# 14

## Governance of Service Triads in Humanitarian Logistics

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#### Introduction

In the continuous search for new ways of creating and capturing value, many organizations are looking for diversification opportunities in service markets related to their products (Visnjic Kastalli et al. 2013). Although companies constantly offer services to the market, they have only in recent years seen the integration of products and services as a possibility for growth and competitiveness (Jacob and Ulaga 2008). The provision of services has now turned into a conscious and explicit strategy with services becoming a main differentiating factor in a totally integrated products and service offering (Baines et al. 2009).

How to manage services in an organization-to-organization (O2O) setting is becoming important as increasing competition forces organizations to work more closely with external partners in the supply chain (Williams et al. 2006; Tate et al. 2010; Van Iwaarden and Van der Valk 2013). An example of such collaboration is the service triad, in which purchased services are directly delivered by service providers to customers (Van Iwaarden and

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Van der Valk 2013). This raises the issue of governance within the service triad which to date has received little attention (Selviaridis and Spring 2010; Van der Valk, and Van Iwaarden 2011). As observed by Selviaridis and Spring (2010), "very little is known about how exchanged services take shape and how/why they are reshaped during the pre- and post-contract phases" (p. 172). The paucity of research relating to governance in the service triad raises questions with regard to alignment of contracts and which contract prevails in case of, for example, service delivery failure (Li and Choi 2009; Van der Valk and Van Iwaarden 2011).

Within humanitarian logistics (HL) the focus has shifted from core products towards the services because offering a mixture of goods and services allows UN agencies and IHOs to differentiate (Kovács 2014). However, applying the customer concept in the humanitarian setting is a bit more problematic. A traditional concept of a customer is the party that pays for goods or services, and is thus involved in a commercial transaction. Financial flows are, however, differently organized in the humanitarian setting. Yet, the notion of beneficiaries (end users) as well as implementing partners (organizational counterparts) having differing and varying requirements applies all the same also here.

Many humanitarian organizations do exactly the same things (provide food, water, sanitation, shelter, health care, education), they seek funding and resources from the same donors (governments, institutional and private), they use the same mass media to raise awareness and funds; their marketing strategies are very similar; and they use the same transport carriers and logistics service providers (Heaslip 2013; Oloruntoba and Gray 2009). Consequently, whatever marketing strategies they employ are quickly copied by other IHOs, who in essence are in competition (Oloruntoba and Gray 2009). Organizations trying to create or maintain differentiation in the humanitarian sector often find that whatever changes they make are greeted by counter moves from competing relief organizations (Oloruntoba and Gray 2009). For many humanitarian organizations the way to sustainable competitive advantage may not lie in changes in the product, promotion, or pricing strategies of the organization, but rather in improving customer service within HL, ancillary services, such as logistics and distribution (Oloruntoba and Gray 2009) and service offerings (Heaslip 2013).

Overall, there is a myriad of actors in the humanitarian supply chain (for an overview, see Heaslip et al. 2012), all with differing functions and roles. Table 14.1 provides an overview of those that are relevant to the service triad at hand, adding on the role of beneficiaries, who, though not directly included in an O2O service triad, are the final recipients of products and services, and the very reason for the existence of humanitarian service triads in the first place.

Table 14.1 Different actors and their roles related to the humanitarian service triad

		Commercial	
Actor	Function	transaction	Authors
Beneficiaries	The end-user of the product or service whose needs or requirements must be accommodated	None	Oloruntoba and Gray (2009), Kovács and Spens (2007) and Altay and Green (2006)
Implementing partner (IP)	These are specific organizations, with specific functions (such as water, shelter etc.) operating between the international humanitarian organizations (IHOs) and the aid beneficiaries/endusers of the relief effort.	Yes between IP and IHO.	Matopoulos et al. (2014), Kovács and Spens (2011) and Thomas and Mizushima (2005)
Donor (governmental, institutional, private)	Provides funding for IHOs to procure staff, relief goods and transport them to disaster sites for relief distribution.  The donor not only provides funding but may also provide supplies such as clothing, food or cooking oil, here the donor acts like a supplier, except that the donor does not get paid.	Yes between donor and IHO. None when donor acts as a supplier (in-kind donations).	Heaslip (2013) Holguín-Veras et al. (2013), Oloruntoba and Gray (2009) and Van Wassenhove (2006) Kovács and Spens (2009) and Van Wassenhove (2006)
IHO	get paid.  Can act as donor, implementing part- ner, or delivery part- ner in particular programmes or through Clusters.	Yes between IHOs.	Kovács (2014) and Jahre and Jensen (2010)
UN Agency	Specific organization, with specific functions (such as water, shelter etc). Can act as delivery partners in particular programmes or through Clusters.	Yes between donor, IHO and IP.	Heaslip (2013), Kovács and Spens (2011) and Jahre and Jensen (2010)

In this chapter we adopt an agency theory (AT) perspective to gain a better understanding of how contractual agreements influence the service triad in humanitarian supply chains. This is in essence an O2O triad between the donor, a UN agency or IHO, and the UN's or IHO's implementing partner (IP, another, usually local organization) in the field. AT explicitly addresses under which contractual arrangements the relationship between a buyer (the principal) and a service provider (the agent) operates most efficiently (Eisenhardt 1989; Tate et al. 2010). As observed by Van der Walk and Van Iwaarden (2011), when service production is outsourced there is a third actor involved: the "end customer" (another agent). In this research the buyer (the principal) is therefore confronted with two agents (the service provider, which is either an UN agency or an IHO, and "end customer", which in the humanitarian service triad would be the IP) who may each have their own specific and possibly conflicting objectives (Tate et al. 2010; Van der Walk and Van Iwaarden 2011). In AT the contractual question becomes should the agent be measured by relational (such as salaries, hierarchical governance) or contractual outcomes (commissions, market governance) (Logan 2000). As Eisenhardt (1989, p. 58) points out, "[...] the focus of agency theory [centres] on determining the most efficient contract governing the principal-agent relationship [...]".

This leads to the following research question: how can AT be applied in a service triad in HL in order to gain a better understanding of how contractual arrangements influence the buyer-service provider alignment in an O2O service triads? To assist in answering this question we use descriptive exploratory research to obtain primary data directly from humanitarian in-country programmes.

### **Service Triads**

There are two unique features to service triads overall. Firstly, there is direct contact between service provider and end customer (Li and Choi 2009; Van der Valk et al. 2009; Van der Valk and Van Iwaarden 2011). Hence, the service provider's performance is determinative for end customer satisfaction, and the buyer cannot directly control this performance other than through contracts and monitoring activities (for example through contracts and/or Service Level Agreements). Secondly, while there is a contract between end customer and buyer and between buyer and service provider, there is however no contract between the service provider and end customer. So far, service triads and their governance have been largely neglected in scholarly research (Li and Choi 2009; Van der Valk et al. 2009; Selviaridis and Spring 2010; Van der Valk, and Van Iwaarden 2011). Table 14.2 provides an overview

Table 14.2 Triad literature in supply chain management

			Setting	
	Service triad		manufacturing /	
Authors	composition	Research theory	service	Results
Wu and Choi	1 buyer and 2	Social network	Manufacturing	Relational dynamics of the supplier-supplier relation-
(2002)	suppliers	theory		ship as a link indirectly connected to the buyer
Dubois and	1 buyer and 2	Network theory	Manufacturing	Triadic sourcing occurs
Frediksson (2008)	suppliers			
Choi and Kim	1 supplier and 2	Social network	Manufacturing	Structural embeddedness exist in these triads
(2008)	buyers	theory		
Rossetti and	Supplier, service pro-	Agency theory	Manufacturing	Supply chain disintermediation occurs between the
Choi (2008)	vider, and an end user (customer)			customer and the supplier
Choi and Wu	1 buyer and 2	Balance theory	Manufacturing	Triadic relational dynamics in the collective go
(5006)	suppliers	and Social net-		beyond individual actors
		work meory		
Li and Choi	Buyer, service provi-	Social network	Services	<ul> <li>Bridging role of the service provider is potentially</li> </ul>
(5005)	der and end user	theory		critical
	(customer)			<ul> <li>Nature of the relationship between buying firm and</li> </ul>
				service provider before service provision begins
				affects the relationship between service provider
				and customer after it begins
				<ul> <li>Ongoing interaction between the service provider</li> </ul>
				and the customer, once service delivery begins, may
				undermine the relationship between the buying
				organization and the customer

(continued)

Table 14.2 (continued)

Results	<ul> <li>A significant relationship between supplier-supplier co-opetition and supplier performance</li> <li>Buyer plays a role in building supplier-supplier relationships</li> </ul>	Outsourced service production can be properly governed by the right combination of contracts and monitoring activities	Social capital in one relationship does not only improve dyadic supply performance but also impacts other relationships in the network.
Setting manufacturing / service	Manufacturing	Services	Services
Setting manufa Research theory service	Co-opetition theory	Agency theory	Social capital theory
Service triad composition	1 buyer and 2 suppliers	Buyer, service provider and end user (customer)	Buyer, service provider and end user (customer)
Authors	Wu et al. (2010) 1 buyer and 2 suppliers	Van der Walk and Van Iwaarden (2011)	Hartmann and Herb (2014)

of the antecedent literature of service triads in supply chain management. In line with previous research in service triads (Li and Choi 2009; Van der Valk and Van Iwaarden 2011), this research focuses on business-to-business, or rather, O2O services.

The service triad proposed for this research follows the service triad composition initially proposed by Li and Choi (2009) – buyer organization, service provider and end customer. Translating this composition into HL, we propose a buyer organization would be similar to a donor, a service provider is similar to a UN agency or IHO, and the end customer equates to an implementing partner (IP), see Fig. 14.1. The nature of the relationships between these actors and the level of integration and trust are major determinants of the capability of the supply chain to deliver services.

When acting as "service providers", UN agencies or IHOs can provide services such as information consultancy, procurement, customs clearance, warehousing, distribution, inventory management, fleet services and management, postponement, and training. Prominent examples are UNICEF's procurement services to their "partners" (governmental agencies, or NGOs that act as implementing partners), or the International Federation of the Red Cross and Red Crescent Societies (IFRC) provides fleet services to national chapters of the Red Cross/Red Crescent movement. In the latter case, IFRC manages a global fleet that they can lease to national chapters (their IPs) on demand (Pedraza Martinez et al. 2011). However, it is donors providing the funding for this to happen. Donors are intrinsically interested in the results of humanitarian programmes, and set the constraints of these programmes (Jahre and Heigh 2008; Majewski et al. 2010).

As in third-party logistics, there are various possibilities for these relationships. Material flows can originate from donors if they are suppliers at the same time,

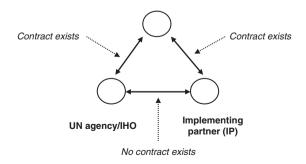


Fig. 14.1 A humanitarian service triad

and go through IHOs to IPs, or just be administered by IHOs to reach IPs. Financial flows from donors can target IHOs, IPs, or both – though the most typical situation would foresee a financial transaction from donor to IHO to IP, which is why the situation is sometimes described as consisting of sequential principal-agent relationships (Lundin 2011) and not triads. Interestingly, there is no one common set-up for how formal contracts exist between the three entities in this service triad. Donors may have a contract with the UN agency/IHO or the IP, or both. UN agencies /IHOs may have a contract with the IP directly, or the arrangement may be set through the donors. Then again, also in third-party logistics (Bask 2001), it is the sum of the flows (material, information, finance, and title flows) that determines the triad.

Meeting the demands of beneficiaries has become more complex (and more global), the providers of HL and distribution services have responded in a number of ways. Some have diversified into complete one-stop shops, others have remained more narrowly focused on providing a limited range of functions. Some examples illustrate the trend. The traditional view of UN (e.g. WFP and UNICEF) and IHOs (e.g. Oxfam and World Vision International) is in providing tangible relief (such as water, food, and shelter), see Fig. 14.2. Post the 2004 Asian tsunami the asset-based UN agency (e.g. WFP) and IHO (e.g. IFRC) developed. This was primarily from the diversification of some traditional IHOs into more complex offerings. Several of the world's leading UN agencies and IHOs moved in this direction (e.g. United Nations Humanitarian Response Deport – UNHRD). With

	Asset based	Skills based
	Major functions	Major functions
	Warehousing	Information consultancy
	Inventory management	Supply chain
	Postponement	management
ė	Transportation	Financial services
service	Distribution	Training
Physical	Traditional	Network based
hys	Major functions	Major functions
П	Food	Track and trace
	Water	Procurement
	Sanitation	Custom clearance
	Shelter	Service standardization
	Health care	
	Education	

Management services → Fig. 14.2 Types of UN agencies and IHOs (Source: Authors)

this move towards asset-based services, it is as if the goods an IHO provides had become a "qualifier", whereas the service offered has become the "order winner". The focus has shifted from core products towards the services because offering a mixture of goods and services allows the IHO to differentiate and create a more satisfied and loyal customer – though with a focus on donors as customers, not beneficiaries.

In the early 2000s, a number of network-based UN and IHOs appeared, most notably United Nations Children's Fund (UNICEF), IFRC and WFP. This move to offering value-added services includes procurement services being offered by agencies such as the UNICEF, the UNHRD network and the United Nations Office for Project Services (UNOPS) to other UN agencies as well as to governments (Kovács 2014). Procurement works like a pivot in the internal supply chain process turning around requests into actual products/commodities or services to fulfil the needs. Beyond the UN family, IFRC have developed a procurement centre and procurement portal that has been accredited by the European Commission's Humanitarian Aid & Civil Protection agency (ECHO), and through which third parties (for example, Caritas) outside Red Cross/Red Crescent national chapters can ask for their services. Other value-added services are also available, for example the IFRC is offering its services in areas such as "procurement and transportation", "warehousing and handling", "contingency stock", "fleet service" and "insurance" (IFRC 2012; Kovács 2014). These service offerings are offered both in disasters settings and long-term development (IFRC 2012). In addition to these, Heaslip (2013) has demonstrated the existence of further applications of service operations in humanitarian supply chains, for example the WFP acting as a consignee in major disasters (and consolidating transportation), as well as service standardization. The nature of these services necessitates creating geographically extensive and tightly integrated networks of operations. The development of "common services" has even become one of four key points on the agenda of the Global Logistics Cluster meeting in Copenhagen in November 2014. The global strategy of the Logistics Cluster for 2013-2015 (GLC 2013) includes the point of developing a "service catalogue" that would be available for addressing and filling gaps in logistics services in risk areas but also to build national preparedness - albeit it remains disputed which role the cluster should play in the latter.

The fourth type of IHO – the skill based – has been a recent phenomenon. These are UN and IHOs that provide a range of primarily information based services. These encompass consultancy services (including supply chain

configuration) and training. Examples of this type of IHO include UNWFP, which has developed the Logistics Response Team Training (LRT training) that it has offered to other organizations in the Logistics Cluster since 2007. Interestingly, an integral part of this is a "service mindset training" for logisticians.

As discussed earlier, UN agencies and IHOs are moving to offering value-added services (see Fig. 14.2). The provision of services by UN agencies and IHOs has now turned into a conscious and explicit strategy with services becoming a main differentiating factor in a totally integrated products and service offering (Heaslip 2013; Kovács 2014). As this research is focused on O2O services, it rules out the possibility of beneficiaries being part of the service triad, instead the implementing partner is considered the end customer. As noted by Kovács (2014, p. 280),

...the role of implementing partners also deserves more attention. Largely neglected in research, it is often not the big international NGOs (BINGOs) or aid agencies which conduct the last mile distribution but their implementing partners on the ground.

## **Agency Theory**

AT is concerned with the study of problems that arise when one party, the principal, delegates work to another party, the agent (Zsidisin and Ellram 2003). The focus of AT is on deciding on the type of contract between a principal and an agent (Eisenhardt 1989; Van der Valk and Van Iwaarden 2011). AT advances two types of contract - contractual and relational. The formal contractual approach (or structural approach) identifies complex contracts that mitigate the perceived risk of opportunistic behaviour (Cao and Lumineau 2015; Poppo and Zenger 2002). In contrast, the relational perspective promotes a more relational governance strategy in which partners rely on trust to address issues of safeguarding and coordination (Cao and Lumineau 2015; Malhotra and Lumineau 2011). These two perspectives have their specific assumptions, theoretical bases and governance structures. Contractual governance relies more on monetary sanctions and legal enforceability for curtailing abnormal behaviours. Relational governance on the other hand utilizes trust-based principles such as self-enforceability and social sanctions for restraining self-interest-driven, opportunistic behaviours (Mahapatra et al. 2010). Table 14.3 summarizes the two types of contracts.

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Contract type	Focus of contract	Main assumptions	Proposed governance structures	Authors
Contractual	Emphasizes measurable results or contractual effectiveness and are more likely to lead the agent to behave in the interests of the principal.	Single transaction     Parties tend to act     opportunistically.     Performance is driven by quality of the initial	• Formal governance • Complex contracts	Eisenhardt (1989), Zsidisin and Ellram (2003), Tate et al. (2010) and Van der Valk and Van Iwaarden (2011)
Relational	Focus on processes, tasks and activities that will accomplish the desired results and are most appropriate when the agent's behaviour can be readily monitored and measured at a reason-	structural design.  1. Inter-firm relationship  2. Parties tend to act in a trustworthy fashion.  3. Performance is driven by the quality of the ongoing relational processes.	• Informal governance • Trust	Eisenhardt (1989), Zsidisin and Ellram (2003), Tate et al. (2010), Van der Valk and Van Iwaarden (2011)

Underlying AT are specific assumptions about human nature (selfinterest, bounded rationality, risk aversion), information (seen as a commodity that can be purchased), and organizations (goal conflict among members) (Eisenhardt 1989; Tate et al. 2010; Van der Valk and Van Iwaarden 2011). AT builds on specific assumptions regarding whether suppliers can be expected to act in the best interest of their (customers') customers, or are likely to display opportunistic behaviour (Tate et al. 2010; Van der Valk and Van Iwaarden 2011). Firstly, regarding human nature, the assumptions of self-interest, and bounded rationality and differing risk preferences (Tate et al. 2010) explain why in many cases agents are unlikely to act in the best interest of their principals. Secondly, information is viewed as a commodity that can be exchanged (Eisenhardt 1989). If interests are misaligned and there is goal incongruence, then information may be hidden, thereby creating information asymmetry (Tate et al. 2010). Thirdly, organization relates to the fact goal congruence between principal and agent reduces the risk of opportunistic subcontractor behaviour (Van der Valk and Van Iwaarden 2011). Essentially the principal wants the provider to meet or exceed agreed upon service levels and the agent wants to be fairly rewarded for his efforts as noted by Fayezi et al. (2012) "typically, the principal seeks to minimise the agency costs, such as, specifying, rewarding and monitoring, and policing the agent's behaviour, while the agent works towards maximising rewards and reducing principal control" (p. 557). Efficient management of agency problems such as information acquisition (or communication) (Eisenhardt 1989), preference mismatch (or conflict of interest) (Tate et al. 2010), effort (or moral hazard) and capability (or adverse selection) (Van der Valk and Van Iwaarden 2011), mainly associated with the agent (Fayezi et al. 2012) is also imperative to any principal-agent relationship. The greater the goal congruence between the agent and the contract, the more likely the agent will meet the terms of the contract (Rossetti and Choi 2008).

In situations where an agent's action is difficult to observe, such as in HL (largely due to the complex nature of the task), the principal is exposed to a heightened risk of opportunism by its agent. Similarly, where agents know more than the principals the potential for opportunism increases. This according to Hartmann and Herb (2014) provides an opportunity for the agent to both evade control and misrepresent its capabilities. To avoid opportunism governance emerges from the values and agreed-upon processes found in social relationships which may minimize transaction costs (Tangpong 2011; Malhotra and Lumineau 2011).

As humanitarian operations are being pressured to become more transparent (Van Wassenhove 2006), UN agencies and international humanitarian organizations (IHOs) have focused on "getting the job done" and have put little effort into performance measurement other than reporting to donors on the amount of relief and usage of funds for a given operation. When performance is difficult to measure, parties have incentives to limit their efforts toward fulfilling the agreement. Poppo and Zenger (2002) found that when mangers could not easily measure the performance of an outsourced activity, it strongly damaged the user's evaluation of the provider's cost performance. According to Poppo and Zenger (2002, p. 709), "managers have two choices in such a situation, either realize lower performance, or expend resources and create more complex contracts to improve performance measurement, and service levels". The AT assumptions are applied to the service triad agency relationships in Table 14.4.

Recently scholars have used AT to develop propositions on the design of contractual arrangements between two principals and an agent (Tate et al. 2010) and triads (Van der Valk and Van Iwaarden (2011). We draw on the work of Li and Choi (2009); Tate et al. (2010); and Valk and Van Iwaarden (2011) to build propositions. In the humanitarian service triad, as in third-party logistics, the actual material, financial, information and title flows determine the triad, regardless of the contractual set-up. In any case, financial flows originate from donors, hence they are the principal in the humanitarian service triad, whereas the UN agency or IHO as service provider, and the IP will conduct agent-like behaviour. The IP is mainly interested in the desired outcome of the service encounter and possibly in the process that brings about that outcome.

Eisenhardt (1989) proposes that a contractual contract is more likely to lead any agent to behave in the interests of the principal. Based on this, we propose the following:

Proposition 1: Within the service triad, the contract applying to the donor-IP dyad is contractual based.

Zsidisin and Ellram (2003) point out that the buyer (here donor) will primarily be interested in pricing, compliance and performance information as a means to reduce risk and monitor supplier behaviour. Van der Valk and Van Iwaarden (2011) posit that cost reduction may be an important buyer objective, while quality is likely an end customer objective. Building on Tate et al. (2010) we propose the following:

Proposition 2: Within the service triad, the contract applying to the donor-UN agency /IHO dyad is contractual based.

Table 14.4 Agency assumptions applied to service triads in humanitarian logistics

People Self interest Focus on cost control and efficacy of contracts.  Bounded Limitations are due to an over emphasis on tangible issues a the potential expense of critical, but less tangible performance issues.  Risk aversion Risk neutral when the opportunity exists to multisource. tunity exists to multisource. mance to outcome oriented metrics.  Utility of Wiew information to control supplier opportunism.  Utility of View information as contribuinformation Goal conflict Wants relationships.  Organization Goal conflict Wants relationship more formalized and the service more commoditized. Reduced cost, timely delivery, and measurable quality. Overarching		שלו מוכע מוסמומעול מו	
Self interest Fa Bounded Li rationality Risk aversion R Risk aversion Ir Utility of V information zation Goal conflict W	er/donor (Principal)	IHO (Agent)	partner (Agent)
Bounded Li rationality Risk aversion R Information Ir information Outility of V information Outility of V information V information V	s on cost control and effi- y of contracts.	The Agent may or may not behave as agreed.	The Agent may or may not behave as agreed.
rationality  Risk aversion R  Information Ir  information  Goal conflict W	Limitations are due to an over-	Limitation comes from lack of	Limitation comes from lack of
Risk aversion R Information Ir information  Goal conflict W	emphasis on tangible issues at	information about Principal's	information about Principal's
Risk aversion R Information Ir information  Goal conflict W	the potential expense of criti-	future needs and	future needs and
Risk aversion R Information Ir Utility of V information A Goal conflict W	cal, but less tangible perfor-	commitment.	commitment.
Risk aversion R Information Ir information  Goal conflict W	nce issues.		
Information Ir  Utility of V information  Goal conflict W	neutral when the oppor-	Risk averse when the relation-	Risk averse when security and
Information Ir Utility of V information	nity exists to multisource.	ship is important, prefer	income are often tied to a sin-
Information Ir  Utility of V information  Goal conflict W		multisource.	gle donor.
U Utility of V information Goal conflict W	mation requirements are	Information requirements are	Want communication flows lim-
U Utility of V information Goal conflict W	lh with regard to confor-	high with regard to confor-	ited to relational issues but
U Utility of V information Goal conflict W	nce to outcome oriented	mance to outcome oriented	will exchange information to
U Utility of V information Goal conflict W	trics.	metrics.	achieve security and income.
Utility of vinformation Goal conflict W	information to control	Use information to improve the	
Utility of Vinformation Goal conflict V	oplier opportunism.	relationship.	
information Goal conflict V	/ information as contribu-	View information as a	Use information as a
Goal conflict V	tor to and outcome of good	commodity.	commodity.
Goal conflict V	ationships.		
malized and the service n commoditized. Reduced o timely delivery, and meas able quality. Overarching	ts relationship more for-	Wants to provide a highly indi-	Wants a strong alliance with the
commoditized. Reduced of timely delivery, and meast able quality. Overarching	malized and the service more	vidualized service with lim-	supplier and highly creative
timely delivery, and meas able quality. Overarching	commoditized. Reduced cost,	ited interference on process.	output. Overarching goal is to
able quality. Overarching	timely delivery, and measur-	Overarching goal is to maxi-	create a positive image for the
	e quality. Overarching	mize profit, which includes	organization and increase
goal is to control agency	goal is to control agency costs	maintaining the relationship.	sales.
and achieve contractual	achieve contractual		
results.	ults.		

Source: Adapted from Eisenhardt (1989) and Tate et al. (2010)

In summary, AT can be used to help design the most effective types of contracts and relationships to provide fair outcomes to all parties. The contractual question concerns the management of the agent using contractual or relational contracts while balancing the service triad. The next section describes the research design and data collection used for this research.

## **Research Design and Data Collection**

The research followed a systematic combining approach, as described by Dubois and Gadde (2002). The aim was to link theory to the empirical world, where the case itself as well as theoretical constructs served as intermediating links between theory and empirics. One approach designed to tackle real problems and to develop a capacity to learn is a case study (Yin 2003). Due to lack of suitable frameworks that offer explanation for effective service triad contracts in HL, we adopted exploratory case study as the methodological approach for this research (Eisenhardt 1989). Case studies allow exploration of areas with little pre-existing theory (Voss et al. 2002), and help develop frameworks by using data collected through direct interaction with subjects of interest (Eisenhardt and Graebner 2007).

Since humanitarian service triads are a contemporary phenomenon that show their potential in real-life contexts and can hardly be replicated in experiments, the case study design is deemed as an appropriate research methodology. Our empirical study used one case study examining the response to the Typhoon Yolanda. The case in focus was the service triad between the Irish Aid, WFP and Concern Worldwide (CWW). Primary data were collected through semi-structured interviews. Informants were chosen to cover persons who had [...] lived experiences related to the focus of the study, who were willing to talk about their experiences, and who were diverse enough from one another to enhance rich and unique stories of the particular experience.

This study is based on field research, utilizing participant observation and incontext interview techniques for rich data collection. It was felt that field research would be the only way to obtain data that would be rich in detail and which could be related to the context in which it was occurring. Observation provided a means of studying the whole system with its many interrelationships in great detail. Participant observation has been described as when the "ethnographer participates in the daily routines of this setting, develops ingoing relations with the people in it, and observes all the while what is going on". The complexity of the humanitarian context meant that case

study research offered the methodological fit (Edmonson and McManus 2007; Fisher 2007) to advance relevant theory on service triads.

The selected organizations capture the heterogeneity in the humanitarian sector and facilitate comparisons (Eisenhardt and Graebner 2007). The size and profile of the organizations interviewed fit with the time, budget and accessibility constraints of the research project. The selected organizations (see Table 14.5) facilitated access to their sites and personnel for interviews.

We operationalized research quality as credibility, transferability, dependability, and confirmability (see e.g. (Golafshani 2003). By triangulating sources of information, the researcher's perceptions were corrected from different angles. Transferability is explained by Halldorsson and Aastrup (2003) as to what extent "the study is able to make general claims about the world". Transferability between the context of defence logistics and the context of HL will be discussed later in the chapter. As for dependability, that is stability of data over time, Halldorsson and Aastrup (2003) suggest to document the whole research process. Ideally, all research material should be made available. Some texts are not publicly available. Confirmability was ensured by transcribing and redistributing audio-taped recordings to each respondent. The rationale of so doing was to ascertain that the respondents agreed with the researcher's interpretation of what was said, and allow additional comments from the respondents. Finally, we combined information from the interviews with secondary data.

Data collection took place during a period of 4 weeks in 2014 and was mainly performed by means of semi-structured, in-depth interviews (Table 14.5), and through document studies and participant observation. The interviews focused on the contracts/SLAs in place, incentives used, and the monitoring activities employed. At IA, interviews of about 1.5-2 hours were conducted with the three managers that are most strongly involved in the dealings with each of the agents. These interviews resulted in an understanding of how IA works and how IA views the relationships with WFP and CWW. At the service provider, two interviews of approximately 1.5-2 hours were conducted with strategic and tactical representatives. The interviews focused on what agreements were made between WFP and IA and WFP and CWW. At CWW interviews tool place strategic, tactical and operational managers, each interview lasting approximately 1.5-2 hours. The interviews focused on what agreements were made between CWW and IA and CWW and WFP.

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Triad participant	Organization	Job title	Function level	Services
Donor	Irish Aid (IA)	Head of Development Cooperation Division Humanitarian Development Specialist Humanitarian Development Specialist	Strategic Tactical Operational	Buying: Information consultancy; Procurement; Customs clearance; Warehousing; Distribution; Inventory Management; Fleet service; Postponement;
Service provider (UN agency/IHO)	WFP	Network Coordinator Procurement and logistics coordinator	Strategic Operational	Providing: Information consultancy; Procurement; Customs clearance; Warehousing; Distribution; Inventory Management; Fleet service; Postponement;
<b>≙</b>	Concern World Wide (CWW)	Supplies and Logistics Manager Logistics manager Logistics manager	Strategic Tactical Operational	Receiving: Procurement; Customs clearance; Warehousing; Distribution; Inventory Management; Fleet service; Postponement;

Critical to the usefulness of the analysis is the clarity of the case boundary (Perren and Ram 2004); in this research the case boundary was around the senior logistical personnel of Irish Aid, WFP and Concern Worldwide rather than the individual organizations *per se*. Because we relied on key informants, we needed influential decision makers who led service initiatives for their organization, so we only invited senior managers to participate.

In terms of data management, digital folders were created for archiving system for each case study. A chain of evidence was established by documenting data sources in the case study reports and analysis. There are no predetermined criteria for sample size in qualitative research but according to Edmonson and McManus 2007) the sample size can be fixed at what the researcher considers reliable within the constraints of time and resources. Data analysis involved a process of data reduction and reconstruction. In the data reduction phase, collected data were subjected to a coding process that allowed them to be disaggregated so that key themes in the data became apparent. Data were analysed in a two-stage process that was heavily inductive (Lofland and Lofland 1995). During the first stage, field notes and transcribed interviews were examined for instances during which issues pertaining to the collaborative nature of the project (working together) were noted. Initial labels were then attached to these data elements that in some way pertained to collaboration, either between the military and the agencies or the agencies themselves. The second stage of coding was an analysis of the initial codes. During this focused coding (Lofland and Lofland 1995), the initial codes were sorted into similar groups, to which labels were then attached. This enabled systematic organization of our data and reducing complexity. Examples of labels used are contract type, service specification and so on. Subsequently the analysis and synthesis of results was carried out through feedback and discussion with associated humanitarian service triad participants.

The next section presents the findings from the case study, which is used to provide validation of the two propositions.

#### Results

In this section, we first provide a case history. The discussion is based on data that we obtained through data triangulations (i.e., data collected at different times at multiple locations from multiple participants). The case studied involved the service triad of Irish Aid (donor) – WFP (UN agency) – Concern Worldwide (IP).

#### The Donor

Irish Aid (IA) has been in the top 20 of government contributions to humanitarian aid of the past decade (GHA 2011). In 2013, the Irish Government spent €637 million on Ireland's aid programme. This is called Official Development Assistance (ODA) and represented 0.46% of Gross National Product (GNP) or 46 cents in every €100 that the country produces (Irish Government 2014). €497 million or approximately 78% of this funding was managed by IA. Table 14.5 provides an overview of the services IA purchase from WFP. IA does not deliver aid on the ground; in emergencies it uses its various implementing partners to deliver aid on its behalf.

#### The UN Agency as Service Provider

WFP procures, manages, stores and transports emergency supplies on behalf of the humanitarian community, Table 14.5 provides a more detailed list of services. WFP through its affiliate the United Nations Humanitarian Response Depot (UNHRD) pre-positions inventory in six locations worldwide – Panama, Ghana, Dubai, Subang, Las Palmas and Brindisi. The case of WFP was selected, because of WFP being the lead agency of the Logistics Cluster, and has therefore developed numerous "common services" for other agencies and organizations in the cluster.

### The Implementing Partner

Concern Worldwide are dedicated to tackling poverty and suffering in the world's poorest countries. They work in partnership with the very poorest people in these countries, directly enabling them to improve their lives. Concern Worldwide operate as an IP for Irish Aid delivering aid on their behalf.

#### **Findings**

This section delves deeper into the case study findings, interpreting the data in the light of the contractual considerations of AT. The data available from the case studies provide new insights into the relationships in O2O service triads, beyond those available from quantitative data analysis (Eisenhardt and Graebner 2007).

#### **Proposition 1**

For proposition 1, similar to Eisenhardt (1989) who suggested: "When the principal has information to verify agent behaviour, the agent is more likely to behave in the interest of the principal" (p. 60), our research finds that IPs will opt for contractual-based contracts. Our findings are comparable to Neely (1999) who found that people focus on the issues that are measured and rewarded within an organization, and it " is likely that the agent will behave in its own interest by complying with the objectives that are more easily measured and thus are used to evaluate its performance" (p. 220). In the contract between Irish Aid (IA) and Concern Worldwide the contract is based on measureable outcomes, such as cost, timeliness and issue resolution. IA observed, "As we got more experience in the area [humanitarian sector] we required more information regarding what outcomes needed to be included in our contracts. Part of this was to adhere to transparency and accounting procedures". It should be noted, however, that certain aspects of the contract such as beneficiary satisfaction was not considered.

These findings show that if contracts are not designed carefully, opportunistic behaviour may occur in the unmeasured areas, so that the spirit of the contract may be lost. For example, IA had to continuously modify its measures, or its IP would act in their own self-interest and try to "game" the system. IA remarked, "there have been situations in the past where agencies have tried to take advantage and act in their self-interest and not in Irish Aids interest, even though we would be purchasing the goods." This finding is similar to those reported by Tate et al. (2010) when investigating the purchasing of marketing services in a triadic relationship.

In this contractual contract, criteria had to be modified to take all possible deviations from the intent of the contract into account. The IP focused on what was measured, rather than performing to the behaviour that they clearly knew that IA was interested in. These findings show that if contracts are not designed carefully, opportunistic behaviour may occur in the unmeasured areas, so that the spirit of the contract may be lost. It is thus highly important that appropriate measures are identified. Similar to Mishra et al. (1998) and Tate et al. (2010) this research found that even if the IP possess the "right" skills, they may still fail to use them if information asymmetry allows such actions and if there are cost savings involved. Similarly buyers (donors) seek information to help make better choices. IA commented: "It is important for our IPs to tell us what services they would like...We have frank conversations with our IPs so that we can understand their position".

New insights were obtained regarding the presence of relational contracts in the donor — IP relationship. The research suggests that a hybrid (mixed) contract exits. The hybrid approach had the benefit of providing detailed performance data regarding relational elements such as processes for accessing funding as well as contractual criteria such as cost, timeliness and issue resolution. While the relational monitoring may be perceived by the IP to be obtrusive, the presence of a relational contract looks like an aid in preventing the IP from displaying reactant behaviour. IA commented, "We have very good relationships with Concern Worldwide and in some cases personal friendships which facilitates more of the soft skills when negotiating contracts; we try to cocreate with our implementing partners." The presence of relational contracts reduces the possibility of misalignment of contracts. This finding suggests that in the cases studied, relational governance outweighs contractual governance.

To avoid opportunistic behaviour, incentive capability (Hurwicz 1972) was adopted in the contract design. Contracts were subsequently designed so that the actions with the highest pay-off to the IP are also the actions that are most appropriate from the donor's point of view.

#### **Proposition 2**

Proposition 2 stated that the contract applying to the donor-service provider (UN agency /IHO) dyad is contractual-based. In line with Grönroos (2011) and Tate et al. (2010), we observe that the way in which the service is perceived governs much of the contractual behaviour related to services. The IP's preference for contractual contracts with the donor is not necessarily reflected in the service provider – donor contract. IA has a three-year contract with WFP which is a hybrid contract consisting of contractual-based measurable outcomes, such as cost, timeliness and issue resolution and relational outcomes. Underlying the contract is a service-level agreement, which includes arrangements for the service delivery process. It seems that the donor prefers to focus on aspects like measurability of performance in determining their contracts, and to specify a relational-based contract rather than to transfer their IP's requirements to WFP. While the relational monitoring may be perceived by the service provider to be meddlesome, the presence of a relational contract looks like an aid in preventing the service provider from displaying opportunism behaviour. Contrary to earlier research by Van der Valk and Van Iwaarden (2011), this research determines that the preferred contract between the buyer (donor) - service provider is a hybrid-based contract.

Eisenhardt (1989) observed that in AT the right type of contract varies with the length of relationship. While this may be true, we did not find support for this in the practices among the case studies. For example, prior to WFP involvement, IA used relational-based contracts with its service providers within long-term relationships. Later, when WFP became involved, IA modified its contracting approach to improve measureable performance, and developed a mix of relational-based and contractual-based contracts. IA remarked: "We learnt so much from our previous involvement in humanitarian aid. With WFP we think we have struck the right balance of accountable measurements." A major characteristic of humanitarian contexts is the lack of information available to humanitarian logisticians. The major difficulty is that the quality of service provision is difficult to assess; whereas the service provider may know product quality, the buyer often does not (Kastalli et al. 2013). This asymmetry of information between service providers and buyers creates problems for their market provision. WFP remarked: "We try to build relationships with our customers, build trust maintain a connection and jointly overcome any unexpected problems."

A hybrid approach reduces the conflict between IA and WFP by allowing both to incorporate their goals. From a logistics perspective, the hybrid approach also has the benefit of providing detailed performance data regarding the relational-based elements, while retaining WFP's preferred contractual focus. For IA, the hybrid approach allows the positive relationship with the service provider while still achieving the desired results. Since the hybrid contractual arrangement includes both relational- and contractual-oriented elements, the agent will be more likely to behave in the interests of the principal. This is similar to Eisenhardt's (1989) observation that, "When the contract between the principal and agent is outcome-based, the agent is more likely to behave in the interests of the principal" (p. 60). By standardizing coordination with WFP, IA is able to obtain a good overview of the service provider's activities, learn from them and make appropriate investments in their capabilities.

### **Conclusion**

This chapter has drawn on AT to conceptualize the service triadic relationship between a donor, service provider and IP of HL services. We wanted to gain an understanding of how contractual agreements influence the alignment of goals and behaviours between the buying organization and the service provider and between the buying organization and an implementing partner. For this purpose, we examined data from a case study.

A key characteristic of commercial service triads is that services are directly delivered by the service provider to the end customer. Hence, the service provider's performance is determinative for end customer satisfaction, and the buyer cannot directly control this performance other than through contracts and monitoring activities. AT provides valuable suggestions regarding contracts, yet, has only limitedly been applied to triadic settings.

Considering the novelty of research regarding the supply of services in general and regarding HL services in particular, the next few sentences present the theoretical contributions of this research. This research contributes to the governance of service triad relationships in the context of HL services. Our research allows for theoretical elaboration of AT, and a greater understanding of the service triad context. The introduction of the agency triad creates an opportunity for improved contractual relationships. This research helps elaborate upon existing theory to develop an understanding of the service triad relationship. It highlights the value of alignment, and suggests the appropriate type of contractual arrangements between a donor – service provider and a donor – IP. This research suggests that a hybrid of elements of contractual-based and relational-based contracts in HL services results in improved performance.

For practitioners, our findings suggest that it is highly important that relational outcomes are established between donor–service provider and donor–IP, as it appears to guide the service provider and IP towards desired behaviour. Aligning all three parties in the triad by means of the right type of contract is beneficial not only for the donor, but certainly also for the IP and the service provider. This research suggests that cooperation between the principal and two agents can improve performance through sharing of information, knowledge, and improved coordination. However, this alignment seems to be more easily achieved through relational contracts rather than legal arrangements.

This research argues that governance structures that integrate the complementary elements of relational- and contractual-based contracts are likely to be advantageous. Mahapatra et al. (2010) notes that in these mechanisms, complementary elements such as potential for future business, contractual adaptability and penalties for unjustifiable breaches limit dysfunctional outcomes that are inherent to contractual or relational governance. Developing an arrangement that appropriately balances relational- and contractual-based elements however involves a great deal of experiment in a mutually supportive atmosphere.

In examining an HL service triad AT helps to answer two questions: what can the donor do to encourage quality service and fair treatment by the

service provider and what can the service provider do to keep the donor and IP satisfied and at the same time reach its goals.

The service triad clearly is a special situation, since contracts and service production do not occur on one and the same link, but across multiple links in the triad. This has implications for what kind of contract and what kind of governance structures is appropriate. Further research is required to examine different contractual governance mechanisms such as transactional cost economics or social exchange theory to determine which the appropriate governance structure for contracts in service triads. Future research could add insight to the phenomena briefly explored here by studying triads in these more enduring service contexts. Follow-up research could be aimed at further validating and developing the propositions presented in this research. Overall, we believe our research provides a good starting point for additional research on governance in service triads in various other service contexts.

#### References

- Altay, N. and Green, W.G. (2006). "OR/MS research in disaster operations management", *European Journal of Operational Research*, 175(1), 475–493.
- Baines, T. S., Lightfoot, H. W., Benedettini O. and Kay, J. M. (2009), "The servitization of manufacturing", *Journal of Manufacturing Technology Management*, 20(5), 547–567.
- Bask, A. (2001). "Relationships among TPL providers and members of supply chains A strategic perspective", *Journal of Business & Industrial Marketing*, 16(6), 470–486.
- Cao, A. and Lumuneau, F. (2015) "Revisiting the interplay between contractual and relational goverance: A qualitative and meta-analytic investigaation", *Journal of Operations Management*, 33, 15–42.
- Choi, T.Y. and Kim, Y. (2008). "Structural embeddedness and supplier management: A network perspective", *Journal of Supply Chain Management*, 44, 5–13.
- Choi, T.Y. and Wu, Z. (2009). "Triads in supply networks: Theorizing buyer-supplier-supplier relationships", *Journal of Supply Chain Management*, 45(1), 8–25.
- Dubois, A. and Fredriksson, P. (2008). "Cooperating and competing in supply networks: Making sense of a triadic sourcing strategy". *Journal of Purchasing and Supply Management*, 14, 170–179.
- Edmonson, A.C. and McManus, S.E. (2007). "Methodological fit in management field research". *Academy of Management Review*, 32(4), 1155–1179.
- Eisenhardt, K.M. (1989). "Agency Theory: An assessment and review. Academy of management". *Academy of Management Review*, 14(1), 57–74.

- Eisenhardt, K. and Graebner, M.E. (2007). "Theory building from cases: Opportunities and challenges". *Academy of Management Journal*, 50(1), 25–32.
- Fayesi, S., O'Loughlin, A. and Zutshi, A. (2012). "Agency theory and supply chain management a structured literature review", *Supply Chain Management: An International Journal* 17(5), 556–570.
- Fisher, M. (2007). "Strengthening the empirical base of operations management". Manufacturing & Service Operations Management 9(4), 368–382.
- Global Humanitarian Assistance Report (2013). Who's who in humanitarian financing, http://www.globalhumanitarianassistance.org/reports/
- Global Logisitcs Cluster (2013), Global Strategy 2013–2015, http://www.logcluster.org/sites/default/files/logistics cluster glcsc strategic plan 2012-2015 0.pdf
- Golafshani, N. (2003). "Understanding reliability and validity in qualitative research", *The Qualitative Report*, 8(4), 597–606.
- Grönroos, C. (2011). "A service perspective on business relationships: The value creation, interaction and marketing interface". *Industrial Marketing Management*, 40(2), 240–247.
- Halldórsson, Á. and Aastrup, J. (2003). "Quality criteria for qualitative inquiries in logistics" *European Journal of Operational Research*, 144(2), 321–332.
- Hartmann, E. and Herb, S. (2014). "Opportunism risk in service triads A social capital perspective", *International Journal of Physical Distribution & Logistics Management*, 44(3), 242–256.
- Heaslip, G. (2013). "Services operations management and humanitarian logistics", *Journal of Humanitarian Logistics and Supply Chain Management*, 3(1), 37–51.
- Heaslip, G, Sharif, A.M. and Althonayan A. (2012). "Employing a systems-based perspective to the identification of inter-relationships within humanitarian logistics", *International Journal of Production Economics*, 139(2), 377–392.
- Holguín-Veras, J., Pérez, N., Jaller, M., Van Wassenhove, L. N. and Aros-Vera, F. (2013). "On the appropriate objective function for post-disaster humanitarian logistics models", *Journal of Operations Management*, 31, 262–280.
- Hurwicz, L. (1972). "On informationally decentralized systems". In R. Radner & C.B. MacGuire (Eds.), *Decision and organization: A volume in honour of Jacob Marschak* (pp. 297–336). North Holland Publishing Company: Amsterdam.
- International Federation of Red Cross and Red Crescent Societies (IFRC). (2012). Logistics Preparedness, Available at: http://www.ifrc.org/en/what-we-do/disaster-management/preparing-for-disaster/disaster-preparedness-tools/logistics-preparedness Accessed 14/04/14.
- Irish Government (2014) Irish Aid Annual, Department of Foreign Affairs and Trade, Government Publications, Dublin.
- Jacob, F. and Ulaga, W. (2008). "The transition from product to service in business markets: An agenda for academic inquiry". *Industrial Marketing Management*, 37(3), 247–253.

- Jahre, M. and Heigh, I. (2008). "Does the current constraints in funding promote failure in humanitarian supply chains?" *Supply Chain Forum: An International Journal*, 9(2), 44–54.
- Jahre, M. and Jensen, L. M. (2010). "Coordination in humanitarian logistics through clusters", *International Journal of Physical Distribution and Logistics Management*, 40(8/9), 657–674.
- Kastalli, V., Van Looy, I. B. and Neely, A. (2013). "Steering Manufacturing Firms Towards Service Business Model Innovation". *California Management Review* 56(1), 100–123.
- Kovács, G. (2014). "Where next? The future of humanitarian logistics". In: Martin Christopher and Peter Tatham (eds.) *Humanitarian logistics: Meeting the challenge of preparing for and responding to disasters*, (pp. 275–285, 2nd edn.). Kogan Page: London, UK.
- Kovács, G. and Spens, K. (2007). "Humanitarian logistics in disaster relief operations", International Journal of Physical Distribution & Logistics Management, 37(2), 99–114.
- Kovács, G. and Spens, K.M. (2011). "Trends and developments in humanitarian logistics A gap analysis", *International Journal of Physical Distribution and Logistics Management*, 41(1), 32–45.
- Kovács, G. and Spens, K. M. (2009). "Identifying challenges in humanitarian logistics", *International Journal of Physical Distribution and Logistics Management*, 39(6), 506–528.
- Li, M. and Choi, T.Y. (2009). "Triads in services outsourcing: Bridge, bridge decay and bridge transfer", *Journal of Supply Chain Management*, 45, 27–39.
- Lofland, J. and Lofland, L. (1995). *Analyzing social settings*. Wadsworth: Belmont, CA. Logan, M. (2000). "Using agency theory to design successful outsourcing relationships", *The International Journal of Logistics Management*, 11(2), 21–32.
- Lundin, S. (2011). Den icke-statliga organisationens agerande inom utvecklingsbiståndskedjan ur ett samarbets- och maktperspektiv, Masters thesis, at http://hdl.handle.net/10138/27941, Accessed Mar 27, 2015.
- Mahapatra, S.K., Narasimhan, R. and Barbieri, P. (2010). "Strategic interdependence, governance effectiveness and supplier performance: A dyadic case study investigation and theory development". *Journal of Operations Management* 28 (6), 537–552.
- Majewski, B., Navangul, K.A. and Heigh, I. (2010). "A peek into the future of humanitarian logistics: Forewarned is forearmed". *Supply Chain Forum: An International Journal*, 11(3), 4–18.
- Malhotra, D., Lumineay, F., (2011). "Trust and collaboration in the aftermath of conflict: The effects if contract", *Academy of Management Journal*, 54(5), 981–998.
- Matopoulos, A., Kovács, G. and Hayes, O. (2014). "Local resources and procurement practices in humanitarian supply chains: An empirical examination of large scale house reconstruction projects". *Decision Sciences*, 45, (4), 621–646.
- Mishra, D. P., Heide, J. B., & Cort, S. G. (1998). Information asymmetry and levels of agency relationships. Journal of marketing Research, 277–295.

- Neely, A. (1999). The performance measurement revolution: Why now and what next? *International Journal of Operations & Production Management*, 19(2), 205–228.
- Oloruntoba, R. and Gray, R. (2009). Customer service in emergency relief chains, *International Journal of Physical Distribution & Logistics Management*, 39(6), 486–505.
- Pedraza Martinez, A.J., Stapleton, O. and van Wassenhove, L.N. (2011). "Field vehicle fleet management in humanitarian operations: A case-based approach", *Journal of Operations Management*, 29(5), 404–421.
- Perren, L., & Ram, M. (2004). Case-study method in small business and entrepreneurial research mapping boundaries and perspectives. International small business journal, 22(1), 83–101.
- Poppo, L. and Zenger, T. (2002). "Do formal contracts and relational governance function as substitutes or complements?" *Strategic Management Journal* 23, 707–725.
- Rossetti, C. and Choi, T. (2008). "Supply management under high goal incongruence: An empirical examination of disintermediation in the aerospace industry", *Decision Sciences*, 39 (3), 507–540.
- Selviaridis, K. and Spring, M. (2010). "The dynamics of business service exchanges: Insights from logistics outsourcing", *Journal of Purchasing & Supply Management*, 16, 171–184.
- Tangpong, C. (2011). "Content analytic approach to measuring constructs in operations and supply chain management". *Journal of Operations Management* 29, 627–638.
- Tate, W., Ellram, L., Bals, L., Hartmann, E. and van der Valk, W. (2010). "An agency theory perspective on the purchase of marketing services". *Industrial Marketing Management* 39 (5), 806–819.
- Thomas, A. and Mizushima, M. (2005). "Logistics training: Necessity or luxury?" *Forced Migration Review*, 22, 60–61.
- Van der Valk, W., Wynstra, F. and Axelsson, B. (2009). "Effective buyer–supplier interaction patterns in ongoing service exchange". *International Journal of Operations and Production Management*, 29 (8), 807–833.
- Van der Valk, W. and Van Iwaarden, J. (2011). "Monitoring in service triads consisting of buyers, subcontractors and end customers", *Journal of Purchasing & Supply Management*, 17, 198–206.
- Van Iwaarden, J. and Van der Valk, W. (2013). "Controlling outsourced service delivery: managing service quality in business service triads", *Total Quality Management and Business Excellence*, 24, 9–10.
- Van Wassenhove, L.N. (2006). "Humanitarian aid logistics: supply chain management in high gear", *Journal of the Operations Research Society*, 57, 475–489.
- Voss, C., Tsikriktsis, N. and Frohlich, M. (2002). "Case research in operations management", *International Journal of Operations & Production Management*, 22(2), 195–219.

- Williams, R., Van der Wiele, T., Van Iwaarden, J., Bertsch, B. and Dale, B. (2006). "Quality Management: The new challenges". *Total Quality Management & Business Excellence*, 17(10), 1273–1280.
- Wu, Z. and Choi, T.Y. (2005). "Supplier-supplier relationships in the buyer-supplier triad: Building theories from eight case studies". *Journal of Operations Management*, 24(1), 27–52.
- Wu, Z., Choi, T. Y., & Rungtusanatham, M. J. (2010). Supplier–supplier relationships in buyer–supplier–supplier triads: Implications for supplier performance. Journal of Operations Management, 28(2), 115–123.
- Yin, R.K. (2003). Case study research: Design and methods, 3rd edn. SAGE Publications, London.
- Zsidisin, G.A. and Ellram, L.M. (2003). "An agency theory investigation of supply risk management". *Journal of Supply Chain Management* 39(3), 15–27.