries were included in the ‘other’ industry. This result shows the wide range of scholars’ research interest in business. The diversity of the industries shows the importance of issues arising at the intersection of organizational culture and supply chain collaboration. Figure 2 provides the list of industries.

![Figure 2. Industries studied](image-url)
Unit of analysis

The unit of analysis provides information about the extent to which the studies contribute to the domain of supply chain management. Scholars have found the firm level to the network level of research interest. Figure 3 represents the units of analysis used in the selected articles. The vast majority of articles (64%) were focused at the firm level indicating that issues relating to organization culture and supply chain collaboration can be assessed at this level. About 19% of the articles focused on understanding at the dyad level. Further, about 14% of the articles focused on supply chain level thus making the issue gain more gravity, and the other level (the project level and the sea port level) accounted for the remaining 3%.

![Figure 3. Unit of analysis](image)

A thematic view of organizational culture and supply chain collaboration research

The final list of selected articles for the review provided several research themes. Broadly, these themes can be classified into supply management, organizational culture, and collaborative outcomes. Figure 4 shows the themes that emerged from the final list of selected articles for review.

![Figure 4. Themes](image)
**Supply management**

The vast majority of the articles (66%) fell into the broad theme of supply management. As can be seen from Figure 3, the main theme of supply management can be broken down into sub-themes. Most of the research centered on the buyer–supplier relationship, followed by articles focusing on performance in the upstream, knowledge sharing between firms, and supplier contracts. Sub-themes with fewer articles, such as technology, humanitarian, supplier diversity, and organizational learning, emerged. The sub-themes are discussed in the following sections.

**Buyer–supplier relationship**

Seven articles examined the sub-theme of the improving ties between partners within the broad theme of the buyer–supplier relationship. Patterson et al. (1999) conceptualized several types of buyer–supplier relationships that extend internal-focused organizational culture to relationships between firms. Akintoye et al. (2000) demonstrated how the workplace culture could be a barrier to reaping the benefits of the supply chain in the construction sector. In
addition, cultural differences between architects and contractors dampen their relationship thus slowing down construction projects (Ankrah and Langford 2005).

Kleinman et al. (2000) developed a model that improves the motives of the negotiation process through incorporating the factor of organizational culture. Further, Lechner and Dowling (2003) emphasized that in an entrepreneurial firm, the development of marketing networks depends on the firm’s culture. Winklhofer et al. (2006) supported that organizational culture manifests as artifacts, values, and assumptions and has a direct bearing on the supplier relationship orientation. Beugelsdijk et al. (2006) concurred regarding the importance of the positive association of organizational culture and inter-firm relations.

Five articles examined the sub-theme trust. Granting purchasing managers greater autonomy enhances trust in the buyer–supplier relationship (Perrone et al. 2003). Trust in this relationship is enhanced by the long-term orientation culture of the firm, and trust helps suppress conflict between channel members (Ryu and Moon 2009). Manu et al. (2015) found that a strong level of trust is induced by trustworthiness and not by benefit-induced trustfulness in contractor–subcontractor relationships in the construction industry. In the Iranian financial sector, inter-organizational coordination is positively influenced by mutual trust (Aghajani et al. 2014). However, lower levels of trust between employees and outsourced employees in the hotel industry diminishes customer-oriented behavior thus affecting the service (Zoghbi and Ting 2016).

Pressey et al. (2007) showed that in order to maintain a longstanding relationship in the buyer–supplier dyad, the fit between the two organizations is essential (for instance, the fit between culture and strategy). Naesens et al. (2007) underscored the need to check the fit between buyer and suppliers through testing if there are any unsurmountable practices such as differences in the organizational cultures that could hamper the buyer–supplier relationship and collaboration. Scholars also found that the organizational fit between the buyer and the supplier greatly improves supply chain performance (Cadden et al. 2013).

Each of the other sub-themes of the buyer–supplier relationship theme was examined in fewer than three articles. Researchers also sensitized the role of power in the buyer–supplier relationship and showed that organizational culture that embraces group orientation reduces the negative impact of power on suppliers (Ryuet al.2008). In addition, Koulikoff and Harrison (2008) showed tension emerges between buyers and suppliers due to internal priorities of the firm competing with the resource requirements of the supply relationship. Fagan (2001) and
Harvey et al. (2000) emphasized the need for flexibility in buyer–supplier communication that accommodates the nuances of the suppliers’ organizational culture. In order to maintain high ethical standards, communication and transparency need to be embedded in the firm’s culture (Halter et al. 2009). Participative culture and responsibility of mutuality of an organization impact the agility and responsiveness of the supply chain (Storey et al. 2005; Eng 2006). Vlaar et al. (2006) showed sense making is used to decipher problems due to the understanding of differences in organizational cultures in the buyer–supplier relationship. It can be seen that buyer seller relationship is heavily investigated on various aspects.

Performance

Scholars have found links between organizational culture and performance in the supply chain context. Several articles focused on the differences in organizational culture in the buyer–supplier context and performance. For example, (a) a balance scorecard approach was developed to monitor the performance of the new product development process (Lee et al. 2007), (b) the differences in organizational culture were sensitized in the buyer–supplier relationship performance (Beugelsdijk et al. 2009), (c) differences in organizational culture were examined in business-to-business (B2B) relationships and logistics performance (Ulgen and Forslund 2015), and (d) differences in organizational culture were examined in network management and performance measurement tools (Hyypiä and Pekkola 2011). It is interesting and surprising that scholars found complementarities between organizational cultures rather than congruent cultures lead to better performance (financial, delivery times, and inventory) in the buyer–supplier context (Cadden et al. 2013).

Firm performance is positively influenced by a market orientation culture (Guo et al. 2014), and flexibility and an external orientation culture (Yunus and Tadisina 2016). Portfolio performance is improved through compatibility in management routines in the buyer–supplier context (Schilke and Goerzon 2010). Moreover, business competitiveness (Keung and Shen 2017), and the performance of human resources (Shub and Stonebreaker 2009) were found to be connected to organizational culture.

Knowledge sharing

Organizational routines, which are manifested in organizational culture, play an important role in firms’ knowledge-sharing behavior. It is also important to note that such knowledge-sharing routines have a positive influence on innovation and new product development (Powell 1998;
Mariotti 2007; Bstieler and Hemmert 2010; Vaccaro et al. 2010; Lopez and Esteves 2013; Qureshi and Evans 2015). Scholars also found that inter-organizational creativity is improved through knowledge-sharing routines (Wang et al. 2008). Such routines also help reduce defects at a manufacturing plant (Dyer and Hatch 2006). Finally, knowledge-sharing routines help in improving supply chain integration (McCarter et al. 2005) and overall knowledge exchange (Bisogno et al. 2015).

Contracts

Five articles contributed to the contracts sub-theme specifically focusing on the understanding between buyers and suppliers. Wu yts and Geyskens (2005) explained how organizational culture affects the supplier selection decision (existing or new) and limits a supplier’s opportunistic behavior. Lee and Kwon (2006) developed a framework based on a cognitive map that takes in primary (price or order quantity) and secondary (resource availability and corporate culture) negotiation terms in the supplier contracts that help understand B2B negotiation problems in the present and simulate different future situations. Baraldi (2008) built on how IKEA manages its supplier network through defining the content of the buyer–supplier relationship and its organizational routines for efficiency goals. For efficiency in construction projects, Laryea and Watermeyer (2014) proposed a strategic procurement approach that considers new terms of contracts and collaborative procurement and emphasizes the need to change the existing procurement culture. Schweitzer (2016) clarified how the complexity of contractual agreements helps achieve a strategic innovation partnership that predicts the partnership culture.

Technology

In the broad theme of supply management, scholars have taken a technology based perspective. Patterson et al. (2003) found among several factors, the organizational structure significantly impacts the speed of technology adoption in a supply chain to remain competitive. In the construction industry, Al-bizri and Gray (2010) argued that through grouping suppliers (clustering) based on technology, challenges that hinder efficient and quality production are mitigated as the grouping creates a shared culture in the supply chain integration. Chan and Chong (2012) found that organizations that support a culture of information sharing between partners speed up the adoption of technology and thus positively influence organizational performance.
Supplier diversity

Whitfield and Landeros (2006) examined the influence of organizational culture on supplier diversity and found that achievement and affiliative culture are essential for effective supplier diversity as such cultures support information exchange and commitment between the partners. Adobor and McMullen (2007) argued supplier diversity is a source of competitive advantage when diversity is fully integrated into the corporate strategy embodied by a supportive organizational culture.

Organizational learning

A conducive organizational culture characterized by learning intent, receptivity, and transparency encourages organizational learning and in turn, helps achieve better partnering competence of the firm (Johnson and Sohi 2003). Selnes and Sallis (2003) concurred that learning intent is an important antecedent for organizational learning. Moreover, a collaborative culture is essential to establish relationship learning in the buyer–supplier context.

Humanitarian issues

The thriving literature humanitarian supply chain management also discussed about organizational culture. Granot (1997) conceptualized the need for inter-organizational coordination during emergencies amid different organizational cultures of the actors that act as a barrier to co-operation. Dowty and Wallace (2010) demonstrated how the differing organizational cultures of actors in the humanitarian setting could hamper disaster relief work that aimed to restore disrupted supply chains.

Organizational culture

Twelve studies examined the organizational culture theme. These articles show the link to the collaboration literature from the other side.

Culture

In the culture sub-theme, several researchers investigated the type of organizational culture and its effects on the buyer supplier relationship. Some scholars have used the culture typology proposed by Cameron and Quinn (1995) which shows four types of organizational culture: adhocracy, market, clan and hierarchy. Adhocracy culture and clan culture help a higher level of commitment and help achieve a higher level of value creation (Sambasivan and Nget Yen
Similarly, adhocracy and clan culture were found to reduce relational conflict and increase trust between a firm and its suppliers (Zoghbi and Ting 2016). Braunscheidel et al. (2010) also found adhocracy culture helps in external integration with suppliers; meanwhile, hierarchy culture is negatively associated with internal and external integration practices (Cao et al. 2015).

Vilana and Monroy (2010) argued that organizational culture is the glue that binds organizations. Kumar et al. (2016) found that cultural involvement between two organizations enables knowledge and resource sharing. The higher the differences in organizational culture between organizations, the lower the quality of the inter-organizational relationship (Madupalli et al. 2014), and in a few instances, collaboration fails (Fawcett et al. 2015).

Since the recent past, it is also novel to see collaboration as a risk mitigation strategy, and only true collaborative behavior embedded in the organizational culture helps improve a firm’s performance (Cadden et al. 2015). Mamillo (2015) found that a higher level of uncertainty does not lead to a higher level of collaboration; however, organizational culture is the key driver for collaboration.

Social media

Keinänen and Kuivalainen (2015) found that in a B2B context the organizational culture does not significantly influence business social media behavior. Although only one research paper discussed the use of social media, research in this sub-theme is expected to grow as social media plays a role in buyer supplier relationships.

Collaborative outcomes

Collaborative outcome is the third broad theme. Within this theme are two sub-themes: innovation and sustainability.

Innovation

A firm’s innovation capability and new product development performance depend on collaborative behavior. Moreover, innovation culture of the firm also encourages willingness to take risks (Brettel and Cleven 2011). Macpherson et al. (2004) found that organizational routines with a relationship focus support a firm’s fast growth and innovation. Mortara and Minshall (2011), Oxburrow and Brindley (2011), and Inemek and MatthysSENS (2013) argued
that an organizational culture that supports knowledge-sharing between partners enhances innovation.

Sustainability

A sustainable supply chain depends on congruence between organizational structuring, organization culture, and organization commitment (Cheung and Rowlinson 2011). For instance, inter-organizational fit between a firm and a nongovernment organization (NGO; routines help collaborative relationships) is an antecedent for the combination of resources for implementing activities that create value in socially sustainable supply chains (Rodríguez et al. 2016).

Echoing the same idea, Hsueh (2014) pointed out that corporate sustainability activities and strategies have to be in line with the organizational culture in order to be successful. Senior management leadership is a key factor that encourages the diffusion of green supply chain management practices (Prajogo et al. 2014). At the firm level, knowledge absorption capacity helps a firm achieve the common goal of cleaner production (Hoof and Thiell 2014).

Collaboration

Four articles examined the general sub-theme of collaboration, providing a perspective about principles and best practices. Cadilhon et al. (2005) demonstrated how overlapping similarities in the organizational culture between the buyer and the supplier helps manage joint inventory during the sales promotion period in a vegetable supply chain. Fawcett et al. (2008) provided a quantitative and qualitative analysis of the benefits, barriers, and bridges to successful collaboration in areas such as joint cost reduction and customer satisfaction. Similarly, supply chain management practices with a supportive organizational culture through leadership, employee empowerment, and information-sharing lead to customer satisfaction (Haque and Islam 2013). Fawcett and McCarter (2008) showed the need to go beyond technology to organizational culture and structure to establish a truly collaborative supply chain model and argued for a culture of willingness to share information in an organization’s cultural fabric.

Effects of organizational culture on supply chain collaboration

Organisational culture influences supply chain collaboration as illustrated in the figure 5. Extant literature informs that organisational leadership is the key organisational cultural element that is essential for the organisational culture that initiates collaborative behaviour (Cameron and Quinn, 2006). Further, organisational leadership manifests its influence in the
intention of the organisation to develop a platform that encourages organisational learning (Selnes and Sallis, 2003; Wang, 2008).

Further, organisational flexibility is another key element in the organisational culture that develops an inclination for a developing a relationship with the partner organisation (Vilana and Manroy, 2010; Cao et al., 2015). The organisational learning and organisational flexibility together leads to practices in the organisation that form the basis of organisational routines (Inemek and MatthysSENS, 2013; Yunus and TADISINA, 2016). Organisational routines form the boundary of the organisational culture that manifests as practices which interact with the partner organisation (Dyer and Hatch, 2006). The collaborative ties with the partner organisations begin with sharing of information that help in reaching a common goal (Powell, 1998; Harvey et al., 2000; Dyer and Hatch, 2006; Fawcett and McCarter, 2008).
Organizational culture attributes that help supply chain collaboration

Although scholars agree that the ‘values’ level of culture is the richest source of information (Hofstede et al. 1990; Schein 1996), they also acknowledge that this level of organizational culture is hard to detect. However, values manifest as practices within an organization and can be noticed (Trice and Beyer 1993).

Information sharing

Information sharing is one of the key attributes of successful supply chain collaboration and is weaved into the organizational culture fabric. Information sharing begins with sharing of information and knowledge within the organization. The culture of willingness to share information in a firm’s cultural fabric holds the key (Fawcett and McCarter 2008). Cross-functional information sharing influences the sharing behavior with other partners of the supply chain thus strongly supporting collaborative behavior (McCarter et al. 2005; Eng 2006). Information sharing at the organizational level helps develop a participative culture among employees (Eng 2006) and bolster teamwork and coordination (Mariotti 2007).

Information sharing encourages supplier diversity for the firm through effectively inducting from a wide variety of supplier backgrounds (Whitfield and Landeros 2006). Knowledge-sharing routines also help develop inter-organizational creativity, which is necessary for new product development (Wang et al. 2008), firm innovation (Oxburrow and Brindley 2011), and supplier innovativeness (Inemek and Matthyssens 2013). Moreover, the routine of information sharing also maintains the good health of the buyer–supplier relationship (Beugelsdijk et al. 2009; Halter et al. 2009; Oxburrow and Brindley 2011; Chan and Chong 2012). Other benefits such as joint planning for executing schedules and sharing operational resources (Kumar et al. 2016) are realized. Information sharing also helps in developing collaborative capacity (Hoof and Thiell 2014) and helps mitigate risks due to different supply chain uncertainty types: supply uncertainty, demand uncertainty, and technology uncertainty (Mamillo 2015).

In addition, such knowledge sharing within and between organizations moves up to a level where it becomes a part of the organizational routine that is embedded in the way everyday business is done (Inemek and Matthyssens 2013; Hoof and Thiell 2014).
Organizational routines

Stene (1940) introduced organizational routines as a concept. It is regarded as the primary means by which organizations achieve much of what they do on a regular basis (Nelson and Winter 1982). “Routines are repeated patterns of behavior that are bound by rules and customs and that do not change very much from one iteration to another” (Feldman 2000). Routines could be a source of inertia and flexibility, but they can also be a source of flexibility and change (Feldman and Pentland 2003), that is, when routines are the basis for continuous change in an organization, for example, the implementation of total quality management (Hackman and Wageman 1995). Routines act as a delivery mechanism for transferring knowledge and information. Table 7 shows the articles that emphasize organizational routines.

At the firm level, organizational routines enhance knowledge sharing between supply chain partners that create dynamic capabilities and strong product knowledge (Powell 1998). Inter-organizational coordination is also enhanced through organizational routines (Schilke and Goerzon 2010). Routines at the supply chain level help improve supply chain performance through implementing just-in-time (JIT; Shub and Stonebreaker 2009). In the pharma and biotechnology industries, organizational routines that channel knowledge sharing between partners improve the performance of the network in developing new products (Powell 1998). In the automotive industry, such routines improve supplier learning as observed in the case of Toyota; however, the same routines act as barriers to knowledge transfer as in the case of General Motors, Ford, and Chrysler (Dyer and Hatch 2006).
Leadership

Leadership style always matches the corresponding organizational culture type (Table 8). For example, when an organization is influenced by clan culture, parent figures are the most efficient leaders. Clan culture also supports team builders, facilitators, mentors, and supporters (Cameron and Quinn 2005). Organizational leadership influences the organizational culture through four dimensions: charisma or idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Yukl 1998; Hyypia and Pekkola 2011). Leadership also acts as a mechanism that drives collaboration.

Adobor and McMullen (2007); Hyypia and Pekkola (2011); Haque and Islam (2013); Prajogo et al. (2014); Laryea and Watermeyer (2014)

Table 8. Papers that include leadership research

At the firm level, leadership influences organizational culture through empowering employees to share information with customers to generate higher customer satisfaction (Haque and Islam 2013). Firms that implement green supply chain management need the will and support of leadership. Moreover, the leadership’s empowerment of employees allows the diffusion of environmental management systems in several key functions, such as production, procurement, sales, logistics, and R&D thus influencing intra- and inter-organizational collaboration (Prajogo et al. 2014). Leadership style can also influence the procurement routines through joint work with suppliers resulting in value for money (Laryea and Watermeyer 2014). Senior management who make clear articulation can help implement a culture that supports supplier integration (Adobor and McMullen 2007).

Organizational learning and flexibility

In the presence of appropriate factors, a firm is more likely to engage in learning activities integral to the development of inter-firm partnering competence. The conditions for building partnering competence are found in the firm’s culture in the form of learning intent, receptivity, and transparency (Johnson and Sohi 2003). Buyers and suppliers can improve their joint learning activities by facilitating information exchange and by developing common learning arenas. Scholars also found that relationship learning can be promoted and accelerated through collaborative commitment and a high level of trust (Selnes and Sallis 2003).
Flexibility to adapt change greatly improves a firm’s collaborative outcome. Vaccaro et al. (2010) indicated that along with mutual trust, a culture for change—the readiness of the organization to accept and modify changes in technology—has a positive effect on financial performance and time to market. Moreover, firms that intend to adopt e-SCM are exposed to normative and coercive institutional pressures that can be mitigated through flexibility, thus realizing improved performance sooner (Liu et al. 2010).

**Does organizational cultural similarity or complementarity provide an edge for collaboration?**

The articles reviewed show mixed results. A positive influence of congruent organizational cultures on supply chain collaboration was found in several studies. Overlapping similarities of organizational culture between the buyer and the supplier supports joint inventory management during sales promotion periods as a highlight of collaborative commerce in Vietnamese vegetable supply chains (Cadilhon et al. 2005). Cultural fit between buyer and supplier organizational cultures helps firms more closely scrutinize their supply relationships across a broad range of attributes to monitor important issues such as quality and delivery (Pressy et al. 2007). Consistent organizational cultures between partners in the financial services industry improved inter-organizational coordination (Aghajani et al. 2014). In the construction sector, a contractor–subcontractor relationship is fostered through similar organizational cultures that reflect high levels of business ethics involving financial transactions (Manu et al. 2015).

Broadly, extant research agrees that divergent organizational cultures between two partner firms have a negative influence on collaboration. For example, people issues, such as culture, trust, aversion to change, and willingness to collaborate, lead to strains in the collaboration (Madupalli et al. 2014) and in some instances trigger a break-up of the collaboration (Fawcett et al. 2008; Fawcett et al. 2015). Blame culture and cultural differences impact the buyer supplier relationship through creating tension at the inter-organization level (Koulikoff-Souviron and Harrison 2008). Differences in organizational cultures in a dyad, manifested through a lack of trust and understanding, lead to difficulties in developing a collaborative culture with suppliers that contribute to barriers to performance (Ulgen and Forslund 2015).

Studies based on a dyadic view showed that similar cultures lead to better collaboration, as cultural similarity becomes a good predictor of collaboration. However, Cadden et al. (2013) argued that in situations going beyond the dyadic relationship in the supply chain, each
organization may have its own identity, but only the compatibility of the organizational cultures matters for better performance. Cadden et al. (2013) found complementarities between organizational cultures characterize high-performing supply chains. To support Cadden et al.'s (2013) assertion regarding complementarities of organizational culture at the supply chain level, Powell (1998) argued that in a bio-technology network of firms, firm routines and norms support knowledge sharing in the network that complements each member in developing innovative solutions. Such routines and norms (a manifestation of organizational culture) deliver the internal capability that complements external collaboration.

However, McAfee et al. (2002) indicated that cultural consistency between a firm’s employees and its channel partners is necessary to manage the business relationship between partners. Interestingly, this study took a supply chain perspective rather than a dyadic view, and thus showed a different phenomenon from Cadden et al.’s (2013) work. Such competing results call for further research at the supply chain level, to inform theory and practice in the supply chain domain. It can be deduced from this review that in a dyadic view cultural congruence helps collaboration, and at the supply chain level, the question of organizational cultural congruence or complementarily that helps collaboration remains inconclusive.

Conclusion

The aim of the paper is to highlight in a review of the literature the effects of organizational culture on supply chain collaboration, specifically to examine (a) the attributes within organizational culture that help supply chain collaboration and (b) to investigate whether congruent or complementing organizational culture delivers the edge for collaboration. The study showed five attributes within organizational culture support supply chain collaboration: information sharing, organizational routines, leadership, organizational learning, and flexibility. Implications for managers and theory, areas of future research, and limitations of this study are presented in the following sections.

Contribution to supply chain managers

This study helps managers sensitize the influence of organizational culture on collaboration, as it tends to be not clearly visible and taken for granted. The five attributes identified in the paper give a manager a ready solution to work on settling conflicts that arise due to differences in organizational culture. These attributes also help reduce tension between two collaborating
firms and strengthen the relationship and reap the benefits of collaboration: cost reduction, improved profits, new product development, etc.

**Contribution to theory**

This study contributes to the ongoing discussion at the inter-disciplinary level: supply chain management and organizational theory. This study also clearly presents what is presently known and what is not known about the relationship between supply chain collaboration and organizational culture and underscores the need for sub-culture-based research on supply chain collaboration.

**Areas of future research**

Although supply chain literature indicates collaboration leads to a wide range of benefits, research on collaboration with a focus on sustainability has received very little attention. As is evident from the thematic analysis (Figure 3), several areas have received less attention thus far, and they warrant more attention. For instance, only four articles discussed sustainability. In this era of sustainability, it is necessary to inform theory and practice on several fronts of the organizational culture umbrella, such as (a) the role of leadership styles in sustainable supply chain management and (b) organizational culture and its links to practices such as greenwashing, sustainability performance measurement, and reporting.

Second, an area of promising future research is the humanitarian context. Although the key words did not have humanitarian or disaster related terms in the search process, it is logical to argue that humanitarian or disaster related key words only present the context of the supply chain collaboration. Conversely, it is not possible for the search queries to skip humanitarian studies if such studies include supply chain collaboration and organisational culture. Only two studies discussed organizational culture and collaboration in a humanitarian context (Figure 3). However, given that in a humanitarian situation several actors come together from various backgrounds and organizational cultures, this area provides tremendous scope for future theory development. Within the humanitarian umbrella, research examining non-profit organizations is required to expand the theoretical base linking collaboration and organizational culture. Third, social media is another area that requires more research as people use social media widely in the B2B context, and it could influence basic tenets of organizational culture, such as values and beliefs.
Fourth, studies that investigate the links at the sub-culture level of the firm, that is, between departments, between senior and middle management, etc., and their influence on supply chain collaboration are needed. For instance, Cadden et al. (2015) showed that when collaborative cultural differences between senior and middle management within the firm exist, true collaboration does not emerge on a long-term basis leading to poor satisfaction and performance levels of supply chain members. Finally, research linking collaboration and risk and uncertainty shows competing results from an organizational culture context as shown in section 4.2.1. Further research is required to add more knowledge and bring clarity on this front. This is particularly important because risk and uncertainty are emerging at several levels bringing fresh challenges in the present and potentially in the future.

Limitations of this study

As with any study, this systematic literature review has limitations. In this study, the attributes of culture are based on the organizational level. National culture was not considered. Publications in the InderScience database were not considered, as they were not accessible to the researcher. Moreover, conference articles, working papers, and doctoral theses were not considered. Although this decision contributes to the high quality of the review, it also eliminated additional articles. Although the list of keywords used for this review looked comprehensive, the choice of these terms could also be a further limitation of this study. Other articles focused on this topic may exist under different labels.

References


Collaboration in humanitarian supply chains: an organisational culture framework
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The purpose of this study was to determine the impact that institutional logics and, more specifically, organisational culture can have on humanitarian supply chain (HSC) collaboration. A framework was developed that explicates buyer–supplier collaboration in a humanitarian setting. Twenty-nine semi-structured interviews were conducted with buyers and suppliers. The data indicated that in a HSC, collaborative outcomes, such as new product development, inventory management, and product/service delivery, are influenced by the buyers’ and suppliers’ organisational cultures. Based on suppliers’ characteristics, they can be classified as humanitarian suppliers, commercial suppliers, and humanitarian and commercial suppliers. These groups have distinct organisational cultures. An unexpected finding is that suppliers that serve commercial buyers primarily claim to have encountered no issues in supply chain collaboration with humanitarian buyers, although they have different types of organisational cultures. The factors that lead to successful collaboration are identified as trust, commitment, information sharing and mutual respect. Simultaneously, dominant institutional logics are observed in the dyadic relationship.

Keywords: humanitarian supply chain; framework; organisational culture; institutional logics; collaboration

1. Introduction
Due to the increasing number of disasters (EM-DAT 2016), it has become essential for actors in the humanitarian supply chain (HSC) to provide effective relief aid. To provide aid for those in need, several actors participate in relief efforts in the aftermath of a disaster. The actors involved in such efforts can include governmental agencies, United Nations (UN) agencies, international non-governmental organisations (NGOs), local NGOs, military or armed groups, logistics service providers, private companies, and various community actors (Kovács and Spens 2007).

Hence, relief is provided through HSCs comprised of a diverse group of actors with a wide variety of organisational cultural backgrounds (Dowty and Wallace 2010). Organisational culture can manifest via different ways of working and of defining organisational success (e.g. profits, market share, volume of business, or non-profit orientation). Other notable differences between organisations with different organisational cultures include dissimilar leadership styles and organisational structures (Cameron and Quinn 2006).

According to Van Wassenhove (2006), diversity amongst actors can result in a multitude of goals and priorities during emergency responses. A broad range of priorities could inherently lead to a decrease in response efficiency (Balciik et al. 2010). As a result of poor information sharing, mistrust, poor coordination among actors, and inappropriate proportion of responsibility and assigned authority may lead to inefficiency in response (Diallo et al. 2017; Dwivedi et al. 2017). Other reasons for inefficiencies in HSCs have also been found to result from information overload, a sudden influx of funds and relief materials, damaged infrastructures used to carry out relief operations and personnel shortage (Kovács and Spens 2007). To mitigate the potential inefficiencies, actors in HSCs are increasingly striving to work together when responding to the impacts of disasters (Balciik et al. 2010). This study is positioned in the on-going dyadic collaborative relationship during the long-term non-emergency phase of disaster management (Kovács and Spens 2007). This study fills the research gap, as studies relating to upstream collaboration are rare. However, drawing from commercial supply chains, differences in organisational cultures in upstream dyads lead to tension in the dyadic relationship (Madupalli, Pannirselvam, and Williams 2014), mutual blaming for poor collaboration (Koulikoff and Harrison 2008), and lack of trust (Ülgen and Forslund 2015), and in certain instances, the collaborative relationship ceases to exist (Fawcett et al. 2015).

Supply chain collaboration has been found to reap benefits for all actors involved (Fawcett, Magnan, and McCarter 2008). The benefits of collaboration between two actors can range from increased inventory turnover (Agrawal and Pak © 2018 Informa UK Limited, trading as Taylor & Francis Group
and related practices that predominate in an organisational context during product promotions (Cadilhon et al. 2005). Such cultural fit also enhances the buyer–supplier relationship and aids in fixing quality and delivery issues (Pressey, Tzokas, and Winklhofer 2007), in developing high ethical standards between the dyad (Manu et al. 2015), and in developing new products (Wang et al. 2008), and cultural fit promotes a healthy dyadic relationship (Inemek and Matthyssens 2013).

Fawcett et al. (2015) found that differences in organisational cultures between buyers and suppliers potentially lead to collaboration failure. In the humanitarian context, the differences in organisational cultures of the dyad could hamper effective relief responses (Rodon, Serrano, and Gimenez 2012); however, only a small number of studies have been conducted on the influence of organisational culture on HSC collaboration.

The aim of this study is to obtain a better understanding of the influence of organisational culture on HSC collaboration and collaborative outcomes. A framework of organisational culture in humanitarian supply chains is developed based on the following research questions: How can organisational culture influence collaboration in humanitarian supply chains? How can the role of organisational culture surpass the organisational level and the assumptions, values, beliefs, and rules to be understood as institutional logics in the HSC? Organisational culture and institutional logics are embodiments of values, assumptions, beliefs, and norms that operate at the organisational level and the inter-organisational level, respectively (Hinings 2012). Institutional logics can be defined as ‘socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by that individuals produce and reproduce their material subsistence, organise time and space, and provide meaning to their social reality’ (Thornton and Ocasio 1999, 804). Institutional logics, as defined by Thornton and Ocasio (1999), serve as a theoretical lens for this study.

2. Institutional logics

Institutional logics provide a coherent set of organising principles for a specific realm within society (Besharov and Smith 2014) and can be extended to the organisational level or to the supply chain level. Institutional logics can provide the organising principles for a field (Friedland and Alford 1991). These logics are the basis of taken-for-granted rule-guiding behaviours of field-level actors (Reay and Hinings 2009), and as Scott (2001, 139) stated, they ‘refer to the belief systems and related practices that predominate in an organisational field’. Scott (2008) also argued that a community of actors who comprise a specific field share common values and beliefs. Field-level logics can influence organisational-level behaviours (Greenwood et al. 2011). Scott (1991) defines a field as ‘a community of organisations that partakes of a common meaning system and whose participants interact more frequently and fatefuly with one another than with actors outside the field’ (56). In other words, the field is the chain of organisations that work together. The ‘field’ is the supply chain that is comprised of several organisations working together, for example, an HSC.

Institutional logics influence the collective identities of an organisation, profession, industry, or population (Tajfel and Turner 1979; March and Olsen 2010). Collective identities develop based on social interactions and communications between members (organisations) of a group (White 1992). Because members are part of the collective identities, it is likely that the members will follow the norms and prescriptions (Kelman 2006) of the institutional logic. Organisational procedures and managerial practices can be manifestations of, as well as legitimatized by, institutional logics (Lounsbury 2007; Greenwood et al. 2010). Institutional logics, therefore, can help explain the connections that create a sense of common purpose and unity within a field.

In a context in which several institutional logics exist, Reay and Hinings (2009) argued that there is usually one dominant institutional logic amongst the competing institutional logics. Fields or industries might have developed a dominant logic of their own; however, competing institutional logics can exist simultaneously (Thornton and Ocasio 1999). Organisations typically encounter institutional complexity when prescriptions from multiple incompatible institutional logics converge (Greenwood et al. 2010).

Institutional logics can exert pressure on a supply chain that originates from the central firm. For instance, in a commercial supply chain setting, Glover et al. (2014) found that institutional logics exert pressure from the central organisation on other actors in the supply chain to embrace changes that are central to the logic. For example, supermarkets in the dairy supply chain pressurise other actors to drive cost-reduction, which is the dominant logic. For this study, it was assumed that several institutional logics exist in the humanitarian context. Whether a so-called humanitarian institutional logic exists has not been studied to date; however, Bremberg and Britz (2009) studied European civil protection and found no common humanitarian institutional logic, at least for emergency preparedness at the European level. Furthermore, Barnett...
(2013) studied humanitarian governance and identified commonalities that were considered institutional logics for the humanitarian sector.

Based on these arguments, it is posited that the dynamic interaction between institutional logics can exist at the HSC level. The next section discusses the background of organisational culture.

3. Organisational culture in the humanitarian and supply chain literature

Organisational culture has been broadly studied by several researchers since the 1980s, leading to a plethora of definitions and understandings (Quinn 1988; Schein 1992; Hofstede 1998). For this study, the definition by Schein (1991) was adopted. Accordingly, culture is defined as

*a pattern of shared basic assumptions, invented, discovered or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid, and therefore is to be taught to new members of the group as the correct way to perceive, think, feel in relation to those problems.* (247)

This definition takes change and learning into account and hence is suitable when studying a complex and dynamic environment, such as the humanitarian context.

Schein (1991) divided organisational culture into three levels: artefacts, values, and underlying assumptions. Artefacts include the visible organisational structures and processes and are observed at the surface level when an unfamiliar culture is encountered. Values include the strategic goals and philosophies (espoused justifications). Values can be viewed as latent compared to artefacts and represent ‘ought-to-bes’. Underlying assumptions include unconscious beliefs, habits of perception, thoughts, and feelings, which are the source of values and actions.

Organisational culture also influences the ways in which a firm interacts with the key actors, such as employees, customers, and suppliers (Barney 1986), making it important in a supply chain context. Based on the competing values framework, Cameron and Quinn (2006) developed an instrument to assess organisational culture referred to as the organisational culture assessment instrument. Six dimensions are included: dominant characteristics, organisational leadership, management of employees, organisational glue, strategic emphasis, and criteria for success.

Recent literature has also shown that organisational culture can be divided into five dominant models (Giorgi, Lockwood, and Glynn 2015): values (what we prefer, hold dear, or desire [Schein 1985; Cameron and Quinn 2006]), stories (verbal or written narratives with causally linked sequences of events that have a beginning, middle, and end [Vaara and Tienari 2011]), frames (filters or brackets that delimit the focus [Smets, Morris, and Greenwood 2012]), toolkits (sets of stories, frames, categories, rituals, and practice which actors draw upon to make meaning or take action [McPherson and Sauder 2013]), and categories (social constructions or classifications which define and structure the conceptual distinctions between objects, people, and practices [Wry, Lounsbury, and Jennings 2014]). Of the five models, the values-based model developed by Schein (1991) and Cameron and Quinn (2006) was adopted for this study.

In a humanitarian context, research related to organisational culture is rare; however, Walkup (1997) found ways in which the organisational culture of humanitarian organisations impedes the learning and innovation of the organisation. Tatham and Kovács (2010) demonstrated the importance of swift trust between actors in disaster relief. Stephenson (2005) indicated that humanitarian organisations need to rethink their organisational cultures: organisational cultures that actively encourage improved inter-organisational trust foster effective cooperation. Dibble and Gibson (2013) found that organisations that successfully coordinate with other actors in an HSC are characterised by an organisational culture, which helps internal adjustment to external challenges.

Dowty and Wallace (2010) showed that lack of organisational cultural sensitivity results in poor coordination amongst humanitarian actors, leading to poor delivery of relief aid materials. Bharosa, Lee, and Janssen (2010) found that organisational culture is one of the key drivers in the collaboration between humanitarian organisations. McLachlin and Larson (2011) found compatibility between organisational cultures drives successful collaboration between humanitarian actors. Akhtar, Marr, and Garnevska (2012) found the contrary: incompatibility amongst humanitarian organisations originates from different organisational cultures.

3.1. Organisational culture in the supply chain literature

The competing values framework proposed by Cameron and Quinn (2006) has attracted supply chain researchers’ interest. This framework helps identify an organisational culture based on competing values. A stream of literature utilises this framework to understand supply chain integration, quality management, contingencies, product development, organisational
Collaboration amongst supply chain partners has attracted research interest from scholars since the 1990s (Barratt 2004). The definitions of supply chain collaboration can be grouped into two major groups (Cao and Zhang 2011): relationship-focused (Bowersox, Closs, and Stank 2003; Golitic et al. 2003) and process-focused (Mentzer et al. 2001; Simatupang and Sridharan 2002; Sheu, Yen, and Chae 2006). Relationship focus is exemplified by forming close, long-term partnerships in which partners actively share information and resources to achieve the common goal. According to Golitic et al. (2003), a collaboration which denotes an inter-firm relationship is defined as ‘the extent or degree of closeness or strength of the relationship between or among organisations’ (61). The process-focused definition used for this study is related to two or more actors in a supply chain collaborating to achieve common goals. Simatupang and Sridharan (2002, 19) stated that supply chain collaboration occurs when ‘two or more independent companies work jointly to plan and execute supply chain operations with greater success than when acting in isolation’. The process-focus definition was adopted in this study as collaborative outcomes were investigated.

Four elements of collaboration can strengthen the collaborative behaviour of firms. Barratt (2004) found that four collaborative cultural elements lead to collaborative behaviours: trust, mutuality, information exchange, and openness and communication. Trust between organisations and within organisations is critical for long-term relationships between supply chain partners (Nesheim 2001). Trust between buyers and suppliers enhances collaborative relationships. Trust between the dyad reduces the transaction costs and the buyer’s need to monitor its suppliers (Nyaga, Whipple, and Lynch 2010) and enhances the collaborative relationship (Fynes, Voss, and de Bürc 2005). Conversely, lack of trust between the dyad acts as a barrier to collaboration and, in turn, promotes inter-firm rivalry (Fawcett, Magnan, and McCarter 2008). Tsanos and Zografos (2016) found that mutuality and reciprocity in a dyadic relationship help develop trust and therefore lead to increased commitment in the relationship. In a collaborative relationship, mutual benefits are expected to arise (Ellram and Edis 1996), and it cannot depict a situation where ‘I win/you go and figure out how to win’ (Ireland and Bruce 2000). In a dyadic context, mutuality takes several forms, for example, mutual trust (Bensou 1999), mutual learning (Stjernstrom and Bengtsson 2004), mutual risk sharing (McIvor, McHugh, and McHugh 2000), etc.

Information sharing is an essential element of collaborative behaviour that contributes to better performance of the supply chain as a whole (Lambert and Cooper 2000; Cao et al. 2010). Information sharing between a dyad helps inter-organisational creativity through developing new products or services (Wang et al. 2008) and reduces supplier opportunism (Wang, Ye, and Tan 2014). In addition to fostering supplier innovativeness (Inemek and MatthysSENS 2013), information sharing helps in mitigating risks due to uncertainties, such as supplier uncertainty, demand uncertainty, and technological uncertainty (Datta and Christopher 2011; Mamillo 2015). Openness in a dyadic relationship helps in clear communication which helps in shared responsibility and understanding (Stank, Keller, and Daugherty 2001). Openness and honesty help develop trust and commitment, leading to improved reliability in the dyadic relationship (Hoyt and Huq 2000); hence, in a way, each of these four elements reinforces strong collaborative ties. In addition to these elements, a commitment between the dyad acts as a differentiating factor between dyads which have high levels of information sharing and information quality (Li and Lin 2006), and as an indicator of which relationships continue and which do not (Wilson and Vlosky 1998). Commitment in the dyadic relationship is also significantly by long-term investments in the collaborative efforts thereby enhancing satisfaction and performance (Nyaga, Whipple, and Lynch 2010). Collaboration in humanitarian supply chains can occur through one or more joint tasks, such as information sharing, need assessment, resource mobilisation, joint procurement, transportation, or the final delivery of goods and services to the beneficiaries (Moshtari 2016). Technology plays an important role in the HSC collaboration through information sharing which helps in resource deployment for efficient relief at the disaster site (Li et al. 2013) and coordination with logistics service.
providers (Van Wassenhove and Martinez 2012). Altay and Pal (2014) showed that through the UN’s cluster approach, information sharing and coordination become faster amongst the humanitarian actors and result in a prompt response.

The developed framework which is discussed in the next section was based on the previously discussed links between institutional logics, organisational culture, and supply chain collaboration.

5. Framework of organisational culture in HSC collaboration

A framework was developed to obtain a better understanding of organisational culture and supply chain collaboration (Figure 1). The framework links supply chain–level institutional logics with organisational culture. Organisations which have a common set of goals can create a community which shares the same logic of values and beliefs (Giorgi, Lockwood, and Glynn 2015). Organisational culture can influence an organisation’s collaborative culture; hence, the collaborative behaviour of a firm at the inter-firm level, as well as the expected collaborative outcomes. For these reasons, it can be argued that organisational culture is the foundation of supply chain collaboration (Kumar et al. 2016).

5.1. Linkage between institutional logics and organisational culture

Institutional logics are the composite of belief systems, and related practices dominate in the field (Scott 2001). A field is the structured relationship between organisations, which is bound by a common meaning system (Hinings 2012). As organisations are part of the field (supply chains), these belief systems that originate from the logics influence the belief systems of the organisation embedded in the field (an actor in the supply chain). Clearly, organisational culture is the embodiment of belief systems of an organisation (Giorgi, Lockwood, and Glynn 2015).

5.2. Linkage between organisational culture and collaborative culture

Scholars agree that the values and assumptions of an organisational culture are hard to detect through a study (Hofstede 1998; Schein 1992). However, values and assumptions manifest as practices within an organisation, which are easily detectable.

Figure 1. A framework for organisational culture in humanitarian supply chain collaboration.
(Trice and Beyer 1993). Practices are ‘how we do things’; they refer to routine activities which are largely unconscious and automatic (Swidler 2001). These organisational routines play an important role in collaboration and collaborative outcomes. ‘Routines are repeated patterns of behaviour that are bound by rules and customs and that do not change very much from one iteration to another’ (Feldman 2000). For example, Bisogno, Saccomanno, and Tommasetti (2015) found that information exchange between partners as organisational routines helps in improving the efficiency of port community systems through integrated information flow in maritime logistics. Further, Inemek and Matthyssens (2013) found that knowledge sharing as an organisational routine between the buyer and the supplier in a manufacturing context improves supplier innovativeness. Knowledge sharing with suppliers as a part of organisational routines greatly improves supplier learning and reduces the number of defects in Toyota manufacturing (Dyer and Hatch 2006).

5.3. Linkage between collaborative culture and collaborative outcomes
As Figure 1 illustrates, a collaborative culture is based on four organisational cultural elements: trust, mutuality, information exchange, openness, and communication (Barnett 2013). In the buyer–supplier context, collaborative behaviour plays an important role in achieving specific goals, such as new product development, joint cost-reduction, and joint inventory management (Horvath 2001). The figure also illustrates the ways the elements of an organisational culture can drive these potential positive collaborative outcomes (Soosay, Hyland, and Ferrer 2008).

Dyer and Hatch (2006) found that knowledge sharing, as a form of organisational routines, between the buyer and the supplier leads to better-quality final products and that defects decreased by 50%, compared to another supply chain where no routine of knowledge sharing existed. Wang et al. (2008) found that knowledge-sharing routines in the dyadic relationship improves inter-organisational creativity. At a fundamental level, organisational routines help in a higher level of inter-organisational coordination (Schilke and Goerzon 2010). Inter-firm knowledge-sharing routines promote supplier innovativeness by expanding the supplier’s knowledge in a specific domain (Inemek and Matthyssens 2013). In sum, attributes of organisational culture are linked to specific collaborative outcomes.

6. Method
In this study, the framework (Figure 1) functioned as a conceptual frame for collecting data. A semi-structured interview guide was developed for the data collection. The semi-structured interviews gave us the opportunity to explore set themes but still left room for the unexpected (Mason 2002). Furthermore, unstructured interviews lack a specific direction, and structured interviews leave no room for more information regarding the context; semi-structured interviews are a mix of these two approaches (Fisher 2010). In a qualitative research setting, data are collected from the context of a naturally occurring social phenomenon (Bryman 1988). Moreover, the qualitative approach encourages theoretical and practical understanding and helps in generating new and alternative theories and concepts (Bygrave 1989). Data collected through semi-structured interviews capture rich data about the research problem. Such interviews also provide the researchers the flexibility to explore any additional issues raised by the respondents (Soosay, Hyland, and Ferrer 2008). This method helped in developing theory that aids in understanding the institutional logics in the humanitarian context proposed as humanitarian institutional logics (HIL). HIL is discussed in the findings section. Twenty-nine semi-structured interviews were conducted with buyers and suppliers in an HSC, which included 2 buyers (B1 and B2) and 27 suppliers. B1 and B2 are big, international organisations with a presence in most countries. These humanitarian organisations have been functioning for several decades. The interviews lasted between 12 and 30 minutes. The interviews were conducted at the AidEx exhibition and meeting in Brussels in 2015. AidEx is an annual exhibition for humanitarian buyers and sellers (current and prospective). Out of the 127 suppliers and buyers that exhibited at AidEx, 29 agreed to participate in this study. The selection of interviewees was based on their job function and their firms’ relationships with the buyers either as suppliers or potential suppliers. The respondents from the supplier group comprised of national managers who handle sales functions and heads of sales. Senior management from the purchasing function in B1 and B2 responded from the buyers group.

The semi-structured interview guide focused on the two main constructs of this study: organisational culture and supply chain collaboration. The purpose of the data collection was to capture Schein’s (2010) and Cameron and Quinn’s (2006) five dimensions of organisational culture (dominant characteristics, organisational leadership, management of employees, strategic emphasis, and criteria for success), as well as collaboration between suppliers and buyers. In addition, potential differences in the organisational cultures between the buyers and suppliers and potential impediments to collaboration due to the differences were investigated. The data were analysed using a content analysis, as suggested by Krippendorff (2004), for data gathered through structured interviews. Content analysis can be defined as a research technique for an objective and systematic description of the manifest content of communication (Bryman and Bell 2007). The transcribed interview material was
coded and categorised into respondent characteristics and then into themes following the five dimensions of organisational culture and collaborative outcomes (please see Tables 2 and 3). The respondents were divided based on the size of the firm (Raghavendran, Xavier, and Israel 2012). The number of employees was used to define a firm’s size. Respondent organisations with fewer than 200 employees were classified as small, 200–500 as medium, and more than 500 as large (see Table 1). The suppliers were classified based on key business units. For example, suppliers that focused on the commercial sector without a humanitarian unit or specialised products for humanitarian relief were classified as commercial suppliers (C). Suppliers with separate units that handled the humanitarian and commercial sectors were classified as humanitarian and commercial (H&C), and suppliers that focused on humanitarian relief only were labelled humanitarian (H) Table 1.

7. Findings

7.1. Organisational culture and supply chain collaboration

According to the B1 respondent, the fundamental difference was that the suppliers were ‘there to make a profit’, whilst B1 functioned on a non-profit basis. Furthermore, bureaucracy was mentioned as a differentiating factor. The B1 respondent indicated that they have a reputation for rigorous processes, particularly in the procurement function, and that this is often highlighted as a difference from their suppliers with perhaps more flexible structures. The B2 respondent shared similar experiences.

Several suppliers differentiated between the goals and outcomes in this field. For example, although they felt the organisational cultures were different, customer satisfaction was highlighted as important: ‘Basically we are looking for the same ends – satisfy the needs of the customers and customers satisfy our needs, too’ (Supplier I). Furthermore, supplier

<table>
<thead>
<tr>
<th>Supplier/Buyer</th>
<th>Customer</th>
<th>Firm size</th>
<th>Type</th>
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<tbody>
<tr>
<td>A</td>
<td>UNRWA, NGOs</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>B</td>
<td>Turkish Red Crescent, UNICEF, UNHCR, Red Cross, and Commercial</td>
<td>M</td>
<td>H&amp;C</td>
</tr>
<tr>
<td>C</td>
<td>UNDP, UNHCR, UNICEF, UNWFP, Oxfam, World vision, ICRC, IFRC, and Commercial</td>
<td>M</td>
<td>H&amp;C</td>
</tr>
<tr>
<td>D</td>
<td>UNICEF, WHO, ICRC, local NGOs, and Commercial</td>
<td>L, C</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>UNHCR, NGOs, and Commercial</td>
<td>M</td>
<td>C</td>
</tr>
<tr>
<td>F</td>
<td>NGOs, actors such as Red Cross, WHO, and UNICEF</td>
<td>M</td>
<td>H</td>
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<tr>
<td>G</td>
<td>UNICEF, Oxfam, and Commercial</td>
<td>M</td>
<td>C</td>
</tr>
<tr>
<td>H</td>
<td>Local rescue agencies in Finland – Crisis management agencies, UNHCR, MSP, Red cross, and Commercial</td>
<td>M</td>
<td>C</td>
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<tr>
<td>I</td>
<td>UNICEF, MSF (Medicines Sans Frontiers)</td>
<td>M</td>
<td>H</td>
</tr>
<tr>
<td>J</td>
<td>Commercial</td>
<td>S</td>
<td>C</td>
</tr>
<tr>
<td>K</td>
<td>UNHCR, WFP, UNOPS, UNDP, Peacekeepers, ICRC, many other NGOs, Save the Children, and Oxfam.</td>
<td>M</td>
<td>H</td>
</tr>
<tr>
<td>L</td>
<td>UNHCR, WFP, and Commercial</td>
<td>M</td>
<td>C</td>
</tr>
<tr>
<td>M</td>
<td>UN, Red Cross mainly, also some charities, and commercial</td>
<td>M</td>
<td>H&amp;C</td>
</tr>
<tr>
<td>N</td>
<td>Red Cross, MSF, UNHCR, Norwegian refugee council, and Commercial</td>
<td>S</td>
<td>H&amp;C</td>
</tr>
<tr>
<td>O</td>
<td>Oxfam, JSI, US Aid, Save the Children, Farm Africa, UNICEF, and HealthPartners International</td>
<td>M</td>
<td>H</td>
</tr>
<tr>
<td>P</td>
<td>Red Cross, MSF, UNICEF, and Commercial</td>
<td>S</td>
<td>H&amp;C</td>
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<tr>
<td>Q</td>
<td>UNFPA, Red Cross, German Red Cross, and British Red Cross</td>
<td>S</td>
<td>H</td>
</tr>
<tr>
<td>R</td>
<td>UNICEF, NGOs, Red Cross, Defence forces, and Commercial</td>
<td>M, C</td>
<td></td>
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<tr>
<td>S</td>
<td>Governments, UNHCR, and NGOs</td>
<td>S</td>
<td>H</td>
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<td>T</td>
<td>NGOs, UN, and Commercial</td>
<td>S</td>
<td>C</td>
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<tr>
<td>U</td>
<td>Norwegian Refugee Council, Mercy Corps, CRS, ACF Spain, UNICEF, NGOs, and Commercial</td>
<td>M</td>
<td>H&amp;C</td>
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<td>V</td>
<td>UNHCR, and Commercial</td>
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<td>W</td>
<td>UN Agencies, Red Cross, NRC, and Commercial</td>
<td>S</td>
<td>H&amp;C</td>
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<td>X</td>
<td>Local and international NGOs, UN, and Commercial</td>
<td>M</td>
<td>H&amp;C</td>
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<tr>
<td>Y</td>
<td>UNICEF, NGOs</td>
<td>S</td>
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<tr>
<td>Z</td>
<td>UNHCR, Oxfam, and Commercial</td>
<td>S</td>
<td>H&amp;C</td>
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<tr>
<td>ZA</td>
<td>UNHCR, NGOs</td>
<td>M</td>
<td>H</td>
</tr>
<tr>
<td>B1</td>
<td>Wide range of actors and beneficiaries</td>
<td>L</td>
<td>H</td>
</tr>
<tr>
<td>B2</td>
<td>Wide range of actors and beneficiaries</td>
<td>L</td>
<td>H</td>
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S-small, M-medium, L-large; H-humanitarian, H&C-both.
respondents who viewed their organisational culture as different stated that this was due to differences in values related to making profits versus a non-profit goal. As Schein (1991, 1992) stated, values are core factors that define organisational culture. Thus, the non-profit versus profit factor seems to be a dominant segregator: ‘With regards to our customers, we mainly supply to the UN. They have their own culture that is different from our profit-making culture’ (Supplier C). Supplier F expressed the same line of thought: ‘Maybe since we are a commercial company and they are NGOs, there is a difference right there. However, I cannot think of anything else’.

Furthermore, three suppliers defined organisational culture in a similar manner as Hofstede’s (2016) understanding of cultures. For example, these suppliers discussed differences between the geographical locations of headquarters versus field locations: ‘The factory is based in Denmark, and of course, we have a very different culture compared to places we serve, such as Africa or India’ (Supplier D).

In addition, several suppliers perceived their organisational cultures as distinct and therefore unlike their buyers’ organisational cultures. One supplier (Supplier R) stated that the organisational culture is based on family values because it is a family business. Another supplier (Supplier W) stated that the operations are based on transparency and whether other suppliers operated in the same way was unclear.

The interviews revealed that there were suppliers who shared their buyers’ organisational culture and suppliers who acknowledged the differences in core values between making a profit versus a non-profit basis. Initially, it seems that organisations that serve the humanitarian community and the commercial sector identified differences between their organisational cultures and their buyers’ organisational cultures. Suppliers that served only humanitarian actors as customers shared fewer differences and indicated that the organisational cultures were the same as those of the buyers. This could be because, despite the goal to make a profit, organisations that serve only the humanitarian sector might share other values with their buyers, such as serving the beneficiaries. As Supplier O stated, ‘We do not really have customers so much as we have beneficiaries’.

At the organisational level, the cultural attributes were different for the three groups of suppliers when compared to the buyers. Table 2 provides an overview of the ways the organisational cultures differed in different dimensions of organisational culture.

The analysis (as in Table 2) shows that the suppliers can be grouped into three categories: commercial, humanitarian, and commercial and humanitarian. Clearly, there is a similarity in such attributes as leadership, employee management, and success criteria amongst the humanitarian suppliers and the humanitarian buyers, making it an organisational cultural congruence. This congruence explains the collaborative behaviour between the humanitarian suppliers and the humanitarian buyers. In terms of commercial suppliers and humanitarian buyers, there is an obvious difference. However, in spite of the differences in the organisational cultural attributes between the dyad, the attributes show complementarities. For example, the leadership style of facilitator, mentor, and competitor (of the commercial supplier) complements the buyer’s leadership attributes of coordinator and monitor. The complementarities in the leadership between a humanitarian buyer and a commercial supplier provide a complementary fit for the other four attributes of organisational culture, leading to collaboration between the dyad. Similarly, complementarities can be found between humanitarian buyers and H&C suppliers.

<table>
<thead>
<tr>
<th>Supplier/buyer type</th>
<th>Suppliers/ Buyers</th>
<th>Organisational culture dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dominant</td>
<td>Leadership</td>
</tr>
<tr>
<td></td>
<td>characteristics</td>
<td>management</td>
</tr>
<tr>
<td>Commercial supplier</td>
<td>D, E, G, H, J,</td>
<td>Entrepreneurial,</td>
</tr>
<tr>
<td></td>
<td>L, R, T, and V</td>
<td>results-oriented</td>
</tr>
<tr>
<td>Humanitarian supplier</td>
<td>A, F, I, K, O,</td>
<td>Result-oriented,</td>
</tr>
<tr>
<td></td>
<td>Q, S, Y, and ZA</td>
<td>personal place</td>
</tr>
<tr>
<td>Humanitarian and</td>
<td>B, C, M, N, P,</td>
<td>Entrepreneurial,</td>
</tr>
<tr>
<td>commercial supplier</td>
<td>U, W, X, and Z</td>
<td>results-oriented</td>
</tr>
<tr>
<td>Humanitarian buyer</td>
<td>B1 and B2</td>
<td>Structured, controlled</td>
</tr>
</tbody>
</table>

Table 2. Buyer and supplier view of organisational culture dimensions.
The presence of congruence and complementarities of organisational culture between the buyer and the suppliers as a whole enables the collaborative relationship.

7.2. Collaborative behaviour and outcomes

In line with previous studies (e.g. Bstieler and Hemmert 2010), the findings indicated that a similar organisational culture leads to enhanced collaboration, which can positively influence joint efforts. Supplier T stated the following: ‘We collaborate with our customers to reduce the cost and time. We also plan the movement of goods jointly.’ Supplier K reflected on inter- and intra-level collaboration: ‘We try to understand the requirement from them and develop products that suit them. So, our engineering team and technical team work closely with them.’

It was also found that some suppliers put considerable effort into achieving the common goal of improving the delivery of relief to beneficiaries: ‘We work together. We assume that they are a part of our company, and they assume the same – we are part of their organisation’ (Supplier Q).

The data also indicated that in an HSC, collaborative outcomes, such as new product development, inventory management, and product/service delivery, can be influenced by elements of the buyers’ and suppliers’ organisational cultures, such as trust, information sharing, and commitment. The findings specifically related to collaboration between buyers and suppliers are shown in Table 3.

As seen from Table 3, the range of collaborative outcomes for humanitarian suppliers is limited compared to those for commercial supply chains. Product and service delivery with customisation, joint cost-reduction, and occasional joint development of new products are outcomes of collaboration. The limitation of the range of collaborative outcomes could be due to the buyers’ fairly hierarchical organisational culture along with ‘going by the books’ (as B1 indicated). Whilst suppliers expressed interest in engaging in a higher level of collaboration, the fairly short periods of collaboration (about three years) discouraged suppliers from making a large investment.

It was also found that none of the supplier types (H, C, or H&C) mentioned any problems with the buyers (B1 and B2) due to differences in organisational cultures. The respondents indicated that the factors that contributed to a seamless buyer–supplier relationship were information sharing, trust, commitment, flexibility, transparency, and mutual respect, in addition to contracts and agreements.

7.3. Institutional logics in the humanitarian context

Both responding buying organisations were characterised by institutional logics related to their non-profit basis and by their assisting beneficiaries. The responding suppliers categorised as H (see Table 1) followed the same institutional logics as both buyers; however, types C and H&C followed an institutional logic that was characterised by being innovative and achieving financial targets.

Thus, it appears that certain actors in the humanitarian context function and collaborate with different institutional logics. Because the buyer organisations (B1 and B2) were large, they could have caused a dominant ‘humanitarian’ logic to predominate the supply chain level and thus to also influence supply chain collaboration and outcomes. The finding could

<table>
<thead>
<tr>
<th>Supplier/buyer type</th>
<th>Suppliers/buyers</th>
<th>Level of collaboration</th>
<th>Outcomes of collaboration</th>
<th>Enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanitarian supplier</td>
<td>A, F, I, K, O, Q, S, Y, and ZA</td>
<td>Limited collaboration, short-term</td>
<td>Joint product development and customisation</td>
<td>Flexibility, information sharing, commitment, trust, transparency, mutual respect</td>
</tr>
<tr>
<td>Humanitarian buyer</td>
<td>B1 and B2</td>
<td>Limited collaboration, short-term</td>
<td>Product/service delivery, customisation, and some innovation</td>
<td>Information sharing, contracts, and agreements</td>
</tr>
</tbody>
</table>
be considered novel because, although this is a mature field and B1 and B2 have been active humanitarian organisations for more than 50 years, actors with differing logics co-exist and collaborate rather well according to the respondents. This finding contradicts previous findings, such as findings by Meyer, Scott, and Strang (1987), that mature fields possess congruent logics at the supply chain level.

Institutional logics characterised by non-profit and beneficiary assistance goals can be referred to as HIL. Institutional complexity exists when several institutional logics converge (Giorgi, Lockwood, and Glynn 2015). Within HIL, institutional complexity can exist depending on disaster specifics (e.g. which actors are involved), sector specifics (different product types, e.g. shelter might be influenced by industry-specific logics), and phase specifics (different goals in the immediate aftermath of a disaster than in a long-term development phase). As this study shows, the suppliers had different institutional logics as well, leading to institutional complexity.

7.3.1. **Humanitarian institutional logics**

Institutional logics in the HIL are characterised by the field (the supply chain) that consists of several actors working together with completely different backgrounds and organisational cultures (supplier type C, H&C). Contrary to the extant supply chain literature, whilst there is a difference in organisational cultures between the buyer and the supplier, the collaboration between the dyads did not cease to exist, neither there was there any tension in the collaborative relationship in the dyad. Furthermore, the differences in organisational cultures did not hinder the dyad’s ability to collaborate and reap collaborative benefits (e.g. product innovation and customisation). The overarching institutional logics, at the supply chain level, originating from the humanitarian buyer that aims to provide relief to the beneficiaries diminishes the effects of differences in organisational cultures of the suppliers and keep them in collaboration with the buyers.

Moreover, the collaborative behaviour of the humanitarian buyer with the suppliers fluctuates in placing context-specific relief priorities that are specific to the phase of the disaster management (e.g. preparedness, immediate relief, and reconstruction or short-term aid, long-term aid) and the disaster itself. These overarching logics are composed of values, norms, and beliefs that are aimed at helping the needful people: the beneficiaries. The dominant institutional logics that emerge at the supply chain level are characterised by the size (B1 and B2 are very large and are international organisations), power, and organisational culture of the humanitarian buyer and the participating suppliers. Based on the literature review (as Thornton and Ocasio (1999) described, see Section 2), the data and our proposed view of HIL, we understand HIL as

- behaviour with fluctuating patterns
- disaster-phase specific
- embodied with norms, values, and beliefs influenced by non-profit and helping people in need goals
- influenced by a hierarchy as well as power and the size of the central actor
- overarching mechanism that connects organisations regardless of their organisational culture.

8. **Conclusions**

The aim of this study was to develop a framework that linked institutional logics at the industry level to organisational culture on the organisational level with collaboration at the supply chain level. The framework guided the qualitative data collection from 29 respondents. The respondents included 2 buyers and 27 suppliers. The purpose of the study was to better understand the impacts that institutional logics and, more specifically, organisational culture can have on HSC collaboration.

The findings indicated that organisational culture is mostly related to the values of the organisation rather than assumptions and artefacts, as Schein (1991, 1992) included in the definition of organisational culture. Moreover, the findings indicated that there are on-going collaborative efforts between suppliers and buyers and that these efforts lead to greater outcomes for the beneficiaries.

An unexpected finding was that no suppliers claimed to have experienced issues with the buyers although they had different types of organisational cultures. The factors that contributed to successful collaboration were identified as trust, commitment, information sharing, and mutual respect. In addition, strong institutional logics exert normative pressure on suppliers to be flexible, and hence existing institutional logics might mask the influence of a specific organisational culture on collaborative outcomes. The identified institutional logics are referred to as ‘humanitarian institutional logics’. Institutional logics can arise from collective identities (Tajfel and Turner 1979), and organisations such as buyers and suppliers can be seen as members of collective identities that follow the norms and prescriptions of the sector (humanitarian) institutional logics (Kelman 2006). Although the respondents in this study did not discuss norms, they did identify a common value based on non-profit goals. Hence, the findings can be seen as an indication of common institutional logics at the sector and supply chain levels in the humanitarian context.
This study provides original contributions in several ways. First, the presented framework (Figure 1) explicates the relationship between key constructs, organisational culture, and HSC collaboration. In a humanitarian setting, this framework can be used to further the understanding of buyer–supplier collaboration despite differences in organisational cultures and institutional forces. Second, the framework can also be used to develop models for the statistical testing of collaboration in HSCs in further research. Third, the application of institutional logics as a lens for HSCs expands the boundary conditions of the theories discussed in HSC research. Finally, despite differences in organisational cultures, insights from the success story of a harmonious buyer–supplier relationship in an HSC can be applied to a commercial supply chain setting to enhance collaborative outcomes.

8.1. Further research and limitations

Future research studies could investigate organisational culture and collaboration in a humanitarian setting with both local and international NGOs, as well as UN agencies. Furthermore, other dimensions of organisational culture developed by Cameron and Quinn (2006) could be used to obtain insights. Specific geographical locations and disaster-specific research could be conducted to generate additional in-depth knowledge of a specific supply chain. The data collection was limited to 2 buyers and 27 humanitarian aid suppliers. A larger sample of humanitarian buying organisations is, therefore, suggested for future research.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References


Role of organizational culture in supply chain collaboration: 
NGO context

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Abstract

Previous studies on nongovernment organization (NGO)–business collaboration put business at the center of the supply chain. This study examines a NGO-led supply chain collaboration with for-profit suppliers. The investigation further looks at the reasons for such a collaboration to exist although the NGO has limited financial resources. The NGO’s mission is to provide members with low-cost, high-quality solar-powered salt-water pumps for salt farming purposes. This study investigates the influence of organizational culture on the supply chain collaboration. The organizational culture perspective provides answers to issues relating to the NGO successfully managing the supply chain with for-profit suppliers. This research follows a case study design through semi-structured interviews with the NGO and two tiers of its suppliers. The study finds that complementary organizational cultures between the NGO and its supplier are the key to holding the entire supply chain in place. Moreover, the role of institutional logics in influencing the supply chain is also demonstrated. Research propositions for future research are proposed.

Keywords – NGO, Organizational culture, Institutional logics, Supply chain

1. Introduction

Nongovernment organizations (NGOs) play an important role at the community level by assisting the needy to improve their livelihood. The range of NGO activities extends from humanitarian disaster relief (Scholten et al., 2010) to developmental aid from donors aimed at improving the livelihood of those in need (Oloruntoba and Gray, 2006). However, commercial firms work with NGOs with a goal that is mutually beneficial. For example, Microsoft Corp and One Laptop per Child (OLPC) aim to manufacture and distribute low-cost laptops across the world. In another instance, Unilever in India along with local NGOs created Shakti, a rural
network that employs about 31,000 women who sell Unilever’s products to rural customers (Dahan et al., 2010).

Extant literature informs that such roles played by NGOs with commercial firms are captured as cross-sector partnerships (Selsky and Parker, 2005). Firm-initiated inclusion of NGOs either enhances the firm’s projection of corporate social responsibility (CSR) to the outside world (Doh and Guay, 2006; Dahan et al., 2010) or improves the firm’s social sustainability (Rodriguez et al., 2016). In some instances, such inclusion is seen as a strategy for bolstering the legitimacy of the firm (Arenas et al., 2009).

However, studies of the NGO as the central buying firm with for-profit suppliers in the supply chain are rare. It is important to understand such a context as it helps in understanding the way in which this type of supply chain collaboration differs from commercial collaboration. Moreover, this collaboration could be an essential source of information for supply chain management theory to adopt a best practice that the commercial supply chain has missed thus far. This study aims to fill this research gap by investigating a supply chain with an NGO as the central buyer with suppliers that are for-profit firms in the Indian context, an emerging economy setting. Such a supply chain is created to deliver a collaborative outcome that helps uplift the livelihood of the local community.

Collaboration between organizations results in several beneficial outcomes, such as new product development, joint cost reduction (Fawcett et al., 2008), inventory management (Storey et al., 2005), etc. However, such collaboration between two organizations does not have to be a long-term phenomenon. One of the main reasons for a strained collaborative relationship is differences in organizational cultures that lead to tension in the buyer–supplier relationship (Koulikoff and Harrison, 2008), and in some instances, such differences in organizational cultures between the collaborating firms can lead to a breakdown in collaborative relationships (Fawcett et al., 2015).

Organizational culture manifests within an organization through several forms, such as a firm’s ability to innovate (Brettel and Cleven, 2011), information sharing between the partner firms (Oxburrow and Brindley, 2011), organizational routines that support collaborative behavior (van Hoof and Thiell, 2014), policies and procedures that support collaboration (Harvey et al., 2000), support of supplier diversity (Whitfield and Landeros, 2006), and knowledge sharing between partners in the supply chain (McCarter et al., 2005). Thus, it can be argued that organizational culture becomes a key factor within the gamut of the supply chain in driving
and delivering collaboration as the organizational culture binds the dyadic relationship that influences in a wide variety of collaborative outcomes. Organizational culture is defined through values, norms, beliefs, and assumptions (Schein, 1991). Similar to organizational culture, institutional logics is defined through values, beliefs, and norms (Thornton and Ocasio, 1999) and extends beyond the organization level. Such congruence allows institutional logics to be a natural fit as a theoretical lens for this study. The aim of this study is to answer, how does organizational culture influence collaboration in a supply chain with an NGO as the focal actor with for-profit suppliers?

The rest of the paper is organized as follows. A literature review of the key concepts (institutional logics, organizational culture, and supply chain collaboration) is presented. Following the literature review, the data collection, coding, and analysis are presented. Results are presented followed by discussion that contains research propositions intended for future examination. Implications for theory and practice, and limitations of this study are presented last.

2. Literature review

2.1 Institutional logics

Institutional logics can be defined as “socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality” (Thornton and Ocasio, 1999, p. 804). Institutional logics provide guidelines for interpreting and working in social contexts. Moreover, organizations conform to the logics in order to gain validation from the key audiences (Friedland and Alford, 1991). Organizations often face multiple logics that may be mutually incompatible (Kraatz and Block, 2008). The extent of incompatibility leads to tension between the partnering firms and poses challenges to the relationship, such that competing institutional logics lead to institutional complexity (Greenwood et al., 2011). In addition, in emerging fields (the NGO is the central actor), the contestation between logics as proponents compete to prioritize the logics that are driven by material interests or normative beliefs between the actors thus allowing one logic to succeed over the other, while mature fields have settled priorities over logics (Hoffman, 1999).

Institutional logics emphasize how institutions provide social actors with a highly contingent set of social norms (Jackall, 1988), where behavior is driven not by a logic of consequences
but by a logic of appropriateness (March and Olsen, 2010). Organizational forms and managerial practices are manifestations of, and legitimated by, institutional logics (Greenwood et al., 2010). Institutional logics also provide a clear set of organizing principles for a specific realm within society (Besharov and Smith, 2014).

According to Hinings (2012, p.99), “a field is a set of structured relationships between organizational actors, bound together by a common meaning system, currently conceptualized primarily as an institutional logic.” This definition makes sufficient characteristic of a supply chain where different organizations are bound together toward a common goal. Institutional logics and organizational culture are connected. For example, logics at the field level are either adopted or adapted at the organizational level. This suggests that the influence of institutional logics is an attempt to change the existing organizational culture during the adoption/adaption process (Hinings, 2012). The recent works by Marquis and Lounsbury (2007), Lounsbury (2007), Zilber (2008), and Reay and Hinings (2009) show that relationship. Moving beyond the firm level, from the supply chain level, institutional logics emerging from the central firm play an important role among the members of the supply chain (Glover et al., 2014). It could be deduced that organizational culture works at the organizational level and institutional logics work at the supply chain level (shown as the field level). Thus, it is essential to view organizational culture theoretically.

2.2 Organizational culture

Organizational culture is defined as “as a pattern of shared basic assumptions, invented, discovered or developed by a given group, as it learns to cope with its problems of external adaptation and internal integration, that has worked well enough to be considered valid, and therefore is to be taught to new members of the group as the correct way to perceive, think, feel in relation to those problems”(Schein, 1991, p.247). Culture as a term has been used to portray a wide variety of contexts ranging from a set of values, beliefs, and assumptions that guide or restrain people in an organization (Schein, 1985) to tools that actors use to mix and match to suit their needs (McPherson and Sauder, 2013).

Drilling down from institutional logics (the supply chain level), the organizational culture (at the organizational level) plays an important and irreplaceable role in the way the organization functions internally and interacts externally. A firm realizes competitive advantage if the firm’s organizational culture is valuable, rare, and imperfectly imitable. Organizational culture also influences how a firm interacts with several actors, such as employees, customers, and
suppliers (Barney, 1986), making organizational culture vital from a supply chain perspective. Several dimensions of a firm are so tightly woven into the organizational cultural fabric that such attributes act as indicators to determine the type of prevailing organizational culture. For example, six dimensions, such as criteria for success, organizational leadership, employee management, organizational glue, dominant characteristics of the firm, and strategic emphases of the firm, indicate the type of organizational culture of the firm (Cameron and Quinn, 2006).

Cameron and Quinn (2006) developed a scale, the organizational culture assessment instrument (OCAI), to detect the organizational culture based on the competing values framework (CVF). The OCAI is based on six dimensions of organizational culture: dominant characteristics, organizational leadership, management of employees, organizational glue, strategic emphasis, and criteria for success. These six dimensions indicate one of the four organizational culture types: clan, adhocracy, hierarchy, and market. This scale helps detect the organizational culture of a firm which can be used as input knowledge, and measures can be taken to change as needed to improve the firm’s performance.

Firms with similar organizational cultures fit naturally to collaborate to reap collaborative benefits, such as joint new product development (Lee et al., 2008), joint cost reduction (McIvor and McHugh, 2000), joint inventory management (Cadilhon et al., 2005), technology diffusion within the supply chain (Patterson et al., 2003), implementing sustainability practices (Prajogo et al., 2014), etc. Organizational routines that are manifestations of the organizational culture act as the principal mechanism with which the organizational culture spreads its influence on the supply chain collaboration. For example, organizational routines influence knowledge sharing between firms (Dyer and Hatch, 2006; Powell, 1998), inter-organizational creativity (Wang et al., 2008), inter-organizational coordination (Schilke and Goerzon, 2010), supplier innovativeness (Inemek and MatthysSENS, 2013), and collaborative capacity planning (van Hoof and Thiell, 2014).

2.3 Collaboration

Definitions of supply chain collaboration can be grouped into two broad categories: process focused and relationship focused (Cao and Zhang, 2011). The process-focused definition of collaboration centers on two or more actors in the supply chain that collaborate to achieve a common goal with importance given to processes that help collaboration. A process-focused collaboration can be found in the works of Stank et al. (2001), Mentzer et al. (2001), Manthou et al. (2004), Sheu et al. (2006), and Simatupang and Sridharan (2002). A relationship-focused
collaboration is about the buyer–supplier relationship, antecedents of the relationship, sharing of resources, mutual trust, and a long-term collaborative relationship (Bowersox et al., 2003; Fawcett et al., 2008; Golicic et al., 2003; Olorunniwo and Li, 2010; Soosay et al., 2008). This study adopts process-focused collaboration, and accordingly, collaboration is defined “as two or more chain members working together to create a competitive advantage through sharing information, making joint decisions and sharing benefits which result from greater profitability of satisfying end customer needs than acting alone” (Simatupang and Sridharan, 2002, p. 19).

NGOs are “social, cultural, legal, and environmental advocacy and/or operational groups that have goals that are primarily noncommercial” (Kourula and Laasonen, 2010, p.36). Although some studies show that the NGO–business relationship is characterized by mistrust and conflict (Dahan et al., 2010; Rodinelli and London, 2003; Roloff, 2008), NGOs and businesses understand their strengths and therefore, work together for the benefit of the community. The outcomes align toward sustainable development of the community through creating social, environmental, and economic value for the actors involved (Rein and Scott, 2009).

The rise in the number of NGOs in recent years has led to an increase in influence at the institutional level with public and private sector actors (Doh and Teegen, 2002; Yaziji and Doh, 2009). There are several motivational reasons for NGOs to collaborate with business. Pederson and Pederson (2013) show ten motivations for such collaboration, and the least important reason for NGOs and business is conforming to stakeholder pressure for partnerships. From the NGO’s standpoint, the most important reason is to get access to partner resources (financial, technical, and human). Meanwhile, from the business’s standpoint, the motivation comes from jointly raising awareness of social problems, closely followed by improving image, reputation, and legitimacy.

Scholars have attempted to develop typologies for NGO–business collaboration. For example, Rondinelli and London (2003) show three types of collaboration: arm’s-length relationship (low intensity), interactive collaboration (moderate intensity), and intensive environmental management alliances (high intensity). Austin (2000) shows a collaborative continuum that divides the entire business–NGO collaboration into three stages: philanthropic, transactional, and integrative. Moreover, in some instances, the level of collaboration is also argued to move between the stages.

Extant literature on NGO–business collaboration points at social sustainability, CSR, and reputational risks as drivers of collaboration. An NGO–business collaboration is established as
a result of frequency of contacts, perceived strategic fit, and firms’ commitment to CSR (den Hond et al., 2015). Although several barriers have been found, from a strategic viewpoint, a lack of shared vision and clear goals and lack of knowledge of each other’s organizational culture are the key barriers in business–NGO collaboration (Pederson and Pederson, 2013).

3. Methodology

Case study is chosen as a method for this research because this method allows the phenomenon to be studied in the natural setting, and meaningful theory can be generated. This method also provides a holistic understanding of the phenomenon of interest (Meredith, 1998). The case study is an empirical inquiry that investigates a contemporary phenomenon in depth and adds a real-life context (Yin, 2003; Eisenhardt, 1989). In this case study, we investigated an NGO-led supply chain in which the NGO is the central actor with for-profit suppliers. One NGO (buyer) and five suppliers were interviewed. A total of 12 semi-structured interviews were conducted with the NGO and all of its suppliers. Semi-structured interviews were chosen as they provide the flexibility to dig deep into the context but are guided to stay on the subject (Soosay et al., 2008). Table 1 provides more information about the respondents. The buyer (the NGO) and the suppliers were categorized based on the size of the firm. The number of employees was used to define a firm’s size (Ahire and Golhar, 1996). Respondent organizations with fewer than 100 employees were classified as small, 100–500 as medium, and more than 500 as large. Based on an extensive literature review, a semi-structured interview guide was prepared. The interview guide included questions relating to supply chain collaboration and organizational culture.

3.1 Case context

The NGO in this study is located in India in the state of Gujarat. Gujarat contributes to more than half of the country’s salt production from the region Little Rann of Kutch. The NGO works actively with the salt farmers by creating awareness and engaging them in buying and installing solar-powered salt-water pumps. The NGO has about 35,000 salt farming members. The aim
of the NGO is to improve the livelihood of the salt farmers through reducing the total cost of salt production by replacing traditional diesel-powered pumps with modern solar-powered pumps. There are several advantages for this switch. Energy loss during pumping out brine is reduced to a minimum, and the cost of installation of the solar-powered pumps breaks even in 4 years (thus, the next 21 years of the solar-powered salt-water pumps’ active life is free of cost for the salt farmers). Moreover, carbon emissions are fully controlled leading to environmental sustainability and the improved personal health of the salt farmers as a matter of social sustainability. Based on trial and error, the NGO has perfected the specifications of the solar-powered salt-water pumps (the product) that can withstand the harsh environmental conditions of the Little Rann of Kutch. With this product specification at hand, the NGO identified suppliers that can meet the specifications and the cost constraints.

3.2 Data collection

Twelve semi-structured interviews were conducted with the buyer and two tiers of suppliers. The interviews lasted between 25 and 45 minutes. The respondents were senior managers in the sales function from the supplier firms and the senior management in the NGO. The interviews followed the two main constructs of the study: organizational culture and supply chain collaboration. The data collection was intended to capture the key aspects of supply chain collaboration and the five dimensions of organizational culture (Cameron and Quinn, 2006) that reflect Schein’s (2010) view on organizational culture. The five dimensions (whose dominant characteristics are organizational leadership, management of employees, strategic emphasis, and criteria for success), as well as collaboration between suppliers and buyers, were investigated. Moreover, potential differences in the organizational cultures between the buyers and suppliers that could lead to potential impediments to collaboration were also captured. The data was analyzed using content analysis (Eisenhardt, 1989; Krippendorff, 2004).

3.3 Data coding

The data obtained from the interviews was transcribed and inputted into Atlas.Ti, qualitative research software. Open coding was done initially, as this helps to break down the data into
small “meaning units” that can be used later to build higher-level concepts (Carter and Denser, 2001; Glaser, 2001). Codes were assigned based on the interpretation of what the participant was relating to the interviewer. After the coding was completed, selective coding was performed as the next level to evolve categories and properties (Saldhana et al., 2015).

4. Findings

The findings show the influence of organizational culture on supply chain collaboration. This influence is achieved in a two-stage process. The first stage explicates the influence of the NGO’s organizational culture on the collaboration with the first-tier supplier, and the second stage explains the influence of institutional logics on the supply chain that helps the NGO’s desired outcome. It is interesting to find that both parts are essential to the functioning of the NGO-led supply chain.

4.1 Influence of organizational culture on the dyadic collaboration (NGO and first-tier supplier)

In this case study, the organisational cultures of the NGO and its suppliers are fundamentally different for instance, non-profit organisational culture of the NGO and for-profit organisational culture of the suppliers. A close look at the dimensions of organisational cultures of the NGO and the supplier Z (Table 2) shows the similarities and differences across organisational cultures.

The CEO of the NGO described the organisation’s culture as follows:

…we have a culture of running our operations in a low cost mode. Our employees know this well and we believe that we can do good to the community without raising our costs. In all our internal meetings the idea of keep costs low is passed to our employees. Also, when we meet our suppliers we emphasise that we always look for ways to do business at low cost.

For the NGO, successful collaboration in this case would be to help improve the livelihoods of beneficiaries and to develop low cost, high-quality solutions for the salt farming community. For supplier Z, successful collaboration would mean the development of innovative products that suit a wide variety of market needs. As indicated by the CEO of the NGO,

….. It is livelihood generation. It also leads to a reduction in expenses and increase in income through higher output of brine pumped out in a day...
There is a natural fit between the criteria of success in both organisations. As indicated by the CEO of the NGO, “…we work with our suppliers very closely. We work with them at every level, at the state level, and national level…”

The NGO places a strategic emphasis on efficiency coupled with a high level of trust and participation. This emphasis ensures that the NGO can drive efficiency in product development activities while allowing participation and communication so that the supplier can discuss the issues that could deter a final product. As a complement to the buyer, the supplier Z emphasizes that its organisation encourages flexibility, thereby allowing the organisation to be open to new ideas. The sales manager of Supplier Z indicated that:

...We work with the NGO in this new product they need. We want to satisfy our customer, so we are flexible in our approach, and we have meetings regularly to come with the new design of pumps, moreover our Director also insists on developing this product successfully...

In this case, the NGO had perfected the product specification based on several years of trial and error on a small sample of salt farmers. Effectively communicating the product specification aided the collaboration process and helped to bring down the overall cost of the product. The NGO and supplier Z held joint quarterly review meetings. The joint review meetings brought together key personnel in both organisations to review the collaborative performance. This high level of collaboration was possible due to the complementary organisational cultures across. Such joint meetings enhanced transparency and encouraged accountability. Such meetings also strongly discouraged a culture of mutually blaming for inefficiencies, and poor performance, leading to strain in the collaborative relationship.

.. Both Rohit and I will sit together and check with these people. Usually, things go wrong when the one of the two teams is not working well. Then the blame game starts, the finger pointing starts. Once the two teams get the message that looks the owners are sitting together and asking why was it not done, then they will be forced to work together. They have no choice. They better collaborate that is what exactly we are going to do

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Insert Table 2 here

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The leadership qualities of both the NGO and the supplier Z complement one another.

I will pick up the phone and speak to Kumar and vice versa. He is the CEO of the company. Anytime day or night. We have spoken at 11 pm in the night. That’s ok., we understand this, there is an emergency, time doesn’t matter. Pick up the phone and talk. There is no other way to resolve things...

The NGO’s strength in facilitation complements the supplier’s innovativeness, allowing mutual information sharing which lead to removing inefficiency in the product finalization and the processes. Coordination between the dyad extend at the employee level. Employee teamwork and freedom to innovate allows the end goal to be reached with ease. Such similarities in organisational culture between the NGO and the supplier Z naturally differ from any expected difference between non-profit versus and for-profit organisations.

Further, organisational cultural values of the NGO and the supplier Z are similar. The similarity in the organisational cultural values also bolsters the collaborative relationship between the NGO and supplier Z. For instance, the sales manager at supplier Z indicated that,

... we had several meetings with the NGO and we understood that both of us have the same organisational values. Both of us want to embrace delivering sustainable solutions for the society. In our organisation, our leadership always insists on delivering sustainable solutions to the society, it is also one of the reasons for our existence in this business..

Similarly, the CEO of the NGO also indicated that … it is in our values to help the salt farmers in a sustainable way.

The findings become concrete that organisational cultures of the NGO (buyer) and the tier 1 supplier are complementing each other. The complementarity of the organisational culture is the foundation for a reciprocal relationship and development of trust leading to successful collaborative outcome.

4.2 Influence of organizational culture on the dyadic collaboration (first-tier supplier and second-tier suppliers)

The organisational culture of supplier Z gels with its suppliers’ organisational culture. Among the four suppliers (A, B, C, D), the organisational culture of supplier B is very similar with the organisational culture of supplier Z (as seen in Table 3), leading to strengthened buyer-supplier relationship. The high level of collaboration between suppliers Z and B resulted in joint product
development. This finding echoes the previous research of Inemek and Matthyssens (2013), and Brettel and Cleven (2011). The organisational cultures of A and D are predominantly similar in four cultural dimensions between the organisations sharing similar values as seen in Table 3.

*...if you see that supplier (D) they have more or less same approach as we do. I have seen them since two decades and they have visited our factory. Doing business is very easy with that supplier as we understand each other...*

As shown in table 3, it is found that supplier Z collaborates with supplier A and D that results in product customisation as the collaborative outcome. The organisational cultural dimensions of supplier C is different from Z in almost every aspect except for some similarities regarding leadership. Because of the differences in organisational cultures, buyer-supplier relationship is limited to transactions only.

*...the other supplier (C) is very old style and sells standardised parts. They have so many terms and conditions with us. So we don’t bother them so much. Right now we have a requirement (the electrical assembly) so we just buy from them. It is readily available with them. We just place an order and the stock arrives in two or three days...*

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Insert Table 3 here

---

4.3 Enablers of supply chain collaboration with the NGO as the focal firm

Throughout the supply chain, mutual trust in the buyer-supplier relationship is an invisible thread that connects all of its actors. Similar to previous studies based on commercial supply chains (Fawcett et al., 2008; Whitfield and Landeros, 2006; Wang et al., 2008), information sharing between the actors in the supply chain influences collaboration and collaborative outcomes in this NGO-led supply chain. Table 10 provides various collaborative outcomes and the enablers of collaboration between the actors.

Trust plays an important role in cementing the collaborative relationship between the actors, especially when the fundamental business motives are different (i.e. for-profit vs. non-profit).
Information sharing and mutual trust between actors is important for both for-profit and non-profit organisations and act as key enablers of collaboration throughout the supply chain.

Between the partners there is a sense of commitment that drives the idea of new product development by supplier Z. For instance, a sales manager from supplier Z indicated that:

…when we saw the need of the salt farmers for a solar powered salt water pump, we felt we can deliver. We spoke to salt farmers to understand their requirements and current issues in the pump. The meeting made us feel committed to developing a solution.

The NGO interacts with the suppliers of Z: A, B, C and D for sharing technical expertise that it gained over a period of seven years of field trials of solar powered salt water pumps. The technical expertise also helped the NGO in the meetings to drive the idea of keeping the cost low without compromising on the quality.

To bolster collaboration in the supply chain, suppliers A, B, and D stood committed to developing the final product. The transparency in communication between the focal actor and the two tiers of suppliers enables achieving the common collaborative outcome: new product development – solar powered salt water pumps. Further, the focal actor – the NGO has also taken steps to show the suppliers as to how they can be a part of the collaborative goal. As supplier A indicated:

…we went to Runn of Kutch and saw the need of the agariyas. We understood how the new salt water pump that NGO wants to develop can help the agariyas. We felt committed. Our organisation allows us to take decisions that are essential from a customer perspective, and we went ahead developing a low cost solar panel for our customer.

In a similar way, the NGO also invited supplier B, C, and D to visit the salt farming area, however supplier C turned down the invitation.

Supplier B indicated that:

…our organisation works in an open way. Our company always supports developing new products, open to new ideas. So we never had a problem in convincing my boss about taking up the project. Moreover, NGO need is very specific, and they talk to us once in a while to understand the updates on the project. They also saw our drawings of solar panels and gave their suggestions…
The NGO also highlighted that:

…supplier C is an old style company. They are not so flexible, but they deliver goods on time. Since they sell standardised goods we don’t bother to convince them to make a new design for us. The product quality is good and delivery errors are very rare, so we didn’t bother to give them a second invitation for visiting the salt farm.

It is found from the above evidence that factors such as commitment, flexibility and transparency strengthen the collaboration in this NGO led supply chain. This finding echoes Barratt’s (2004) work on enablers of supply chain collaboration.

4.4 Influence of institutional logics on supply chain collaboration

Institutional logic plays an important role in directing collaboration in the NGO-led supply chain to the specific outcome of low-cost, high quality solar salt-water pumps. In this case, the community’s need for the solar salt-water pumps is captured by the focal NGO and drives the supply chain. As the salt farming community is extremely price sensitive to the final product, the NGO has little room to adjust the final cost or the quality of the product.

In order to drive the cost down, the NGO has provided the supplier Z with the perfected product specifications, which is a result of few years of trial and error in the field. Through frequent communication and transparency of process, the NGO has driven the logic of keeping the product cost to the minimum with its first-tier supplier Z. As supplier Z stated:

... NGO wants the pumps in a lower price. As our top management visited the salt farm in Gujarat we understood we can provide pumps for salt farmers. We also know that the NGO operates a low-cost model. We have seen their offices and operations – everything is a cost cutting culture. So we can understand that NGO can only operate in a low-cost environment. We have trimmed the new product a lot as per NGO’s request – when you compare the cost of similar horse power salt water pump we supply to other companies - which has made us supply low cost pumps finally...

The NGO emphases the importance of keeping costs does as part of its organisational culture. This is evident in its operations and artifacts. Further, the CEO of the NGO also reinstated the low-cost operations as its organisational culture, indicating that:

…we don’t have deep pockets. Our members are salt farmers and women who work in the agricultural fields, we cannot take a huge subscription fees – they will simply quit. So we have
from the beginning reinforced the idea that we can do good things at low cost with our employees. We also talk in the same way to our suppliers. You can see for yourself the office, the infrastructure are minimal. It helps us is reducing the overall cost. We rarely use flights, and even if we use it is a low-cost airline. We procure farm produce from nearby villages in bullock cart. We also understand that low cost comes with a delay, so we plan in advance...

The periodic meetings between the NGO and the tier 2 suppliers also emphasized the logic of low-cost, high quality product. Through salt farm visits, the NGO managed to convince the tier 2 suppliers the importance of developing a new product that meets the NGO’s price and technical specification. Supplier A indicated that

...we initially found the idea of developing a new solar powered salt water pump interesting. But we could not match the low cost. The NGO came for a meeting with us and they demonstrated how can the idea be made reality, and still we could make a profit. The NGO provided technical specifications and also, they shared sources from where we could buy some key items which can lower our cost...

The NGO was successful in communicating with the tier 2 suppliers A, B, and D to reduce the cost of the products to lower the final cost to the salt farmers. However, supplier C was not flexible in reducing costs since it was a traditional organisation that specializes in manufacturing standardised products. However, all the other suppliers were able to reduce the cost of their product as the NGO provided technical knowledge about the product and sharing information about low cost suppliers from other states of India.

5. Discussion

The results of the case study differ from several previous studies of NGOs and businesses in several aspects. First, extant literature shows that the reasons for NGO and business collaboration are broad due to the growing focus on self-regulation (Vogel, 2010), the increasing space that CSR takes up (Lambell et al., 2008), and the strategy behind such CSR activities (McWilliams et al., 2006) to boost social legitimacy (Marano and Tushman, 2012). Second, studies have shown NGO–business collaboration from the perspective of the commercial firm aiming to spread its business through NGOs (Dahan et al., 2010; Magretta, 2002). Third, reputational risks lead to business and NGO collaboration (Loza, 2004). Finally, in an NGO–business collaboration, few studies have shown that NGOs bring market knowledge, local networks, and legitimacy, while companies bring technical, financial, and
human resources to develop solutions for the local community (Dahan et al., 2010; Googins and Rochlin, 2000; Yaziji, 2004). However, this study shows that the NGO assembles everything, including technical and financial resources other than legitimacy, a local community network, and market knowledge. The supply chain in this study is similar to a commercial one, except that the focal firm is an NGO, thus falling outside the scope of cross-sector partnerships (Le Ber and Branzei, 2010).

The findings underpin the idea that five dimensions of organizational culture (Cameron and Quinn, 2006) show the fundamental values of the focal NGO. Each dimension is connected and reinforces the other such that all these dimensions together create a working supply chain. Although the organizational culture of the NGO and its first-tier supplier are basically different, for example, non-profit versus for-profit, the two organizations have complementary organizational cultures. As studies based on NGO-led supply chains are rare (Rodriguez et al., 2016), this study attempts to put forth research propositions that could serve as a source for future research.

In a commercial supply chain setting, all members are interested in improving their individual profits. Although firms collaborate for various outcomes (such as new product development, joint inventory management, or innovation), we know that profits are generally important, to keep the firms engaged in the supply chain. From a business–NGO partnership, firms intend to increase their access to new markets through the dyad’s complementary resources (Dahan et al., 2010). However, in this NGO-led supply chain, the organizational cultures between the NGO and the first-tier supplier are so complementary that the commercial supplier intends to work with the NGO even though some of the supplier’s profit is shaved off the product to keep the final product cost low. This could be attributed to the trade-off that the supplier sees between working with a partner (which complements the organizational culture well) versus losing the partner by increasing the profit margin and eventually, the final product cost.

**Proposition 1:** Organizational cultural complementarity between the focal NGO and its first-tier commercial supplier improves collaborative behavior.

Organizational culture manifested through the organization’s criteria for success extends beyond the firm as an institutional-level logic. In this case, the NGO defines success as developing low-cost and high-quality products. This criteria, through frequent interaction with the NGO’s first-tier supplier, transforms into an institutional logic beyond the NGO and exerts pressure on the supplier to adopt processes that make a low-cost, high-quality product feasible.
Further, as a snowball effect, the logic trickles down to all tiers of the suppliers in the supply chain. It is arguable that suppliers also have their own logics in operation. However, when competing logics meet, the logic of the demanding focal firm takes over (Glover et al., 2014).

Hinnings (2012) stated a similar idea:

> [This] literature takes the study of logics, meanings, and cultures a stage further by suggesting that there may be collaborative relationships in organizations with different logics. These collaborations over specific tasks and activities allow competing logics to be managed. The processes and mechanisms allow those espousing different logics to maintain their independence while collaboratively accomplishing necessary work. (p. 99)

**Proposition 2:** Institutional logic driven by the focal NGO dominates the institutional logics of the supplier.

Extant literature shows that commercial firms are now forced to show their social performance on a periodic basis as a part of the firms; sustainability reporting as customer awareness of sustainability is growing (Habek and Wolniak, 2015). It is done through actively delivering community-based services through an NGO, on some occasions free of cost or in some cases at a subsidized rate (Kerr et al., 1996). However, in both cases, complete end-user accountability is not established (Kerr et al., 1996). In this case study, the solar-powered salt-water pumps are not provided free of cost or at a subsidized cost. Instead, the salt farmers (the end users) are obligated to pay small installments of the cost over 4 years. This repayment structure ensures that the salt farmer owns the product, takes care of it, and feels accountable for it. In the salt farming community, the farmers quickly opt for the new product.

**Proposition 3:** Product accountability helps in quick adoption among the end users of the new product.

6. Conclusion

This study responds to Rodriguez et al.’s (2016) recent call for more research on NGO and business collaboration. Existing research focused on NGO and business collaboration mainly by not placing the NGO as the central firm in the supply chain. The present study contributes by examining a NGO-led supply chain with for-profit suppliers. This study provides answers to some of the pertinent questions in the NGO–business collaboration. First, this study
examines the supply chain collaboration from the organizational culture perspective. This perspective provides answers to why such collaboration exists when the principal firm is non-profit with very limited financial resources.

The findings show that complementarities in the organizational cultures of the NGO and its first-tier supplier enabled the dyadic collaboration to deliver a specific outcome: low-cost, high-quality solar-powered salt-water pumps to salt farmers. Second, the NGO–first-tier supplier dyad is more important to the supply chain as this relationship carries the bulk of heterogeneity. The complementary organizational cultures between the NGO and the first-tier supplier enable the NGO to manage its supplier through joint review meetings. Such joint review meetings reduce blame culture and encourage process transparency. Third, the NGO influences second-tier suppliers through its first-tier suppliers, typically characterizing an institutional logic at the supply chain level. The effects of the logic can be seen across the supply chain as each actor in the supply chain aims at reducing the total cost.

The institutional logic is a broader manifestation of the organizational culture at the supply chain level. Finally, through making the end users (salt farmers in this study) pay for the product, their accountability, responsibility for maintaining the product, and ownership of the product are increased considerably. Such a step feeds back into the supply chain by motivating the NGO to support and install solar-powered salt-water pumps for other members who are salt farmers. This ensures business continuity for the supply chain. In addition, economic, social, and environmental aspects are fulfilled making supply chain sustainability a natural outcome.

6.1 Limitations

Similar to every other study, this study is not free of limitations. The research design included a national NGO and five suppliers from the same country: India. Although this design improved the internal validity of the case study, generalizability of the results beyond an emerging economy context is undermined. Generalizability is also a limitation due to the single supply chain case study method.

6.2 Implications for theory and practice

Implications for theory include expanding the boundary conditions of institutional theory through this case context. This study shows how institutional logic works at a broad supply chain level. This study shows a successful NGO–business collaboration from an organizational culture perspective, with considerable implications for managers by demonstrating how
complementarities in organizational culture can lead to strong collaboration and therefore, can lead to a wide variety of collaborative outcomes despite resource constraints.

REFERENCES


Figure 1. The NGO led supply chain

<table>
<thead>
<tr>
<th>Buyer / Supplier</th>
<th>Business</th>
<th>Firm type</th>
<th>Firm size</th>
<th>No. of interviews conducted</th>
<th>Designation of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO (Buyer)</td>
<td>Social work</td>
<td>Non-profit</td>
<td>Medium</td>
<td>2</td>
<td>CEO, Purchasing Manager</td>
</tr>
<tr>
<td>Tier 1 supplier (Z)</td>
<td>Solar salt water pumps</td>
<td>For-profit</td>
<td>Medium</td>
<td>3</td>
<td>CEO, National Sales head, Purchase Manager</td>
</tr>
<tr>
<td>Tier 2 supplier (A)</td>
<td>Water pumps</td>
<td>For-profit</td>
<td>Large</td>
<td>2</td>
<td>Procurement Manager, National Sales Manager</td>
</tr>
<tr>
<td>Tier 2 supplier (B)</td>
<td>Water pumps</td>
<td>For-profit</td>
<td>Medium</td>
<td>2</td>
<td>Head of Purchasing, Head of Sales</td>
</tr>
<tr>
<td>Tier 2 supplier (C)</td>
<td>Solar panel</td>
<td>For-profit</td>
<td>Large</td>
<td>1</td>
<td>Marketing Manager</td>
</tr>
<tr>
<td>Tier 2 supplier (D)</td>
<td>Accessories for solar salt water pumps</td>
<td>For-profit</td>
<td>Medium</td>
<td>2</td>
<td>Sales Head, Zonal Manager</td>
</tr>
</tbody>
</table>

Table 1. Respondents profile
<table>
<thead>
<tr>
<th></th>
<th>Criteria for success</th>
<th>Strategic emphasis</th>
<th>Leadership</th>
<th>Employee Management</th>
<th>Dominant characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NGO</strong></td>
<td>Low cost high quality solutions for the community</td>
<td>Efficiency, high trust, participative</td>
<td>Facilitator, Mentor</td>
<td>Teamwork, participation</td>
<td>Personal place, result oriented</td>
</tr>
<tr>
<td><strong>Supplier Z</strong></td>
<td>Product innovation</td>
<td>Openness to fresh ideas, flexibility</td>
<td>Innovator, entrepreneurial, coordinator</td>
<td>freedom to innovate, risk taking</td>
<td>Dynamic, Entrepreneurial</td>
</tr>
<tr>
<td><strong>Supplier A</strong></td>
<td>Achieving results, profits</td>
<td>Competitive action, achievement</td>
<td>Competitor, result oriented</td>
<td>competitiveness, achievement of targets</td>
<td>competitive, result oriented</td>
</tr>
<tr>
<td><strong>Supplier B</strong></td>
<td>To develop highly innovative products</td>
<td>Explore new opportunities</td>
<td>Innovator, entrepreneurial</td>
<td>freedom for new ideas, flexible</td>
<td>Flexible and dynamic, willing to test new ideas</td>
</tr>
<tr>
<td><strong>Supplier C</strong></td>
<td>Business volumes, total solution delivery</td>
<td>stability, efficiency and control</td>
<td>Coordinating, organizing</td>
<td>conformity, stability, traditional</td>
<td>Highly structured, highly procedural</td>
</tr>
<tr>
<td><strong>Supplier D</strong></td>
<td>Customer satisfaction, flexibility</td>
<td>reaching annual targets</td>
<td>Hard driver, result oriented</td>
<td>achieving, targets</td>
<td>Result oriented, competitive</td>
</tr>
</tbody>
</table>

Table 2. Organizational cultural dimensions of the NGO and its suppliers
<table>
<thead>
<tr>
<th>Actor</th>
<th>Collaborative outcomes</th>
<th>Enablers of collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO</td>
<td>Low cost high quality product, joint review meetings</td>
<td>Trust, mutuality, commitment, transparency, communication</td>
</tr>
<tr>
<td>Supplier Z</td>
<td>New product development, periodic monitoring of product performance, installation at the field, educating farmers on operating the solar pumps</td>
<td>Trust, commitment, transparency, information sharing, flexibility</td>
</tr>
<tr>
<td>Supplier A</td>
<td>Product customization</td>
<td>Commitment, information sharing, trust</td>
</tr>
<tr>
<td>Supplier B</td>
<td>Product development</td>
<td>Trust, Information sharing, commitment to agreements</td>
</tr>
<tr>
<td>Supplier C</td>
<td>Product supply</td>
<td>On-time product delivery, trust</td>
</tr>
<tr>
<td>Supplier D</td>
<td>Product customization</td>
<td>information sharing, flexibility, trust</td>
</tr>
</tbody>
</table>

Table 3. Collaboration between the supply chain actors
In recent times, there is an increase in the need for long-term aid. Since no actor can handle long-term aid alone, there is an increased need for collaboration between the actors. The actors in the long-term aid possess a variety of organisational cultures. Commercial supply chain literature informs that differences in organisational cultures between the partners in a supply chain lead to a strain in the collaborative relationship. In some instances, the differences result in ceasure of collaboration between partners. This thesis investigates the relationship between organisational culture and humanitarian supply chain collaboration in long-term aid.

The aim of the thesis is to examine the influence of organisational culture on buyer-supplier collaboration in long-term aid. The thesis is both timely and relevant for a number of reasons. First, the increasing occurrence of natural and manmade disasters has led to a corresponding increase in long-term aid programmes. Second, long-term aid requires collaboration among multiple actors from differing organisational cultures. Finally, unlike commercial supply chain collaboration, this process has not yet been perfected in HSC contexts. The thesis investigates how differences of organisational culture influence collaboration in long-term HSC aid provision. This thesis takes a qualitative research approach.

The findings included a framework that explains how organisational cultural attributes influence supply chain collaboration. The organisational leadership, or antecedent, influences organisational learning and organisational flexibility (organisational cultural elements). These elements influence information sharing (collaborative behaviour) through organisational routines. It can be further argued that there are four mechanisms through which organisational culture develops: organisational routines, organisational practices, organisational flexibility, and organisational learning. These mechanisms influence the mechanisms of supply chain collaboration: information sharing, trust, mutuality, and commitment. The thesis also finds the existence of humanitarian institutional logic as an overarching mechanism that mitigates the influence of organisational cultural differences on collaboration between actors.