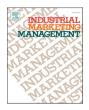


Contents lists available at ScienceDirect

Industrial Marketing Management



journal homepage: www.elsevier.com/locate/indmarman

Examining a client network development framework for a logistics service provider: A longitudinal case study



Xiaobei Wang^{*}, Vasco Sanchez Rodrigues, Robert Mason

Logistics and Operations Management Section, Cardiff Business School, Cardiff University, Colum Dr, CF10 3EU Cardiff, UK

ARTICLE INFO	A B S T R A C T
Keywords: Logistics service provider Forth-party logistics (4PL) Outsourcing Client recruitment Logistics network Mediating	Buyer-seller relationships represent a core theme in industrial marketing management. From the supplier's perspective, extant marketing literature, however, focuses on client retention in preference to client recruitment. Within the context of logistics outsourcing, although numerous studies have taken the buyer's perspective and shown how manufacturers/retailers select logistics service providers (LSPs), there is a shortage of studies and a lack of theoretical understanding from the supplier's perspective on how LSPs recruit clients. This study contributes to rectifying this through a longitudinal case study conducted on a fourth-party logistics service provider appraising its recruitment of clients. A mid-range client recruitment framework is developed, built abductively on the case and through the theory of mediating firms value creation. Theoretically, the framework refines notions of the mediating firm theory. Managerially, this client recruitment framework is proposed as a guide to

aid LSP managers in their organic growth strategies through client network development.

1. Introduction

How a supplier goes about acquiring buyer clients and the development of subsequent supplier-buyer relationships are strategic issues in all business-to-business (B2B) settings. As per the father of business consulting, Peter Drucker, the sole purpose of a business is to create a customer (Forbes, 2006). As a notion developed in the 1990s, customer relationship management (CRM) has been frequently used in contemporary marketing literature in dealing with the acquisition/recruitment and retention of clients (D'Haen & Poel, 2013; Ngai, Xiu, & Chau, 2009): client recruitment being often strategically characterized as "offensive marketing", while retention is invariably associated with "defensive marketing" (Homburg, Steiner, & Totzek, 2009; Johnson, Clark, & Barczak, 2012).

To date, most CRM literature overlooks client recruitment in preference to other topics, such as retention (Ang & Buttle, 2006; Söhnchen & Albers, 2010). Researchers have argued that this is probably because retention strategies are generally more cost-effective than acquisition strategies (Blattberg, Kim, & Neslin, 2008; Wilson, 2006). Consequently, there are limited studies on client recruitment overall (D'Haen & Poel, 2013).

Within the context of logistics outsourcing, extensive literature has investigated the issue of buyer-seller relationship development from the buyer's perspective; that is, how manufacturers and retailers, the so-called 'primary' supply chain firms, select logistics service providers (LSPs)¹ (Aguezzoul, 2014). Although studies on the buyers' perspective have provided insights into logistics outsourcing decision-making and criteria for selecting LSPs, this perspective tends to regard LSPs as merely passive parties to be selected (Fabbe-Costes, Jahre, & Roussat, 2008). This view has contributed little to the understanding of the roles and strategic concerns of LSPs (the suppliers) during the pre-contract/ relationship formation stage.

Of the studies looking at client recruitment from the LSPs' perspective, a very limited understanding of how they generate/recruit clients² has been reached (Halldórsson & Skjøtt-Larsen, 2006, p.495). Overall, only several related factors that influence client recruitment taken by LSPs have been examined. Examples of these factors are recruitment experiences (Hertz & Alfredsson, 2003), the personal relationships of the

* Corresponding author.

https://doi.org/10.1016/j.indmarman.2022.02.012

Received 22 March 2021; Received in revised form 5 February 2022; Accepted 24 February 2022 Available online 5 March 2022

E-mail addresses: wangx150@cardiff.ac.uk (X. Wang), sanchezrodriguesva1@cardiff.ac.uk (V.S. Rodrigues), masonrj@cardiff.ac.uk (R. Mason).

¹ The present paper broadly defines an LSP as any business that provides logistics services (CSCMP, 2013).

² In this paper, 'clients of LSPs' refer to shippers who are typically primary supply chain actors, such as manufacturers and retailers, that outsource logistics services from LSPs. Although some LSPs also occasionally outsource logistics service from other LSPs (Cui & Hertz, 2011), they are not their primary client recruitment and are beyond the scope of this paper.

^{0019-8501/© 2022} The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

recruitment teams (Wong & Karia, 2010) and attitudes of clients to share services (e.g., Huemer, 2012). Consequently, there is a lack of conceptualisation and limited theoretical understanding of the client recruitment process from the perspective of the LSP. This is echoed by Hingley, Lindgreen, and Grant (2015, p.78) who stated that: "little attention has been given to the potential role of supply chain intermediaries, such as logistics service providers, in objectively and independently determining and managing the course of buyer-supplier collaboration and relations in a business-to-business context".

The lack of studies on LSPs' client recruitment (Hingley et al., 2015) is also in contrast to the fact that, in practice, 'sales'/'business development' is one of the core departments for most LSPs, regardless of their size, with LSPs investing in resources and time proactively and at scale to gain new clients rather than waiting passively to be selected by buyers.

In addition, apart from some exceptions, most LSPs recruit more than one client and, thereby, develop client networks.³ In such a client network, different supply chain clients may not necessarily have direct relationships with one another. Accordingly, client recruitment represents not only an organic growth strategy for LSPs, but it also constitutes the antecedent process in the formation of any LSP's client networks. How client recruitment is conducted feeds into LSP-client relationship maintenance and development. Yet extant studies on LSP-client relationship taking a network perspective are very limited, with a focus largely on the dyadic perspective (Brekalo & Albers, 2016). In particular, there is a lack of studies focusing on the antecedence/development of an LSP-client network via client recruitment.

This paper, therefore, explores this nascent research issue and investigates the research question of:

How does an LSP develop its client network through the strategic recruitment of clients?

To address this question, two core aims are proposed:

- To develop an LSP client recruitment framework that includes factors influencing successful LSP's client recruitment.
- To identify theoretical and managerial implications of client recruitment for LSPs.

In terms of a theoretical approach, this paper builds on the theory of mediating firms value creation logic that links interdependent business entities (Stabell & Fjeldstad, 1998). Most LSPs, regardless of their type, create value by linking senders and receivers. Such a linkage is referred to as mediation (Hingley et al., 2015; Stabell & Fjeldstad, 1998). Linkage/mediation value creation relies on three primary value creation activities: 1) developing a network of clients with similar/complementary attributes, 2) provisioning standard services and 3) operating a mediating infrastructure (Stabell & Fjeldstad, 1998). The mediation value creation logic points to one speciality of client recruitment from the perspective of LSPs, which is somewhat different from regular service and manufacturing firms. That is, recruiting one client has an effect (increasing/decreasing) on the value of the whole network for other clients (Katz & Shapiro, 1985). This suggests that clients recruited by LSPs must be strategically selected no matter how they recruit them: via (passively) responding to clients' tenders or (proactively) approaching them. The mediation value creation logic further highlights that an investigation of client recruitment requires acknowledgement of its interdependence with other value creation activities.

With regards to the methodological choice, this paper uses a

longitudinal case study of an administrative LSP (also called a fourthparty logistics service provider - 4PL)⁴ and its client network to gain an in-depth understanding (Yin, 2009) of its approach to client recruitment. The unit of analysis is the LSP-client network. The case 4PL/LSP was purposefully chosen as it followed the mediating value creation logic and access to the case LSP gave a unique opportunity to investigate an LSP's client network development over time from its formation.

From here this paper is structured as follows. A literature review clarifies the research gaps and elaborates on the theoretical framework. This is followed by a research design and methods section. The section on the findings expands on the case firm's client recruitment. The discussion section refines the initial theoretical framework into a client recruitment framework, and the paper ends with the theoretical and managerial implications.

2. Literature review

This section reviews studies on client recruitment first from the general industrial marketing literature and second with a focus on the logistics sector, taking the LSPs' perspective, in which research gaps are identified. It then includes a justification of the mediating firm's perspective, adopted in this study to aid the development of a client recruitment framework for enhancing understanding of an LSP's client recruitment.

2.1. Client recruitment in the industrial marketing literature

Even though the mainstream B2B marketing literature tends to overlook client recruitment in preference to client retention (Ang & Buttle, 2006; Söhnchen & Albers, 2010), extant B2B marketing literature investigates/addresses some of the issues in relation to client recruitment. These include, for example, the overall recruitment process; challenges of information overload or missing data about potential clients; appraisal of potential client value; customer segmentation and recruitment criteria; the qualities of the salespersons; the acquisition and retention trade-offs, and the impacts of post-mergers and acquisitions integration on client recruitment.

Some studies develop "sales funnel" frameworks to capture the process of client recruitment (e.g. Ang & Buttle, 2006; Yu & Cai, 2007). These frameworks cover the client recruitment process from targeting the broadest scope of potential customers operating in the market to identifying prospective clients and on to the successful recruitment of the final clients. Sales funnel frameworks are useful in unravelling the recruitment process and providing managerial guidance.

Information about potential clients can be challenging to handle because of either information overload and/or missing data, resulting in costly and arbitrary recruitment processes. Consequently, several studies investigate the use of database-driven analytics to optimize customer acquisition and retention (D'Haen & Poel, 2013; Yu & Cai, 2007).

Studies do find that some clients are more profitable than others. Hence, these studies highlight the importance of being selective about potential clients by means of identifying profitable/valuable ones. These studies suggest firms should compare customer acquisition costs versus the estimation of potential customer value or even customer lifetime

³ Such a client network, as seen from the perspective of clients of LSPs, concerns horizontal collaboration via the facilitation of LSPs (Hingley et al., 2015; Rodrigues, Harris, & Mason, 2015).

⁴ Among the different types of LSPs, 4PLs typically have no physical assets of their own apart from information and communication technology (ICT) systems. They are logistics intermediaries that provide administrative logistics services (Stefansson, 2006). Third-party logistics service providers (3PLs) generally invest in physical logistics assets such as distribution centres, warehouses, terminals, trucks for providing integrated operational services, including warehousing, transportation, and other logistics activities (Rushton & Walker, 2007).

value when screening potential clients (e.g. Buttle, 2009; Kumar & Petersen, 2005; Yu & Cai, 2007;). However, such an appraisal of customer value is limited to only assessing the sales revenue/volume/ profits and relational retention potential of each client.

The qualities of sales representatives are found to be important in contributing to successful client recruitment. In particular, their intuition (Monat, 2011) and experiences (Yu & Cai, 2007) have been examined.

Many companies struggle with the client acquisition and retention trade-offs as the two activities often compete for the resources and investments of the sales team/department (March, 1991). Nijssen, Guenzi, Borgh, and v. d. (2017) is one of a handful studies that takes a sales capability perspective and investigates how sales managers develop and deploy sales capability to balance both acquisition and retention. Although previous research has acknowledged the link between postmerger and acquisition integration processes and client acquisition outcome, relatively little is known about the mechanisms through which post-merger and acquisition integration impacts on customer acquisition (Kato & Schoenberg, 2014). One exception is Kato and Schoenberg's (2014) study, which reveals antecedents of the customer relationship that were particularly impacted during the merger integration period.

In a similar vein, studies seldom discuss criteria used to screen and prospect for new potential clients. When they do, such criteria as industrial demographic data (e.g., industry type and company size in terms of employees, profit, or turnover) are often used (Bounsaythip & Rinta-Runsala, 2001; D'Haen & Poel, 2013). Little is known regarding if and how firms that follow alternative value creation logics differ in client recruitment criteria.

Industrial market segmentation is fundamental for firms to develop aligned marketing strategies for specific customer segments. Many companies use demographic criteria alone for industrial marketing segmentation (Shapiro & Bonoma, 1984) and compared with consumer segmentation, industrial segmentation has proceeded slowly and received far less attention (Blocker & Flint, 2007). Yet, comprehensive criteria are proposed as well. The acknowledged comprehensive segmentation criteria by Shapiro and Bonoma (1984) covers five types of criteria: demographics, operating variables, customer purchasing approaches, situational factors, and the personal characteristics of buyers. Nevertheless, market segmentation criteria are seldom mentioned for targeting individual potential customers but generically aim to facilitate companies in analysing the overall market and targeting one or several specific market segments (groups of customers with homogeneous needs and character). Furthermore, extant industrial market segmentation literature broadly distinguishes between B2C and B2B segmentation criteria (Shapiro & Bonoma, 1984), with some papers further discussing criteria related to the digital, social media and mobile marketing context (Müller, Pommeranz, Weisser, & Voigt, 2018). Overall, industrial market segmentation criteria are comprehensive, while there is, however, a lack of agreement on which customer segmentation criteria specific types of firms should use. Indeed, such criteria are used either to help with segmenting groups of customers with homogeneous attributes or to manage extant customers rather than guide the targeting of individual customers within a specific segment.

2.2. Client recruitment in the logistics sector (from the LSPs' perspective)

As mentioned in the introduction, client recruitment for LSPs is related to the literature on both growth strategies adopted by LSPs and LSPs' network development.

2.2.1. Growth strategies of LSPs and client recruitment

LSPs can pursue a range of growth strategies, each of which has been studied over recent years. Client recruitment, a primarily organic growth strategy (Manners-Bell, 2017), is one strategy which we focus on in this paper.

In terms of studies that have investigated client recruitment of LSPs, Manners-Bell (2017) argues that this is a safe but slow growth strategy. Hertz and Alfredsson (2003) acknowledge that the previous recruitment experiences of LSPs increase the success rate of recruitment, whereas increased LSP commitments with existing clients constrain the number of new clients that they may recruit and handle. Wong and Karia (2010) find that some LSPs attempt to hire industry experts to join their management boards, which allows them to secure new client contracts. Huemer (2012) and Hingley et al. (2015) illustrate how client attitudes regarding the sharing of services influence client network development of LSPs.

Overall, most of the above literature investigates LSP growth strategies without distinguishing between the various types of LSP, except for Hertz and Alfredsson (2003), Huemer (2012) and Hingley et al. (2015), who studied 3PLs and/or 4PLs in particular. Further, none of these studies focuses specifically on LSP client recruitment, and a theoretical understanding of this issue is absent.

2.2.2. Logistics networks of LSPs and client recruitment

The relationship network of an LSP can be understood from two dimensions, either vertically or horizontally. The vertical dimension refers to relationships between the LSP and its clients: basically, the LSP's client network. The number of clients for most LSPs is more than one; thus, a vertical LSP-client network invariably exists. The literature is limited in explaining LSP-client relationships undertaken from a network perspective and does not go further than the dyadic perspective (Brekalo & Albers, 2016). The horizontal dimension refers to relationships among LSPs. In this sense, an LSP may occasionally outsource activities to other LSPs (Cui & Hertz, 2011), and cooperation among LSPs has increased in recent years (Schmoltzi & Wallenburg, 2011).

In Table 1, the key studies on relationship networks of LSPs, either adopting the vertical dimension or both the vertical and horizontal dimensions, are indicated. It should be noted that there are only several studies on the strategic relevance of networks for LSPs in general or on the vertical dimension that have focused on the attributes/consequences of extant LSP networks. Studies are lacking on the antecedence/development of an LSP-client network via client recruitment.

In addition, as shown in Table 1, three theoretical approaches dominate these studies on logistics networks: industrial networks (e.g., Håkansson, Ford, Gadde, Snehota, & Waluszawski, 2009; Håkansson & Waluszewski, 2002), social networks (e.g., Granovetter, 1973; Granovetter, 1985) and the mediating firm's perspectives (e.g., Stabell &

Table 1

Studies on the vertical relationship networks of LSPs and theoretical perspectives adopted.

Theoretical perspectives	Studies on relationship networks of LSPs			
	The vertical dimension	Vertical and horizontal dimensions		
The social network perspective		Ekanayake, Childerhouse, and Sun (2017); Liu, Song, Xia, and Li (2018)*		
The industrial	Jahre and Fabbe-Costes	Huemer (2006)*; Jensen		
network	(2005); Jahre, Gadde,	(2010); Cui and Hertz (2011);		
perspective	Håkansson, Harrison, and Persson (2006); Huemer (2012)*; Sallnäs and Huge- Brodin (2018)	Wang, Persson, and Huemer (2016)*		
The mediating firm perspective	Huemer (2012)*; Hingley et al. (2015)*	Huemer (2006)*		
Others	Grawe and Ralston (2019); Liu, Purvis, Mason, and Wells (2020)	Houe and Murphy (2017)		

^{*} Indicates studies that either focus specifically on 4PLs or use 4PLs as case study firms.

Fjeldstad, 1998).

The industrial network perspective (Håkansson et al., 2009; Håkansson & Ford, 2002; Håkansson & Snehota, 1989) represents "a network view of reality", as described by Easton (1992). Such a perspective highlights interdependences and interactions among industrial actors and their business relationships beyond the supply chain. The industrial network perspective, however, focuses neither on the characteristics of individual firms nor the unique features of the focal firms as a specific type. Such a perspective fails to address client recruitment of LSPs, a type of firm that follows a unique value creation logic and business model (Huemer, 2012).

The social network perspective, on the other hand, building on the embeddedness theory, has contributed significantly to how the network structure and position affect the behaviour and performance of its actors. This perspective, however, emphasizes quantitative social network measures (Burt, 1992; Powell, Koput, & Smith-Doerr, 1996), which is not in line with the methodological approach of this study.

Comparatively, the mediating firm theory perspective provides a unique, inside-out understanding of value creation and strategy development of LSPs (Huemer, 2012). It highlights mediation and connectedness as the essence of LSP value creation and accordingly the peculiarity of clients for LSPs, which is relevant in studying how an LSP develops its client network. The mediating firm perspective, hence, differs from the social network and industrial network approaches that take an outside-in view of firm differentiation by looking at firms' network embeddedness and dependence. Furthermore, the mediating firm perspective, which highlights the facilitating (rather than controlling) role of LSPs in linking clients (senders and receivers), ably captures the role of the LSP in relation to its clients. This study, therefore, has chosen the mediating firm perspective to examine LSP client recruitment.

2.3. LSPs' client network development: a mediating firm perspective

Sections 2.1 and 2.2 justify the exploration of how an LSP develops its client network through strategic recruitment of clients, including the theoretical underpinnings of the study. This section reviews key notions of the mediating firm perspective, which constitutes the preliminary LSP client recruitment framework as presented in Fig. 1.

The mediating firm perspective represents a body of work looking specifically at mediating firm strategies and value creation. It originates from the mediating logic of Thompson (1967), who argues that the primary function of many organisations is to link clients that are, or would like to be, interdependent. The connections or linkages include

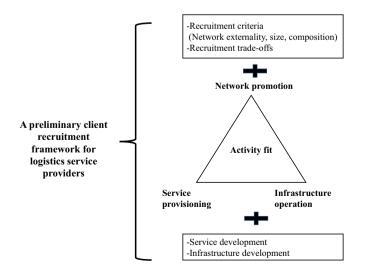


Fig. 1. A preliminary client recruitment framework for LSPs (Adapted from Stabell and Fjeldstad (1998)).

information, physical product flows, or social connections. Typical firms in this category include telecom companies, social media and e-commerce platforms (e.g., Facebook, Amazon), and LSPs.

Stabell and Fjeldstad (1998) further develop the mediating logic into the value network model, an alternative value creation model to the value chain model. Whereas the value chain model captures the value creation of LSPs' clients in terms of transforming inputs into products, the value network model is crucial to understanding how LSPs create value by linking senders and receivers. Mediating firms' value creation, according to the value network model, thus occurs through three interrelated and simultaneous primary activities at the firm level (Stabell & Fjeldstad, 1998) (see Fig. 1 above):

- 1. Network promotion refers to activities such as LSPs inviting potential clients to join the client network and selecting potential clients that are allowed to join.
- 2. Service provisioning refers to establishing, maintaining, and terminating links between customers. For LSPs, this includes them going through the implementation stage of setting up the operations for new clients and providing and maintaining relevant logistics services (e.g., transportation, warehousing) to extant clients.
- 3. Infrastructure operations refers to maintaining and running the physical and information infrastructure. Mediating firms' value creation highlights standardisation of the operation of both services and infrastructure. LSPs operate and maintain service infrastructures, such as ICT infrastructure (e.g., the ERP system) and physical logistics infrastructure (e.g., trucks, warehouses, terminals).

Among the three primary activities, 'network promotion' is obviously core to investigating LSPs' client network development. However, since the 'network promotion' activity interacts with the other two primary activities, their interaction is crucial to understanding client recruitment. Indeed, Porter (1996) distinguishes three types of activity fit to highlight interaction among value creation activities (See Fig. 1 above): *consistency fit among activities* so that they do not erode or cancel themselves out; *activity reinforcing fit* such that the combined effects are larger than those generated by any activity in isolation, and *optimisation of effort fit* to eliminate waste and redundancy.

Growth in the scale of the client network may lead to changes/ development in operations concerning services and infrastructure (Bevilacqua, Ciarapica, Mazzuto, & Paciarotti, 2015). Consequently, the two support activities of the value network model, depicted in Fig. 1, namely, service and infrastructure development, are also relevant for the understanding of LSP client recruitment. Service development refers to the development of new services and adjustments to existing ones, according to clients' requirements. Infrastructure development concerns the design, development and implementation of the service infrastructure (Stabell & Fjeldstad, 1998).

Notably, clients are special and strategically important for mediating firms as they are not only value receivers but they also constitute critical value components. Accordingly, the value network model helps to identify some principles and client recruitment criteria relevant to mediating firms: namely network externality, network size, and composition (See Fig. 1 above). A mediating firm's value creation follows the positive demand-side network externalities logic (Katz & Shapiro, 1985). That is, client value increases as networks grow: "a critical determinant of value to any particular customer is the set, or the network of customers that are connected" (Stabell & Fjeldstad, 1998, p.427). Consequently, mediating network size and composition constitute important value and cost drivers as well as important recruitment criteria for LSPs. Size is relevant to the cost, scale and value in terms of, for example, the number of connections that LSPs' clients can access. The importance of size as a cost and value driver indicates that LSPs face significant challenges during the initial phase, and a small client network results in high cost and low value for each client in the network. The composition is important because only compatible clients add synergies to the network

(Stabell & Fjeldstad, 1998).

Trade-offs represent another notion relevant for understanding client recruitment for mediating firms (See Fig. 1 above). They are essential to strategy because they create the need for choice and purposefully limit what a company offers (Porter, 1996, p.69). Firms face two types of strategy trade-offs: time trade-offs and activity trade-offs. The former refers to the balance between exploiting existing solutions and exploring ways to transcend them (March, 1991). For the mediating firm and its network development, time trade-offs refer to "maintaining and developing established client category/networks" versus "building new ones" (Fjeldstad & Haanæs, 2001). One challenge here involves the failure trap of exploration (March, 1995), where firms take a short-term view of a long-term opportunity and are impatient to further invest and await the return on exploration. Such a failure trap, according to Fjeldstad and Haanæs (2001), should be prevented from happening in the first place/ ex-ante rather than taking ex-post measures. Activity trade-offs involve choices between differentiation and costs. The activity trade-off for the network development of mediating firms refers to reach (the number of customers served) versus range or richness (the nature and extent of transacting as provided between those customers) and increasing the network scope by aggressive recruiting and acquisition versus horizontal cooperation with other mediating firms (Fjeldstad & Haanæs, 2001). For example, an LSP can develop its client network by recruiting more clients (reach) or adding more services to existing clients (range). As well as aggressively recruiting clients, the LSP can also develop the network by horizontally cooperating with other LSPs, thus interconnecting different LSPs' clients. The present article focuses on LSP network development by recruiting clients.

Several empirical studies investigate the importance of client networks for mediating firm performance and strategy. Sasson (2008) examines how relational connectedness among a bank's customers influences the bank's loss per bankrupt customer. Fjeldstad and Sasson (2010) investigate how a bank increases value creation by embedding itself in the same networks as its customers. Fjeldstad and Ketels (2006) study how the value network model, in particular the acknowledgement of client size and composition, facilitates more effective strategic decisions made by an insurance company than the value chain model does. However, in the literature, the client network development of mediating firms is seldom investigated. One exception is found in the study by Burkay (2012), who investigates mediating architecture development mechanisms in the Norwegian newspaper industry, including selfrecruitment processes and horizontal cooperation with other mediating firms.

So, Fig. 1 illustrates the preliminary conceptual framework for investigating LSPs' client recruitment building in the light of the key notions discussed above. A refined version of this framework is presented in the analysis section, building on the combination of evidence gathered from the case study and the theoretical elements covered in this section (see Fig. 2). To date, there is a lack of theoretical refinement of the value network model (Wells, Wang, Wang, Liu, & Orsato, 2020). This study builds on and further refines key concepts of the value network model and, thus, contributes to pertinent theoretical refinement via the development of the preliminary framework from the literature and the refined client recruitment framework derived from the study.

3. Method

To gain a greater understanding of how an LSP develops its client network through strategic recruitment of clients, a longitudinal case study was conducted. This section first introduces and justifies the choice of the focal case firm. It then presents the data collection, data analysis and research quality.

3.1. The focal case firm and choice of the case

MLog⁵ is an independent 4PL, established by four founding partners with distinguished track records in fast-moving consumer goods (FMCG) logistics and supply chain management. MLog offers physical logistics services, such as inbound transport, warehousing, and outbound transport, as well as advanced supply chain services, including demand and inventory management, purchase orders, customer service, and invoicing. Supply chain consulting constitutes only a small part of the company's business. MLog outsources physical services to 3PLs using a pan-Nordic ICT platform to coordinate with 3PLs, clients, and clients' clients (e.g. retailers of beverage products) and is responsible for administrative services and payment.

MLog initially operated in the FMCG industry (primarily beverages) in three Nordic countries and later expanded into one overseas market. Table 2 divides MLog's client network changes into six phases from the start of the firm being launched.

A longitudinal case study is best used for new, exploratory investigations (Dubois & Gadde, 2002). Moreover, unique access to the focal case LSP, MLog, as a start-up LSP, and some of its clients, provided the advantage of being able to trace both the birth and development of its client network. In addition, the longitudinal case study enabled an indepth understanding (Dubois & Gadde, 2002), which provided the advantage of investigating the complexity and dynamics of MLog's client recruitment. During the research timeframe, MLog made different recruitment choices and experienced many challenges, including both the successful and failed recruitment of clients. The company was also exposed to influences from network actors.

The choice of MLog also follows the theoretical sampling principle, purposefully selecting cases for illuminating and extending logic and relationships among constructs (Eisenhardt & Graebner, 2007). The sampling of the case used for this study is purposeful for two reasons. First, MLog accommodated clients' specific needs based on standardised services and infrastructure rather than high customisation. Accordingly, MLog used a module-based service menu to tailor clients' needs, together with minor customisation for specific service details. Standardisation and the strategic intentions to recruit several clients with similar/complementary attributes justify MLog's mediating value creation logic, similar to many LSPs of other types. This paper, therefore, has not chosen MLog for understanding a particular peculiarity of some 4PLs offering highly customised supply chain services but acknowledges and builds upon the common mediating nature of MLog and other LSP types in developing a client network. Second, since MLog provides a broad scope of logistics services, it has developed a relatively small client network over the years. This has made the strategic importance and impacts of increasing the client network size and choosing suitable clients more explicit for MLog than it would be for other large, wellestablished LSPs. Therefore, this case has the additional advantage of highlighting the key theoretical elements, such as size, composition (Stabell & Fjeldstad, 1998), and strategy trade-offs (Fjeldstad & Haanæs, 2001) in a meaningful way.

3.2. Data collection

Data were collected in real time between the mid-Year 2 and late Year 5 points. Different data sources, including interviews, documents, and archival records, were triangulated (Pettigrew, 1990) for the collection of both retrospective and real-time data.

Semi-structured interviews were conducted in English in three phases at different times. Table 3 outlines the interview guidelines with the final number of interviews and informants.

Stage 1 interviews were conducted in Year 2 with the aim of better understanding the chosen focal firm, MLog, and exploring the research

⁵ MLog represents the focal LSP, which remains anonymous.

Table 2

MLog's client network dynamics over time.

	Phase 1: The birth of the client network and recruitment of the "suitable" client (Big Drink) (Starting point)	Phase 2: Generic client recruitment within extant client category (Year 1 and 2)	Phase 3: Shrinking of the client network (Year 3)	Phase 4: Exploring a new client category and recruiting an "unsuitable" client (Vampire) (Mid-Year 4- Mid-Year 5)	Phase 5: Recruiting an overseas client (Big Drink overseas) (Beginning of Year 5)	Phase 6: Recruitment breakthrough in the home market (Mid- Year 5)
MLog's intention	Network initiation	Quick growth	Expansion	Overcome overcapacity	Growth	Growth in the home market
Contextual drivers and constraints	No client Inquiry from 'Big Drink'	Small network constraints. A number of fragmented beverage players in the market.	Several clients left for different reasons	Inquiry from Vampire in the electronics category. Shrinking of existing networks	Relationship development with Big Drink. Failed experience with Vampire and shrinking network size	Shrinking of the home market network
Recruitment result and scale of client network	Recruited a Nordic client	Market shares: home country over 10%, neighbour country I about 6%, neighbour country II about 5%	Extremely slow recruitment; shrinking the network of the home country to 5% of market share	Explored electronic client category but failed	Started the overseas network	Recruited one giant client; home market shares more than 10%

Table 3

Overview of the different interview phases.

Interview phases	Interviewees	Interview objectives/ content	Interview time	Number of interviews
Stage 1	MLog 5 informants -Partner I -Partner II -Nordic ICT manager -Operational staff (inbound logistics): Home country -Manager of Operations and Control: Home country	To know more about the case company MLog To explore research interests	May, June, July, August, October in Year 2	5
Stage 2	MLog 3 informants -Partner I -Partner II -Business Manager: Home country	To explore the birth of the client network To explore client network dynamics and subsequent client recruitment	September, December in Year 4	5
Stage 3	MLog's clients 4 informants	To understand the micro-process of client recruitment. To understand the client's dynamic relationships with MLog	April, June and October in Year 5	5
	MLog 3 informants -Partner I -Partner II -Business Manager: Home country	To follow up MLog's client network dynamics and recruitment updates	February, April, July, November, December in Year 5	5
Total	10 informants	To understand how MLog recruits clients	Year 2-Year 5	20

interests. After the Stage 1 interviews and a parallel literature review, a research proposal was constructed covering the specific research topic, literature review, data collection plan, procedures, etc. The research process was, therefore, not linear but iterative among different research activities (e.g. defining the research question, data collection, literature

review and analysis).⁶ Stage 2 and 3 interviews were conducted in Years 4 and 5. The interviews with MLog aimed to capture the client network dynamics and the company's recruitment criteria and to explore the recruitment process. The interviews with MLog's clients gauged the micro-process of each actor joining/leaving the network.

To mitigate the bias of a single source of informants (Eisenhardt & Graebner, 2007), the interviewees included individuals from MLog and its clients. Those from MLog included all the employees that were relevant to the client recruitment process: namely the two partners, the business manager in the home country, and the operational staff. Since the LSP was a start-up, it did not have many departments but mainly featured a small number of staff who were responsible for different roles and functions. The most relevant informants were the two partners who were in charge of client recruitment, relationship management and the overall strategic development of their business in all its geographical markets. They also had a good insight regarding client network dynamics. The business manager of the home market was in charge of the overall operations, HR, the office and the budget in the home country. He provided additional insight concerning the overall market situation, client recruitment, and the network dynamics and service operations in the home country. The operational staff (outbound logistics staff and operations manager) were interviewed in the initial stages to understand MLog's business operations overall, and how it operated services and interacted with clients at the operational levels. The ICT manager was interviewed to understand the complexity of resource integration with clients when a new client relationship was established, as well as the information flow with clients.

On the client side, the key account managers of four clients (two existing clients and two that had left MLog's network) were interviewed. In total, 20 taped and transcribed interviews were conducted, each of which lasted between 75 and 120 min.

Key documents from MLog included sample contracts, the sample project implementation procedures with new clients, and presentation materials that provided an overview of MLog's business, its key relationships and network dynamics, core competencies and resources, strategic prioritisation, etc. Documents from clients mainly included their corporate reports. Archival records illustrated the number of clients that MLog served over time. Information gathered from these documents complemented data collected from interviews. A case study

⁶ The research process of this study follows the systematic combining approach (Dubois & Gadde, 2002). Systematic combining is an abductive approach depicting the iterative process among different research activities, which is particularly true for longitudinal case studies.

database was used to store and synthesise the relevant evidence. The final case report was reviewed by informants to verify the accuracy of the collected data.

3.3. Data analysis

The primary unit of analysis was the vertical MLog-client network from MLog's perspective. Client recruitment focused only on the formation of vertical relationships between the LSP and its clients.

Coding and analysis were conducted continuously following data collection. First, a continuously updated case report synthesising all types of data was compiled describing MLog's client recruitment following the time sequence. Then, MLog's client network dynamics were deconstructed and categorised into the six phases (see Table 2) (Langley, 1999). A cross-phase comparison further enabled the reduction, restructuring and recombination of the phases into three core categories, as presented in the findings section. Specifically, Phases 1 and 5 (in Table 2), both of which described the recruitment of Big Drink, were combined into a new category labelled as "Recruiting the first suitable client" (see Section 4.1 below). Phase 6, which addressed the common features of MLog's client recruitment, was combined with Phase 2 (in Table 2) as the "generic client recruitment within extant client category" (see Section 4.2 below). Phase 4 (in Table 2) remained as the third category (see Section 4.3 below). Phase 3 (in Table 2) was briefly mentioned as background information for Phase 4 in the findings section as it was less relevant to the research question. Following that, a pattern-matching strategy (Yin, 2009) was used for both withincategory and between-category analysis. Consequently, both theorydriven codes (theoretical elements from the mediating firm literature) and data-driven codes, which could not be explained by theory-driven codes, were identified (Åhlström & Karlsson, 2009). These codes, relating to the client recruitment of the case LSP, were further grouped and aggregated (see Table 5 of Section 5). Finally, based on explanation building (Yin, 2009), further links between all the aggregated codes in relation to the research question were identified. Consequently, a final client recruitment framework was developed (see Fig. 2 of Section 5).

3.4. Research quality

Table 4 summarises the research quality of this study following the research quality evaluation criteria suggested by Yin (2009).

The notion of confidentiality is based on the principle to respect autonomy, to ensure identifiable information collected for research is not disclosed without the permission of informants (Wiles, Crow, Heath, & Charles, 2008). Confidentiality concerns of the relevant companies and interviewees were addressed mainly in two ways:

- Interviewees were informed beforehand that data collected would be used for research purposes only and their names and the names of their organisations would be anonymised when research findings were presented. Anonymity is one main way to operationalise confidentiality (Wiles et al., 2008).
- Additional information was further disguised in the research findings such as specific geographical operating markets and the number of clients the case LSP had, to safeguard the anonymity of participating companies.

4. Findings

This section synthesises the findings gathered from the study, specifically concerning the 6-phase process MLog went through to develop its client networks. The findings are reported in three client recruitment categories: recruiting the first, suitable client; generic client recruitment within the extant client category; exploring a new client category and recruiting the unsuitable client.

Table 4

Research quality evaluation criteria	Tactics applied in the research	Research stages
Construct validity	 Multiple sources of evidence, including interviews, documents, and archival records, were collected as both retrospective and real-time data and appropriately triangulated (Pettigrew, 1990) The final case report was shared with 	Data collection and analysis
Internal validity	 informants to provide feedback. The data were analysed based on themes developed from both the literature review and insights of the case study. The data gathered during the interviews were analysed by comparing the responses provided by different informants and the two other sources of data. 	Data analysis
External validity	 A 4PL and its four clients were interviewed. 11 practitioners were interviewed, including seven from the 4PL and one from each of its four clients. The mediating firm perspective theory was used to enhance the theoretical underpinnings of the case study. 	Research design process
Reliability	 A case study database was developed synthesising all relevant data. A case study protocol was produced based on themes found in the literature review and the chosen theory. 	Data collection
Reliability	 A case study database was developed synthesising all relevant data. A case study protocol was produced based on themes found in the literature review and the chosen theory. 	Data collection

4.1. Recruiting the first, suitable client

Establishing the client network was challenging for MLog. At the start, the LSP faced obstacles in conveying the credibility and value of its service offerings and the high costs. Nevertheless, MLog placed importance on being selective and recruiting clients that constituted a stronger network. It prioritised clients with large product volumes and similar client characteristics at both product and business actor levels. It preferred clients with many service needs, similar distribution channels, and structured product portfolios in terms of stable and structured stockkeeping units with sales history and stable demand, etc. It also prioritised complementary product characteristics with clients whose products were more attractive for retailers, regardless of their small size disadvantage. Regarding client characteristics at the business actor level, MLog preferred professional clients who had a good financial position, track record, and long-term potential related to sharing its strategic intentions, and those that were trustworthy and willing to involve it in their supply chains. It also considered clients' relational compatibility, preferring clients who respected others and were willing to share logistics services with firms that they possibly competed with.

The first client, labelled Big Drink, was regarded by MLog as a perfect client to commence with. Big Drink contacted MLog for a consulting project, facilitating it to evaluate the distributor option versus going for a direct-to-market solution (meaning that the company would market and sell products itself instead of using distributors). MLog, which demonstrated strong logistics competency during the project period, impressed Big Drink. When Big Drink chose the direct-to-market mode, it received tenders from several LSPs. However, it regarded MLog's partner characteristics and expertise in designing and operating its supply chain as more important than other LSPs' advantages associated with their larger networks. MLog also actively evaluated Big Drink. As a giant global beverage producer, Big Drink had a large volume, structured products, and was open to involving MLog and was willing to develop a long-term relationship. All these attributes matched MLog's recruitment criteria.

Thereafter, Big Drink significantly influenced MLog and its network development. As its first client, Big Drink partly influenced MLog's choice of 3PLs. As a Nordic client, Big Drink's size in terms of product volume created immediate and substantial externality effects for potential clients, reinforcing MLog's recruitment advantage. As a wellknown player, Big Drink became the reference client and increased MLog's credibility. The relationship also gave MLog an opportunity to expand overseas four years later. Big Drink Overseas made strategic changes and required new logistics solutions and LSP co-operators; Big Drink Nordic recommended MLog. The opportunity raised a time tradeoff (Fjeldstad & Haanæs, 2001) for MLog regarding developing current geographical networks (exploitation) versus starting a new one (exploration). MLog, which faced slow development in Nordic markets, took the opportunity. Close collaboration with Big Drink Overseas fostered the successful development of MLog's business in the new market.

4.2. Generic client recruitment within the extant client category

Based on the rich experiences and deep knowledge of the Nordic beverage market, MLog believed that approximately 70% of the beverage clients were within its recruitment scope. However, as a new company, its lack of credibility on service provisioning and small client network made attracting new clients extremely difficult. Nevertheless, within the beverage sector, MLog used its recruitment criteria to target good potential clients instead of the easiest ones. Pan-Nordic clients were prioritised as they would benefit from its Nordic service platform, as were potential clients that MLog's sales team had relationships with.

MLog was proactive in terms of approaching potential clients. In practice, successfully recruiting clients took an average of six to eight months. MLog normally started by collecting secondary information on clients' size and composition, such as market position, product characteristics, distribution channels, etc. The company also initiated meetings to understand clients' needs and composition in more depth, which were similar within the category but differed in detail. MLog then responded to clients' requests for quotations, formally presenting solutions and terms. In this process, competent potential clients also actively analysed their supply chains and service needs with MLog in addition to evaluating MLog's service offering.

MLog's network promotion with potential clients was exposed to network influences. 3PLs mattered because they complemented MLog in providing physical logistics services and operating a physical logistics infrastructure. Existing clients' size enabled cost externalities and their specific characteristics constituted important value externalities. Existing clients also added credibility to MLog's service provisioning and lowered the risk perceived by potential clients. Network promotion experiences over time refined MLog's recruitment criteria with the company learning to prioritise clients with logistics competency and including small ones with size potential and interesting characteristics (such as trustworthiness, long-term cooperation intention, and good growth potential).

4.3. Exploring a new client category and recruiting the unsuitable client

The client network of MLog shrank significantly in its home market during Year 3, from 10% of market share to 5%. Several clients left because of competition and strategic changes. Reduction in client network size resulted in MLog decreasing their delivery frequency to beverage retailers from twice to once a week. This triggered another client, who imported beverage products with a large variety and in small volumes to leave. In their view, reduced delivery frequency negatively affected their sales in their stores.

Consequently, MLog became attracted by one large client from the

electronics sector. However, this relationship did not work out well for MLog, the client, or the network. Given its negative relational consequences, the client was labelled Vampire. Vampire's contact had presented MLog with a time trade-off (Fjeldstad & Haanæs, 2001): to focus on the existing client category (exploitation) or to explore new ones (exploration). Vampire demanded different solutions and new 3PL setups at the Nordic level. Network incompatibility challenged the existing standards, which required significant efforts on service and infrastructure development. MLog lacked the relevant logistics competencies in the electronics sector's supply chain and understood that it required explorative learning, made more pressing as Vampire insisted on a short two-month implementation. Given the lack of knowledge of handling this product category in both MLog and the new 3PL and a lack of logistics competency and critical operational data from Vampire, the service implementation consumed resources used for MLog's beverage clients. Negative network externalities were generated, thus reducing the network's value to its beverage clients. The poor implementation with Vampire destroyed MLog's ambition to further develop this category. The two parties terminated the contract after just one year.

The experience with Vampire provided MLog with lessons about exploring a new client category. These included remaining focused on the current category until a relevant strong market position was earned and "doing its homework" – on areas such as understanding clients' outsourcing structures, supply chain needs, distribution requirements and opportunities – before entering a new client category. MLog also developed critical criteria for recruiting the first client in a new category related to long-term cooperation intentions and logistics competency.

5. Analysis

This section analyses MLog's client recruitment over the five-year study period. The initial LSP client recruitment framework outlined in the review of the literature (Fig. 1) is reflected upon, leading to it being part confirmed and, in part, refined and developed.

Overall, the refined framework (see Fig. 2) highlights the importance of not only understanding the network promotion activity and its fit with other value creation activities at the operational level but also the strategic design level (see the left triangle of Fig. 2). The three strategic design activities correspond to the three operational value creation activities, highlighting strategic design fit among them too. Two strategic design activities, namely, service and infrastructure development, were initially acknowledged in the value network model as support activities. A third strategic design activity, network design, integrates i) recruitment trade-offs from the literature, ii) recruitment criteria from both the literature and the case, as well as iii) strategic influence from clients from the case. On the operational side (see the right triangle of Fig. 2), the network promotion activity is refined by including influence from potential and extant clients. Finally, the refined framework highlights the overall fit between the strategic design level and the operational level for understanding client recruitment of LSPs as a strategic issue affecting strategy development and value creation of the LSP as a whole. Underlined italic text in Fig. 2 indicates the novel/refined aspects added to the client recruitment framework. Table 5 illustrates the connection between the empirical data and the refinement of the network design and promotion notions.

5.1. Network design: recruitment criteria

MLog's recruitment criteria followed the principle of externalities, including similar product characteristics and size in terms of clients' product volume and the total number of nodes required to link across their clients' supply chains. MLog's focus on one client category streamlined nodes coverage, linkage patterns and product characteristics (all were beverage products) since different client categories normally imply a significant variety in product characteristics, logistics requirements, and distribution coverage. It also prioritised

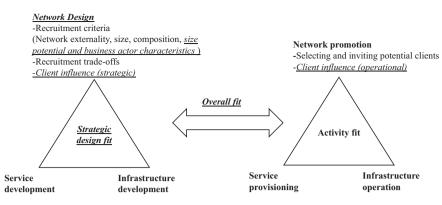


Fig. 2. The refined client recruitment framework for LSPs.

Note: The underlined italic text indicates the novel/refined aspects added to the client recruitment framework.

Table 5

Conceptual development of the network design and network promotion.

	Theoretical construc	ts	Theory- driven codes	Data- driven codes	Examples from the case
Network design	Recruitment criteria	Size (Stabell & Fjeldstad, 1998)	Х		-Clients' product volume and the total number of nodes to be linked across their supply chains
ucsign	citcita	Size potential		х	-Potential clients' growth potential and plans
		Product characteristics (Stabell & Fjeldstad, 1998)	Х	A	-Structured product portfolio, similar distribution channels, many service needs, complementary product characteristics
		Business actor characteristics		х	-Good financial position, track record, long-term cooperation intention, trustworthiness, logistics competency, relational compatibility, an open culture to share strategic intentions and engage LSPs
	Recruitment trade- offs	Time and activity trade-offs (Fjeldstad & Haanæs, 2001)	Х		-Explore an overseas market with Big Drink, explore a client in a new supply chain category (an electronic supply chain client)
	Client influence (Strategic)	- Competency		Х	-Competent client Big Drink facilitated explorative learning of MLog in terms of service and infrastructure development in a new market
		- First-mover influence		Х	-Big Drink as the first client influenced MLog's choice of infrastructure set- up
Network promotion	Inviting and selecting potential clients		х		-Both proactive (secondary data collection and face-to-face meetings) and responsive; leveraged personal relationships of the sales team and used consulting projects to promote itself and approach potential clients
	Client influence	-Externality (Stabell &	Х		-The extant suitable clients and new clients added cost and value benefits to
	(Operational)	Fjeldstad, 1998)			each other, unsuitable client added no value to extant beverage client
		- Relationship referral		Х	-The extant client Big Drink recommended MLog to its overseas sister company. MLog leveraged the brand names of its big clients to promote itself to potential clients
		- Competency		Х	-Competent clients actively analyse logistics needs with MLog

complementary product characteristics to add value (Wang et al., 2016), such as clients with attractive portfolios complementing those with less attractive portfolios.

One criterion that emerged from the case was potential size (see underlined italic texts on the left side of Fig. 2 and Table 5), which concerns potential clients' short-term growth potential of their business/product volume and plans. Potential size is in line with Katz and Shapiro's (1985, p.426) argument regarding the relevance of "expected network sizes". That is, when the service is durable, an individual client's benefits depend on the future size of the relevant network. Therefore, MLog considered potential clients' size potential as one criterion.

Client characteristics at the business actor level is another recruitment criterion that emerged from the case (see the underlined italic texts on the left side of Fig. 2 and Table 5). MLog's preference for clients with long-term cooperation intentions and relational compatibility reflected recruitment criteria implicit within the value network model. Some clients regarded MLog's offering as a commodity that could be bought at low prices, while others were more open to long-term cooperation. Those with partnership potential were highly valued. Moreover, certain client characteristics, such as complementary value-adding characteristics and long-term cooperation intention, compensated for their small size and made a small client still interesting.

MLog's recruitment criteria were refined through experience. More specifically, they learnt to seek out clients with the willingness to engage in long-term relationships with them and an acceptance of others in a shared network. For recruiting the first client in a new supply chain category, they learnt the importance of recruiting a client with logistics competencies.

5.2. Network design: recruitment trade-offs

The case study illustrated two strategy trade-offs of MLog regarding recruitment of Big Drink Overseas and Vampire. The two trade-offs indicated different explorative challenges and brought opposite recruitment results. Exploring Vampire addressed service and infrastructure development and operations related to a new supply chain category. Exploring Big Drink Overseas addressed service and infrastructure development and operations concerning a new market. MLog and Vampire fell into the failure trap of exploration (March, 1995) by taking a short-term view of a long-term opportunity. An overly short implementation period with too much explorative learning and investment, combined with Vampire's high expectations, resulted in failed development. However, MLog's and Big Drink's partnership relationship intentions, strong trust in supporting each other, and long exploration time enabled the success of this overseas exploration.

5.3. Network promotion: inviting and selecting potential clients

For MLog, network promotion could be responsive to opportunities from extant or potential clients; it may also have been a proactive approach to targeting clients. The comprehensive understanding and fulfilment of potential clients' needs and the building of trust with them were key to the successful network promotion of MLog. It deployed several tactics, such as leveraging previous relationships of the sales team (Wong & Karia, 2010) and providing consulting services, to promote their business.

5.4. Network design and promotion: influence from clients

Potential and existing clients influenced MLog's recruitment at both strategic and operational levels (see the underlined italic texts in Fig. 2 and Table 5). In terms of strategic influence, a competent client of MLog, namely Big Drink Overseas, facilitated explorative learning for service and infrastructure development in new markets. New clients generally needed to adapt to the existing infrastructure and service standards set up for existing clients. However, the first clients, regardless of being suitable or unsuitable, tended to have a first-mover influence on MLog's choice of infrastructure and service development.

Regarding clients' operational influence on MLog's network promotion, Big Drink Nordic fostered new recruitment opportunities, acting as the referee. During the client requirement identification phase, competent clients influenced MLog by actively analysing logistical needs with the company. Further, within the same client category, extant clients indirectly influenced MLog's recruitment of potential others based on their size, product, and business actor characteristics, which brought both cost- and value-related externalities. However, extant clients added no positive externalities to clients in new client categories or new networks because of incompatibility or local network effects (Banerji & Dutta, 2009). Nevertheless, negative externalities may have been spread across different categories if different client categories competed for the use of certain resources. Taking the specific example of Vampire, the findings showed that this client lacked synergies with MLog's other beverage clients. It, therefore, brought no positive externalities to the beverage clients. However, the significant human resources required for mitigating the problems MLog had in their Vampire account tied up substantial human resources it used for its beverage clients. This negatively affected the service quality provided for the beverage clients. Notably, Vampire became a "vampire" in MLog's specific network. However, in another network that was compatible with its characteristics, Vampire could equally have assumed the role that Big Drink played. Vampire joined the wrong network at the wrong time.

5.5. Strategic, operational and overall fits

MLog's client recruitment was affected by both fit and misfit at different levels (see fit highlighted in Fig. 2). This section analyses this particular finding.

MLog's initial client recruitment was constrained by the lack of evidence/records on reinforcing activity fit with the service and infrastructure operations. In other words, evidence of service and infrastructure operations would have strengthened MLog's client recruitment.

MLog's prioritisation of pan-Nordic clients addressed a reinforcing activity fit (Porter, 1996) with their pan-Nordic infrastructure and service development and operations, which enabled more efficient and cheaper services than its competitors.

There is a consistent fit (Porter, 1996) between MLog's recruitment criterion of targeting clients with similar/complementary attributes and its standardised service and infrastructure development and operations

ensuring value creation. A standardised service and infrastructure set-up does not fit consistently with one client with unique needs and attributes and, therefore, cannot create value for the unique client. Similarly, the inclusion of a unique client does not add value for other clients that have common or complementary attributes among them.

MLog maintained a good overall fit between strategic design and operations most of the time. Specifically, network promotion seemed to have a consistent fit with network design (e.g., recruitment criteria). This partially explained MLog's successful client recruitment.

The last beverage client left MLog's network because of a misfit between MLog's changed service provisioning and extant network composition (attributes of this client). Such service change failed to create the value expected from this client and made the network unsuitable for it.

The recruitment of Vampire showed another activity misfit; the recruitment ambition had to fit closely with the other two activities to strengthen value creation. Over-recruitment that exceeded MLog's service and infrastructure capacity not only added little value to Vampire and MLog's network of extant clients but put the entire network in danger, resulting in negative network externalities. Since MLog outsourced parts of its logistics services to another provider, it seemed important to ensure that its subcontractor was also flexible and capable of supporting the focal LSPs' exploratory recruitment ambition. Part of the reason for the Vampire failure was that MLog's 3PL partner lacked the competency and flexibility to manage new recruitment in a different client category.

6. Theoretical implications

This study develops a client recruitment framework explicating how an LSP that follows a mediating value creation logic develops its client network. The framework builds on and refines some notions of the value network model (Stabell & Fjeldstad, 1998).

The recruitment criteria enrich our understanding of the concepts of size and composition as proposed in the value network model (Stabell & Fjeldstad, 1998). Specifically, the size of a client is refined by distinguishing between actual size and size potential. Composition is enhanced by being categorised into two levels related to the product and the actor. Business actor composition, which the value network model does not focus on, highlights the importance of relational compatibility in the mediating network (Huemer, 2012).

The inclusion of the sources of influence from clients further extends network promotion as an activity that interacts with and responds to embedded context (Håkansson & Ford, 2002), which the original value network model does not focus on.

The framework developed from this study incorporates activity fit. The notion of activity fit, originally proposed by Porter (1996), enhances understanding of interdependence among value creation activities. Porter (1996) argues that to ensure value creation at an optimal level, value creation activities should be strategically aligned with each other. The incorporation of activity fit into the framework builds on the notion of activity interdependency acknowledged by Stabell and Fjeldstad (1998) in the value network model. Activity interdependency in the value network model, however, only implies that the three primary value creation activities are reliant on each other in some way. Activity fit goes further and suggests there should be different types of alignments/interdependence between the three types of primary value creation activities: reinforcement, consistency and optimisation (Porter, 1996). All of these are included in the client recruitment framework of this study. Built upon Porter's (1996) notion of fit, this paper further develops this notion at three levels: namely strategic design, operational and overall. As such, these three levels of fit, incorporated in the framework, are essential to ensure that LSPs' client recruitment contributes to strategy development and value creation of the LSP rather than this process being run in a sub-optimised, silo manner.

The externality argument (Katz & Shapiro, 1985), as proposed in the

Table 6

LSPs' client recruitment	t criteria and manufacturers	/retailers' LSP se	election criteria: a c	omparison.
--------------------------	------------------------------	--------------------	------------------------	------------

Implications for value creation	Externalities		Mediating individual supply chain flow		
Recruitment/ selection criteria	LSP's (MLog) client recruitment criteria	Manufacturers/retailers' LSP selection criteria	LSP's (MLog) client recruitment criteria	Manufacturers/retailers' LSP selection criteria	
Business actor/ relational level	–Relational compatibility among clients –Logistics competency –Professionalism: good financial position, track record –Trustworthy		 Open culture to share strategic intentions -Involve MLog in their chains -Long-term cooperation intention -Professionalism: good financial position, track record, logistics competency -Trustworthy 	 -Relationship: share risks and awards, develop collaborative relationships -Flexibility -Professionalism: knowledge, competence, and experience -Financial position -Reputation 	
Product level/ logistics operations	-Node coverage -Large size (potential) -Similar distribution channels -Structured product portfolio -Complementary product characteristics	-Location (e.g., distribution, market, shipment destination and geographical coverage)	-Large volume -Structured product portfolio -Significant service needs	–Cost –Service scope –Quality –Delivery –Information and equipment system	

Note: Non-italics indicates mirrored/matched criteria between buyers and LSPs. *Italics* indicates unmirrored/unmatched criteria between buyers and LSPs.

value network model, highlights that when an LSP recruits its first client, this client can be in a disadvantageous position in comparison to subsequent clients due to the lack/absence of network size. However, as illustrated in the present case, the first-mover influence shows that being the first client has the unique advantage of influencing an LSP's service portfolios and infrastructure set-up in favour of themselves and their supply chains. Consequently, this study shows that the 'first-mover advantage' may still hold, regardless of the strong presence of externality effects in the logistics context.

In parallel with some extant studies that focus on collaborative value creation mechanisms in logistics networks (e.g., Huemer, 2006; Wang et al., 2016), this study contributes to this literature domain by investigating activity fit. Specifically, it shows how consistency and reinforcing fits/unfits between client recruitment and other activities influenced the value creation of the case LSP.

Table 6 compares the criteria used by buyers to select LSPs⁷ with the client recruitment criteria of MLog. It illustrates that there is only a partial match between the two.

Since mediating firms' value creation includes both how mediation is performed and to whom or what the mediator can connect (Fjeldstad & Haanæs, 2001), MLog's criteria for recruiting clients include both mediating flows of individual supply chains and those indicating externalities. However, for manufacturers and retailers, since their value creation was primarily within their individual supply chains, most of their criteria used for selecting LSPs, as found by Aguezzoul (2014), focused on how LSPs could facilitate their own supply chains – except for the "location" criterion, which is in line with the "node coverage" in the LSPs' client recruitment criteria. These criteria mirror MLog's client recruitment criteria for mediating "*individual*" supply chain flows. Such mirroring indicates that the specific characteristics/criteria of both manufacturers and retailers and LSPs are critical for mediating the individual supply chain flows.

Aspects of MLog's client recruitment criteria related to externalities found in the study, which manufacturers and retailers fail to mirror, largely reflect the different business models between LSPs and their clients (Huemer, 2012). Value network firms, LSPs in the case of this study, put a network of clients at the core of their business models and focus on value creation to strengthen and extend the client network (Fjeldstad & Ketels, 2006 p. 125). Accordingly, Huemer (2012) suggested that the right question that LSPs should ask with regard to their business models should be: What is the right product for our supply network (not supply chain)? Our study further adds to Huemer (2012) in that it is not only the right product of potential clients that is important for creating value in LSPs' client network, but it is also the right relationship and right business actor attributes.

Different from the client recruitment and marketing segmentation criteria discussed in the marketing literature, which focuses mainly on the *general* demographic characteristics suggested by D'Haen & Poel (2013), the client recruitment criteria developed in this study build on the unique mediating value creation logic/business model of LSPs; hence, they are *LSP specific*. Although some of the recruitment criteria developed in this study seem to overlap with the comprehensive marketing segmentation criteria (e.g., company size, customer capability, type of buyer-seller relationship), as proposed by Shapiro and Bonoma (1984), their served purpose is very different. That is, market segment criteria aim to identify clients with homogeneous/similar attributes while client recruitment criteria adopted by mediating firms, LSPs in this case, facilitate the development of a client network that includes clients with both similar and complementary attributes.

7. Managerial implications

Compared with the large amount of supply chain literature which centres on the passive role of LSPs as the parties to be selected (e.g., Aguezzoul, 2014), this study shows that an LSP needs to be selective about which clients it recruits and how to achieve this. Specifically, LSPs should recruit suitable, long-term clients rather than the so-called 'best ones' from the market. What a suitable client is for an LSP depends largely on how well the client's product and actor characteristics match the size and composition of the overall client network of that LSP. Such a network view of the value of potential client differs from the general marketing literature, which appraises potential value of clients using the sales revenue/volume/profits and relational retention potential of each individual client independently from other clients of the supplier (e.g., Buttle, 2009). However, this study is in line with the notion of customer lifetime value investigated in the marketing literature regarding valuing clients that have growth potential and long-term relationship intension (e.g., Buttle, 2009; Yu & Cai, 2007). This study is also in line with Kumar and Petersen (2005) and Buttle (2009), who find that relationship referrals from extant clients positively influence client recruitment of the focal firm.

This study reveals several early-stage client recruitment strategies of MLog that may benefit other LSPs. First, MLog leveraged the advantages of its integrated pan-Nordic logistics infrastructure for recruiting those

⁷ Here the criteria are summarised by Aguezzoul's (2014) review study of 67 articles on LSP selection from the buyer's perspective.

clients for whom the LSP's infrastructure facilitated relevant advantages. Second, MLog leveraged its personal relationships and recruited qualified potential clients with whom the sales team had previous relationships. This is in line with Wong and Karia (2010), who also point out the relevance of relationships for LSPs when recruiting clients. As illustrated in the case study, building trust takes time. The previous relationships of the salespersons facilitated the first step in trust-building with potential clients. In line with studies in marketing literature - for example, the works by Yu and Cai (2007) - this study also highlights the relevant experiences of sales representatives when targeting and screening clients.

Arguably, the first-mover influence indicates that the first client recruited by LSPs should be representative, rather than part of a niche, such that the infrastructure set-up and service portfolio benefits from network externalities through subsequent recruitment. This is similar to the advice given in the paper by Liu et al. (2020), which also looked at a start-up logistics company and asserted that the recruitment and service development of a representative client fostered their later recruitment of similar clients.

LSP managers should acknowledge the importance of strategic tradeoffs that involve not only the right choice but also the right timing. The failure trap, in terms of a short-term view of a long-term opportunity (March, 1995), should be avoided. This paper recommends two avoidance strategies. First, focal LSPs should be aware of and undertake careful risk appraisal of exploratory recruitment, which demands new logistics competency and resource investment. Second, LSPs should recruit the first client with strategic partnership intentions for exploring the new client category, since client exploration is not an independent, individual firm attempt, but normally requires inputs and investment from the client. Although it may seem easier to recruit less-qualified clients, LSPs should be patient and recruit clients with the right characteristics.

For manufacturers and retailers who buy logistics services, this study has highlighted the importance of evaluating both the LSP and its network of other clients when making outsourcing decisions.

8. Conclusions

This paper complements the extensive supply chain literature on the perspective buyers typically take when selecting LSPs, by examining how an LSP develops its client network via client recruitment. Accordingly, this study contributes to the limited literature on the organic growth strategy of LSPs and the formation of the vertical LSP-client network via client recruitment, as well as the buyer-seller relationship development in the broader marketing literature, taking a network perspective of the seller. The refined client recruitment framework derived from this study further contributes to the refinement of the value network model.

This study has certain limitations, all of which point to future research directions. The study builds on a single case study of a specific type of LSP, which is one type of mediating firm. However, the client recruitment strategies adopted by LSPs of different types and mediating firms of different types may differ. Consequently, future research is encouraged to replicate/test or further refine the framework developed from this study for other types of LSPs and mediating firm contexts, as well as comparing mediating firm client recruitment with general B2B firms that do not follow network externalities. In particular, it is worth investigating if and how the so-called asset-based LSPs differ from less asset-based LSPs, an exemplar 4PL in the case of this study, in the approach they take when recruiting clients. It is also pertinent to investigate the differences and similarities among the client recruitment strategies taken by LSPs that are more proactive when recruiting clients and those that are more passive. Moreover, different selection decisionmaking methods, such as multi-criteria types (Aguezzoul, 2014), as used by buyers to select clients, can be applied to improve understanding of the relative importance and interdependence of the recruitment criteria.

Furthermore, MLog, the case LSP used in this study, as a small firm, relies on experiences, personal relationships and intuition rather than large databases for their recruitment. Future research may investigate the use of data mining techniques, typically used by larger firms, explored in the marketing literature in facilitating effective client recruitment. Future research could explore the impact of the acquisition costs in influencing the recruitment decision. Such an aspect was not a focus of this study but has been discussed in the general marketing literature. It is also pertinent to run longitudinal case studies on relationship power and the types of relationships with clients for knowledge advancement regarding this topic. Furthermore, future studies may explore whether the LSP's organic growth strategy of client recruitment can be impacted by alternative growth strategies, such as mergers and acquisitions, typically undertaken by large LSPs in recent years. To the best of our knowledge, there is a lack of studies on this issue in the logistics setting. This issue, however, has received recent attention in the marketing literature (Kato & Schoenberg, 2014).

Acknowledgment

The authors are indebted to the Editor-in-Chief Professor Anthony Di Benedetto, and two anonymous reviewers for their insightful comments and suggestions. This work was supported by the Norwegian Research Council [grant number 192922]. The authors would like to thank the funding agency and the participating managers and employees for supporting the data collection process.

References

- Aguezzoul, A. (2014). Third-party logistics selection problem: A literature review on criteria and methods. *Omega*, 49, 69–78.
- Åhlström, P., & Karlsson, C. (2009). Longitudinal field studies. In C. Karlsson (Ed.), Researching operations management (pp. 196–235). New York: Routledge.
- Ang, L., & Buttle, F. (2006). Managing for successful customer acquisition: An exploration. Journal of Marketing Management, 22, 295–317.
- Banerji, A., & Dutta, B. (2009). Local network externalities and market segmentation. International Journal of Industrial Organization, 27, 605–614.
- Bevilacqua, M., Ciarapica, F. E., Mazzuto, G., & Paciarotti, C. (2015). The impact of business growth in the operation activities: A case study of aircraft ground handling operations. *Production Planning and Control*, 26(7), 588–604.
- Blattberg, R. C., Kim, B.-D., & Neslin, S. A. (2008). Acquiring customers. In Database marketing: Analyzing and managing customers (1 ed., pp. 495–514). New York: Springer-Verlag.
- Blocker, C. P., & Flint, D. J. (2007). Customer segments as moving targets: Integrating customer value dynamism into segment instability logic. *Industrial Marketing Management*, 36, 810–822.

Bounsaythip, C., & Rinta-Runsala, E. (2001). Overview of data mining for customer behavior modeling (TTE1–2001-18). Retrieved from Espoo, Finland https://www. vttresearch.com/sites/default/files/julkaisut/muut/2001/customerprofiling.pdf.

Brekalo, L., & Albers, S. (2016). Effective logistics alliance design and management. International Journal of Physical Distribution & Logistics, 46(2), 212–240.

- Burkay, U. (2012). The rise of mediating firms: The adoption of digital mediating technologies and the consequence re-organization of industries (PhD Dissertation). Oslo: BI Norwegian Business School.
- Burt, R. S. (1992). Structural holes the social structure of competition. London, England: Harvard University Press.
- Buttle, F. (2009). Customer relationship management: Concepts and technologies (2nd ed.). London: Taylor & Francis.
- CSCMP. (2013). Supply chain management terms and glossary. http://cscmp.org/CSCMP/ Educate/SCM Definitions_and Glossary.of_Terms/CSCMP/Educate/SCM Definitions_and_Glossary_of_Terms.aspx?hkey=60879588-f65f-4ab5-8c4b-6878815ef921.
- Cui, L., & Hertz, S. (2011). Networks and capabilities as characteristics of logistics firms. Industrial Marketing Management, 40(6), 1004–1011.
- D'Haen, J., & Poel, D. V.d. (2013). Model-supported business-to-business prospect prediction based on an iterative customer acquisition framework. *Industrial Marketing Management*, 42, 544–551.
- Dubois, A., & Gadde, L.-E. (2002). Systematic combining: An abductive approach to case research. Journal of Business Research, 55(7), 553–560.
- Easton, G. (1992). *Industrial networks: A new view of reality*. London: Routledge. Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities
- and challenges. *The Academy of Management Journal*, *50*(1), 25–32.
- Ekanayake, S., Childerhouse, P., & Sun, P. (2017). The symbiotic existence of interorganizational and interpersonal ties in supply chain collaboration. *The International Journal of Logistics Management*, 28(3), 723–754.

X. Wang et al.

Fabbe-Costes, N., Jahre, M., & Roussat, C. (2008). Towards a typology of the roles of logistics service providers as supply chain integrators. *Supply Chain Forum*, 9(2), 28–43.

Fjeldstad, Ø. D., & Haanæs, K. (2001). Strategy tradeoffs in the knowledge and network economy. Business Strategy Review, 12(1), 1–10.

Fjeldstad, Ø. D., & Ketels, C. H. M. (2006). Competitive advantage and the value network configuration. Long Range Planning, 39, 109–131.

 Fjeldstad, Ø. D., & Sasson, A. (2010). Membership matters: On the value of being embedded in customer networks. *Journal of Management Studies*, 47(6), 944–966.
 Forbes. (2006). Peter Drucker on marketing. Retrieved from https://www.forbes.com/2

006/06/30/jack-trout-on-marketing-cx_jt_0703drucker.html?sh=1ac71ab5555c. Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology, 78* (6), 1360–1380.

Granovetter, M. S. (1985). Economic action and social structure: The problem of embeddedness. American Journal of Sociology, 91(3), 481–510.

Grawe, S. J., & Ralston, P. M. (2019). Intra-organizational communication, understanding, and process diffusion in logistics service providers. *International Journal of Physical Distribution and Logistics Management*, 49(6), 662–678.

Håkansson, H., & Ford, D. (2002). How should companies interact in business networks? Journal of Business Research, 55, 133–139.

Håkansson, H., Ford, D., Gadde, L.-E., Snehota, I., & Waluszawski, A. (2009). Business in networks. Chichester: John Wiley & Sons Ltd.

Håkansson, H., & Snehota, I. (1989). No business is an island: The network concept of business strategy. Scandinavian Journal of Management, 5(3), 187–200.

Håkansson, H., & Waluszewski, A. (2002). Managing technological development: IKEA, the environment and technology. London: Routledge.

Halldórsson, Á., & Skjøtt-Larsen, T. (2006). Dynamics of relationship governance in TPL arrangements – A dyadic perspective. *International Journal of Physical Distribution and Logistics Management*, 36(7), 490–506.

Hertz, S., & Alfredsson, M. (2003). Strategic development of third party logistics providers. *Industrial Marketing Management*, 32(2), 139–149.

Hingley, M., Lindgreen, A., & Grant, D. B. (2015). Intermediaries in power-laden retail supply chains: An opportunity to improve buyer-supplier relationships and collaboration. *Industrial Marketing Management*, 50, 78–84.

Homburg, C., Steiner, V. V., & Totzek, D. (2009). Managing dynamics in a customer portfolio. *Journal of Marketing*, 73(5), 70–89.

Houe, T., & Murphy, E. (2017). A study of logistics networks: The value of a qualitative approach. *European Management Review*, 14, 3–18.

Huemer, L. (2006). Supply management: Value creation, coordination and positioning in supply relationships. Long Range Planning, 39(2), 133–153.

Huemer, L. (2012). Unchained from the chain: Supply management from a logistics service provider perspective. *Journal of Business Research*, 65, 258–264.

Jahre, M., & Fabbe-Costes, N. (2005). Adaptation and adaptability in logistics networks. International Journal of Logistics Research and Applications, 8(2), 143–157.

Jahre, M., Gadde, L.-E., Håkansson, H., Harrison, D., & Persson, G. (2006). Resourcing in Business logistics – The art of systematic combining. Slovenia: Liber & Copenhagen Business School Press.

Jensen, L.-M. (2010). Opportunities and constraints for intermediaries in distribution: The challenges of variety. *IMP Journal*, 4(3), 194–219.

Johnson, D. S., Clark, B. H., & Barczak, G. (2012). Customer relationship management processes: How faithful are business-to-business firms to customer profitability? *Industrial Marketing Management*, 41, 1094–1105.

Kato, J., & Schoenberg, R. (2014). The impact of post-merger integration on the

customer–supplier relationship. *Industrial Marketing Management, 43*, 335–345. Katz, M. L., & Shapiro, C. (1985). Network externalities, competition, and compatibility. *The American Economic Review, 75*(3), 424–440.

Kumar, V., & Petersen, J. A. (2005). Using a customer-level marketing strategy to enhance firm performance: A review of theoretical and empirical evidence. *Journal* of the Academy of Marketing Science, 33(4), 504–519.

Langley, A. (1999). Strategies for theorizing from process data. The Academy of Management Journal, 24(4), 691–710.

Liu, H., Purvis, L., Mason, R., & Wells, P. (2020). Developing logistics value propositions: Drawing insights from a distributed manufacturing solution. *Industrial Marketing Management*, 89, 517–527.

Liu, W., Song, J., Xia, X., & Li, W. (2018). How the LSSC networks affect the growth of logistics service integrator. *International Journal of Services, Technology and Management, 24*, 135–150. Manners-Bell, J. (2017). Introduction to global logistics: Delivering the goods (2nd ed.). London, New York, New Delhi: Kogan Page.

March, J. G. (1991). Exploration and exploitation in organizational learning. Organization Science, 2, 71–87.

March, J. G. (1995). The future, disposable organizations and the rigidities of imagination. Organization, 2, 427–440.

Monat, J. P. (2011). Industrial sales lead conversion modeling. Marketing Intelligence & Planning, 29(2), 178–194.

Müller, J. M., Pommeranz, B., Weisser, J., & Voigt, K.-I. (2018). Digital, social media, and Mobile marketing in industrial buying: Still in need of customer segmentation? Empirical evidence from Poland and Germany. *Industrial Marketing Management*, 73, 70–83.

Ngai, E. W. T., Xiu, L., & Chau, D. C. K. (2009). Application of data mining techniques in customer relationship management: A literature review and classification. *Expert Systems with Applications*, 36, 2592–2602.

Nijssen, E. J., Guenzi, P., Borgh, M., & v. d. (2017). Beyond the retention—Acquisition trade-off: Capabilities of ambidextrous sales organizations. *Industrial Marketing Management*, 64, 1–13.

Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. Organization Science, 1(3), 267–292.

Porter, M. E. (1996). What is strategy? Harvard Business Review, 74(6), 61-78.

Powell, W. W., Koput, K. W., & Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, 41, 116–145.

Rodrigues, V. S., Harris, I., & Mason, R. (2015). Horizontal logistics collaboration for enhanced supply chain performance: An international retail perspective. *Supply Chain Management: An International Journal, 20*(6), 631–647.

Rushton, A., & Walker, S. (2007). International logistics and supply chain outsourcing. London and Philadelphia: Kogan Page.

Sallnäs, U., & Huge-Brodin, M. (2018). De-greening of logistics? – Why environmental practices flourish and fade in provider-shipper relationships and networks. *Industrial Marketing Management*, 74, 276–287.

Sasson, A. (2008). Exploring mediators: Effects of the composition of organizational affiliation on organization survival and mediator performance. *Organization Science*, 19(6), 891–906.

Schmoltzi, C., & Wallenburg, C. M. (2011). Horizontal cooperations between logistics service providers:Motives, structure, performance. *International Journal of Physical Distribution and Logistics Management*, 41(6), 552–576.

Shapiro, B. P., & Bonoma, T. V. (1984). How to segment industrial markets. Harvard Business Review, May, 104–110.

Söhnchen, F., & Albers, S. (2010). Pipeline management for the acquisition of industrial projects. *Industrial Marketing Management*, 39(8), 1356–1364.

Stabell, C. B., & Fjeldstad, Ø. D. (1998). Configuring value for competitive advantage: On chains, shops and networks. Strategic Management Journal, 19(5), 413–437.

Stefansson, G. (2006). Collaborative logistics management and the role of third-party service providers. *International Journal of Physical Distribution and Logistics Management*, 36(2), 76–92.

Thompson, J. D. (1967). Organization in action. New York: McGraw-Hill.

Wang, X., Persson, G., & Huemer, L. (2016). Logistics service providers and value creation through collaboration: A case study. *Long Range Planning*, 49, 117–128. https://doi.org/10.1016/j.lrp.2014.09.004

Wells, P., Wang, X., Wang, L., Liu, H., & Orsato, R. (2020). More friends than foes? The impact of automobility-as-a-service on the incumbent automotive industry. *Technological Forecasting and Social Change*, 154.

Wiles, R., Crow, G., Heath, S., & Charles, V. (2008). The Management of Confidentiality and Anonymity in social research. *International Journal of Social Research Methodology*, 11(5), 417–428.

Wilson, R. D. (2006). Developing new business strategies in B2B markets by combining CRM concepts and online databases. *Competitiveness Review*, 16(1), 38–43.

Wong, C. Y., & Karia, N. (2010). Explaining the competitive advantage of logistics service providers: A resource-based view approach. *International Journal of Production Economics*, 128, 51–67.

Yin, R. K. (2009). Case study research design and methods (4th ed.). London: SAGE.

Yu, Y.-P., & Cai, S.-Q. (2007). A new approach to customer targeting under conditions of information shortage. Marketing Intelligence & Planning, 25(4), 343–359.