

# **Understanding the Dynamics of Service Exchange Design in Industrial Markets: The Case of Third Party Logistics Services**

- Work in Progress -

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## **1. Introduction – The Dynamics of Service Exchange Design**

The aim of this paper is critically to examine the process of service exchange design in industrial markets i.e. how service offerings are constructed, developed and adapted in service provider-user relationships. It is suggested that the service procurement literature under-emphasizes the fact that business services are defined, developed and managed in an evolutionary fashion in the context of long-term service provider-user relationships. This stream of research has long been stressing problems associated with the specification and design of business services and such problems are discussed on the basis of a distinction between manufactured goods and services (Allen and Chandrashekar, 2000; Baily et al, 1998). Contrasted with manufactured products, services are presented as having distinctive characteristics (e.g. intangible, non-storable and heterogeneous). Hence, it is often an onerous task to define what it is to be exchanged, write contracts, agree on compensation schemes and evaluate performance (Ellram, Tate and Billington, 2004). The upshot is that a different approach is needed for purchasing business services. A variety of frameworks have been proposed taking into account various dimensions such as service complexity and importance of service (e.g. Fitzsimmons, Noh and Thies, 1998).

Despite their usefulness, such analyses appear to under-emphasise dynamic aspects of service exchange design -an exception here is Axelsson and Wynstra (2002) who discuss a “network perspective” in business service purchasing, recognising the impact of actor and relationship interdependencies on individual transactions. Definition of service requirements is rightly perceived as the starting point, but then little is said about the need to revisit such requirements throughout the procurement process (e.g. Fitzsimmons, Noh and Thies, 1998). In the context of logistics services more specifically, procurement frameworks (e.g. see Andersson and Norrman, 2002) present a linear, step-by-step process and fail to reflect the dynamics of service definition/design which also relate to economic and contractual aspects e.g. price and service volume variations (Halldorson and Skjott-Larsen, 2006).

The empirical context of the study is the third party logistics (3PL) sector. The 3PL market serves as an interesting example as it has evidently grown in complexity, moving from commodity services (transport and warehousing) to increasingly bundled and value added solutions (e.g. supply chain design). Faced with such an unbounded industry and blurred offerings (see Glückler and Ambrüster, 2003), service users are often left confused about the meaning and content of 3PL services. Service specification and design becomes an important challenge in this context, with buyers preferring to gradually increase the scope of outsourced services as the relationship develops rather than buying integrated solutions from the outset (van Laarhoven, Berglund and Peters, 2000).

## **2. Third Party Logistics**

Third party logistics is defined as the organisational practice of contracting-out part of or all logistics activities, with the aim of achieving cost savings and/or enhancing customer service (Christopher, 2005). The notion of 3PL is used to describe a wide variety of contractual arrangements between shippers and logistics service providers, ranging from short-term agreements for the provision of basic services (e.g. transportation) to long-term contracts for the provision of sophisticated solutions (Bagchi and Virum, 1998; Sink, Langley and Gibson, 1996). Reported benefits to manufacturers and retailers using such services include reduction in asset investment and operational costs, access to external logistics expertise, reduction of lead times and customer service improvement (Bhatnagar and Viswanathan, 2000; van Damme and Ploos van Amstel, 1996).

The literature on 3PL purchasing mainly focuses on selection criteria for logistics providers (e.g. Jhakharia and Shankar, 2007; Menon, McGinnis and Ackerman, 1998) as well as on normative purchasing frameworks (Andersson and Norrman, 2002; Bagchi and Virum, 1998; Sink and Langley, 1997). Such studies are useful in so far as they describe the typical buying process and focus on individual stages such as need identification, supplier selection, and service

implementation and performance evaluation. However, they appear to be under-theorised and rather simplistic in the sense that they don't fully represent the realities of definition, design and measurement of logistics service offerings (Selviaridis and Spring, 2007; Halldorson and Skjott-Larsen, 2006).

Existing literature appears to assume that the offering is defined from the outset of the process and it fails to deal with dynamic aspects of service definition. Indeed, some authors (Sink and Langley, 1997; Andersson and Norrman, 2002) recognise the non-linear nature of the procurement process but they stop short of providing empirical evidence and addressing such issues in detail. None of the existing studies seem to consider the impact of repeated purchases (renewals) on service specification and design. There is also little empirical evidence regarding the role of 3PL contracts; contributions focus on whether formal contracts are important for 3PL relationship management or not (contract vs. trust arguments) and describe contractual provisions (e.g. Boyson et al, 1999; van Hoek, 2000), but they don't link contractual issues to the development and subsequent evolution of logistics offerings.

Given the aforementioned changing character of the 3PL market and the identified literature gaps, the aim of the study is to revisit the process (how) of logistics service definition and development. This translates into two key objectives: a) to better understand the dynamics of 3PL service exchanges; in particular how service offerings are designed, developed and (potentially) adapted in the context of long term business relationships b) to examine the role of 3PL contracts i.e. the impact of economic and contractual aspects on design and subsequent management of 3PL services.

### **3. Theoretical Framework**

Callon, Meadel and Rabeharisoa (2002) adopt a dynamic approach to the definition of products and services by introducing the notion of qualification, the process whereby a product/service is temporarily stabilized (in terms of its characteristics and list of qualities) in order to become the object of exchange. Callon, Meadel and Rabeharisoa (2002) draw a fundamental distinction between a product and an economic good. Products are conceived as goods with a "career" or a "biography" because they go through several transformations and change characteristics during their production, circulation and use. On the other hand, economic goods are seen as stabilized products whose list of qualities is (temporarily) closed. In this sense "a product is a process, whereas the good corresponds to a state, to a result, or more precisely, to a moment in a never-ending process" (Callon, Meadel and Rabeharisoa, 2002:197). The product, seen as a series of transformation processes, also defines the networks of agents related to its design, production and consumption. It is these agents that define its characteristics through adjustment, iteration and transformation (Callon, Meadel and Rabeharisoa, 2002). In the same vein, Callon and Muniesa (2005) argue that services can also be made tradable once they are transformed into a good, a thing that "holds-together" so that property rights can be assigned to it.

Baldwin and Clark (2006) also address product definition by taking a rather different (network design) approach though. Their work is primarily seen as a contribution to the modularity theory of the firm, as their aim is to explain why transactions occur at certain locations (within a production system) and not in others. They introduce the notion of mundane transaction costs (MTCs) as a means of drawing a distinction between transfers and transactions. The production system is conceived as a network of tasks and transfers. Transfers of materials, energy, information and money are essential to produce goods due to the physical and cognitive limitations of network agents (human beings and machines). MTCs are defined as "the costs of creating a transactional interface" (Baldwin and Clark, 2006:5). Three categories of costs are identified: a) costs of defining what it is to be transferred b) costs of measuring transfers and c) costs of valuing and paying for the transfers (i.e. compensation schemes). These costs vary according to the type and complexity of transfers. Not all transfers can be converted into transactions; transactions are defined as transfers that can be standardised, counted, valued and

paid for. According to Baldwin and Clark (2006), complex transfers are expected to take place within free-transaction zones and encapsulated systems (i.e. the firm) whereas transfers with low MTCs should be converted into transactions (i.e. contracted-out).

The above suggest that even for products, which we use to think of as entities with solid characteristics, effort and cost is entailed to make them tradable (Araujo and Spring, 2006). By implication, logistics services also require such specialised work; defining, designing and measuring fluid service offerings such as 3PL/4PL can be extremely onerous tasks. Buyers may not be clear about their service requirements from the outset. Logistics services are usually designed through a long-term tendering process where incomplete information and operational/commercial assumptions are the norm rather than the exception. These design assumptions often fail to reflect the reality of logistics operations. Buyers and 3PLs may also find it hard to disentangle logistics processes from other functional areas (e.g. production and order management). Such operational interdependencies introduce difficulties regarding performance measurement and delineation of responsibility for service failures. However, both Baldwin and Clark (2006) and Callon, Meadel and Rabeharisoa (2002) appear to treat such transactions as isolated events. They are preoccupied with exchanges that take place at specific points in time and fail to consider temporal dependencies among them. It is suggested that such a focus might be incompatible with practices in industrial markets where transactions are often interdependent and embedded in a broader series of economic and social exchange episodes that constitute the business relationship (Ford et al, 2003; Håkansson and Snehota, 2002). Indeed, as Langlois (2005) has argued, mundane transaction costs have a (secret) life. Over time the costs of standardising transfers are reduced through repetition and learning and thus location of transactional interfaces can change.

In this sense, the industrial network approach is useful in so far as it shifts emphasis of analysis from the individual transaction to the business relationship. Business relationships have a past and a future and thus temporal dependencies exist regarding the design of service exchanges at any specific point in time. Industrial markets are characterized by stability in the sense that long-lasting relationships are formed between organizations (Turnbull, Ford and Cunningham, 2002). Transaction costs are reduced in the long-term through collaboration and through exchange and adaptation processes (Håkansson and Snehota, 2002; Johanson and Mattson, 1987). However, the focus is on the continuity and implementation of relationships and industrial network scholars appear to have underplayed commercial and contractual aspects of exchanges (Harrison, 2004). Contracts and economic incentives/penalties are assumed to be existent, but their function in terms of relationship governance and support has remained largely unexplored. Harrison (2004) has rightly suggested that investment and risk management issues should be considered for a better understanding of business relationship dynamics. In recognition of this gap, there have been attempts recently to examine how contracts can facilitate inter-organisational interaction on an on-going basis (e.g. Mouzas and Ford, 2006).

Contract theory mainly focuses on transactions that are not immediate in character. The time factor introduces environmental uncertainties, effort monitoring and investment issues into contractual practice (Lyons, 1996). Contrary to the classic distinction in the literature between discrete and relational contracts (see McNeil, 1980), Collins (1999) has proposed three normative frameworks for evaluating contractual behavior: a) the business relationship, where action is oriented towards the development and preservation of trust b) the economic deal, where emphasis is on economic self-interest and c) the contract, where priority is given to commitments undertaken as part of the formal documents. Following Collins' (2003) line of argument contractual behavior which at first sight seems "irrational" (e.g. accepting short-term economic losses or tolerating a breach of contract) can be explained with reference to the priority given to relationship continuity. This appears to be compatible with recent literature discussing the complementarity between relational and contractual governance mechanisms (Blomqvist, Hurmelinna and Seppänen, 2005; Poppo and Zenger, 2002). The increasing use of "framework"

or “umbrella” agreements (Mouzas and Ford, 2006) reinforces the above view in so far as contracting parties focus on creating a flexible interaction environment with the aim of improving exchange performance. Hence, and in response to Harrison’s (2004) call, it is proposed that Collins’ (2003) framework provides a useful basis for understanding the dynamics of service transactions in industrial markets because it successfully incorporates relational, temporal, economic and contractual aspects of exchange design and management.

#### **4. Case Study Research**

Empirical evidence is derived from three retrospective cases of buyer-logistics service provider relationships. All case studies concern the same service supplier (referred to as LSPCo hereafter) who is a global leader in the market for contract logistics services. Data were collected both from the service provider and buyers through semi-structure interviews and review of organisational documents. The focus of analysis is on the process (how) of service offering definition, design and adaptation and hence data were collected (mostly in retrospect though) not only on the contracting process but also on the history of relationships (how previous exchanges impact on current design) and post-contractual issues (relationship management and ex-post service adaptation).

##### **4.1 The LSPCo- HiTechCo Contract**

HiTechCo is a global manufacturer of printers, copiers and associated office equipment. The company outsource part of their outbound and spare parts logistics operations to LSPCo, who have established and manage a dedicated distribution centre (DC) that serves as the main hub for product storage and value-added services. The parties have a thirteen-year working relationship with the service offering being expanded significantly during the previous contract term to include activities such as product assembly and express delivery of spares parts to HiTechCo engineers. The value of the contract has doubled over the last five years. During the previous contract term (10 years) several service improvements were introduced and the service provider worked with the client to reduce costs through initiatives such as the application of zonal delivery of products.

Following a nine-month tendering process, the contract was recently renewed on the basis of trust in provider capabilities and perceived service disruption risk. The contracting process introduced very little change to the pre-existing operating method. Despite the fact that provider analysis during the revealed that DC location was sub-optimum, any potential change in the warehouse location was rejected on the basis that achieved economies of scale outweighed any potential cost saving from relocating the hub. Over the years LSPCo has developed an in-depth understanding of the client’s operations and business requirements and was thus asked to write the ITT specification on behalf the buyer. This was mainly because the internal logistics team had limited operational knowledge and had also lost competence in terms of writing such complicated specifications. LSPCo managed to expand the scope of the offering mainly due to their ability to exploit existing logistics infrastructure and integrate additional volumes and value-added activities within the dedicated DC. Thus, activities such as product pre-assembly, testing and networking of machines have been relocated to the warehouse and are being undertaken by LSPCo employees.

Despite their collaborative working relationship, the parties also focused on commercial and contractual aspects of the service exchange during the tendering process. At the negotiations stage LSPCo (acting under pressure from competitor bidders) revised their service proposal which suggested changes in the contract term and examined a potential transition to a shared-user logistics infrastructure. The option of a reduced (annual) contract term was considered because it would potentially impose high entry barriers for any competitors that had to invest in new facilities and equipment and would have liked a longer term deal to recoup capital investment. HiTechCo on the other hand exploited this competitive situation to achieve a reduced

management fee and minimise their liabilities in terms of vehicle and facility and other logistics equipment investment. A three-deal was eventually agreed, with existing KPIs remaining intact from the previous term.

Within the operation there is also a suite of KPIs (e.g. load planning capability in line with the four day lead-time from product delivery to installation) which are not included in the contract because they are interdependent with other internal processes (e.g. order management) of HiTechCo. Each year contracting parties set improvement targets for a number of KPIS, many of which are non-contractual, but yet they are regarded as crucial for client business success. Currently joint work is undertaken to determine the operational adaptations required in the light of an SAP/ERP implementation project within HiTechCo. The new system is expected to have significant impact on the way logistics are managed and to make several logistics processes and procures within the warehouse less complex and labour-intensive. Thus, the service provider is actively involved in shaping the logistics-related features of the system.

#### **4.2 The LSPCo-PaintCo Contract**

PaintCo is a global manufacturer of paint that serves a range of sectors such as the automotive and decoration industry. The company has outsourced all of its transportation, but warehousing activities are performed in-house because they are perceived as crucial for business success. In this context, LSPCo is responsible for distribution of palletised paint products and in support of this dedicated service they have invested in a cross-docking warehouse whose main functions include product receipt, load planning and delivery scheduling/routing. The contract was recently renewed on the basis of price, proven record of performance and minimal risk of customer service disruption.

The working relationship of parties is long-term and collaborative in nature and LSPCo have developed over time an in-depth knowledge of client business. There is well-established communication both at operations and middle manager level and over the years LSPCo have been involved (for free) in several improvement projects and strategic reviews of the PaintCo logistics network. The main rationale behind these projects is the identification of cost reduction opportunities by introducing different methods of deliveries (e.g. delivery based on post-code schedule or nominated day service). Currently parties are jointly working towards a reduction in service frequency levels. The PaintCo sales and customer service policy allows for a five-day delivery service in any customer location that is included within the contract scope. This policy is currently being challenged, as modelling work undertaken by LSPCo analysts has shown that a delivery plan based on a two- or three-day service frequency would result in significant reduction of distribution costs and would have no impact on service level targets.

The renewed contract can be regarded as a continuation of the established solution as there was little change to the service features. LSPCo continues to provide a dedicated distribution service but with increasing use of sub-contracting resources for peripheral geographical areas. Currently the operation is split into two geographical areas for which separate agreements are in place. This is due to historical set up of PaintCo distribution network but also had to remain as such (i.e. separate agreements) due to misalignments regarding the timing of vehicle leases. In the south operation the renewal entailed the replacement of the vehicle fleet, whereas in the north there was still some useful life left in vehicles and thus integrating the two agreements would be complicated from a commercial point of view.

LSPCo revised several times their costs during the tendering process according to changes in service design (e.g. reduction in vehicle fleet and increasing use of sub-contractors). LSPCo also agreed at this stage to open up their cost basis to PaintCo for the purpose of their understanding the costing methods and main cost categories. In response to the client's request, LSPCo proposed a revised commercial offer based on reduction in vehicle fleet (by two vehicles) and a lower management fee. The service provider in turn requested from PaintCo to issue a letter of indemnity in order to move forward with the investment in new vehicles and associated

equipment. This letter essentially hedged any provider risks in the sense that PaintCo committed to indemnify the supplier for any capital investment undertaken should the deal was not concluded.

At the contract negotiations stage the parties had to revisit the location of the cross-dock facility and that raised concerns (on behalf of the buyer) about potential cost increases (depot costs and restructuring of transport network) that would have cancelled out the original rationale (price) for deciding to renew the contract with LSPCo. This issue was eventually tackled by including in the contract an early termination clause. The client's concerns regarding potential increases in costs (depot rents) were tackled by stating in the contract that the agreement would be terminated if the parties didn't agree on the costs and location of the alternative facility. The contract also specifies a target service level of 99.8% OTIF deliveries, but there are no penalties linked to it and also no detailed KPI matrix.

The deal is based on a menu-pricing mechanism with some of cost elements being fixed (e.g. material handling equipment) and some other being charged on a variable basis (e.g. pence per mile). A mechanism for annual review of these costs is included in the agreement. A clause regarding variations in services and resource levels was also included in order to protect the service provider against potential fluctuations in volumes. Thus, in case of permanent increases or decreases in activity levels the parties have to re-negotiate the price of the service. The provisions of the contract however don't fully reflect what is agreed between the parties. The operational manual, describing working instructions and operational procedures in detail, was left out of the formal agreement as it is continuously updated to reflect changes in operations. Also, there is a number of KPIs that are measured by the client (e.g. cost per drop and percentage of product spillages) but are not included in the agreement.

#### **4.3 The LSPCo-FurnitureCo Contract**

FurnitureCo is a Scandinavian retailer of furniture products such as sofas and beds. The company has recently expanded into the UK market with the intention of becoming a national leader. FurnitureCo had no previous operating experience in the country and thus no established supply chain. The buying team made it clear from the outset that they were seeking a logistics partnership in the sense that the selected 3PL provider would act as the internal logistics and customer service department of FurnitureCo. Service requirements regarding processes and costs were initially unclear due to the fact that there was no history of sales/volumes. The ITT was a short (four-page) document that gave potential suppliers very little information about requirements.

The purchasing process was informal in the sense that LSPCo worked in collaboration with the client to develop a specification for the service in terms of resources, processes, systems and costs and design a logistics network from scratch. The characteristics of the service were continuously revisited and refined in order to meet changing operational and commercial demands of the client. The service provider initially proposed a solution with a single DC and three home delivery centers. Although this solution was optimal from a logistics point of view, it was rejected on the basis of being commercially inflexible i.e. it required high capital investment in which the buyer was reluctant to commit to on the grounds that it would be easier to exit the UK market, should the venture had failed. An alternative proposal, based on two smaller DCs with short-term leases, was developed shortly after.

The contract is based on an open-book mechanism in order to reduce risks regarding changing volume profile and allow parties to build up a history of costs. The contract also makes provisions for potential adaptations the solution due to the fact that the service was designed based on forecasts rather than actual sales data. The agreement deliberately included a clause that allows parties to adapt logistics resource levels. The parties, partly enabled by contractual provisions, revisited the operational solution and the charging mechanism three months after signing the contract. In particular, they had to agree a reduction in the amount of logistics resources when it

became apparent that original projected sales were overestimated. This entailed closing down one of the DCs and reducing the vehicle fleet and the number of staff by approximately 40%. They also amended the payment mechanism, switching from a fixed to a variable management fee (based on actual rather than budgeted costs) to facilitate the client in that transition period. Despite the initial relationship hurdles and financial problem of FurnitureCo, the service provider decided to support the client’s revised sales forecast schedule and adapt the logistics solution accordingly, acting on the expectation that this would be beneficial for both parties in the longer-term i.e. it would ensure economic viability of the FurnitureCo venture and also mean growth for LSPCo business in the future.

## 5. Discussion and Conclusions

Building on Collins’ (2003) work as well as the notion of “qualification”, as introduced and discussed by Callon, Meadel and Rabeharisoa (2002), a basis for better understanding the dynamics of service exchange design in industrial markets can be developed. Conceiving the 3PL service offering as having a “biography”, which is witnessed through a series of exchange episodes (that constitute the broader business relationship), it appears that this process of service definition is on-going in the sense that: a) the service offering is (re)shaped and developed on an on-going basis, no matter the qualification effort during the contracting process b) there is a continuous shift emphasis between economic/contractual and relational mechanisms with regard to service design and management. Hence, Collins’ (2003) framework appears to provide a useful means of analyzing the design of business exchanges in industrial markets since it incorporates relational, economic and contractual aspects of the management of contractual relationships (see Table 1).

<b>Main Issues</b>	
<b>Business Relationship</b>	<ul style="list-style-type: none"> <li>• Path dependencies regarding service solution</li> <li>• Joint projects continuously (re)shape offering</li> <li>• Supplier learning &amp; service improvement</li> <li>• Expectations of relationship continuity</li> </ul>
<b>Economic Deal</b>	<ul style="list-style-type: none"> <li>• Economic &amp; investment decisions</li> <li>• Risk management</li> <li>• Long-term economic benefits</li> </ul>
<b>Contract</b>	<ul style="list-style-type: none"> <li>• Temporary stabilization of service offering</li> <li>• Mechanisms for service adaptation &amp; relationship renegotiation</li> <li>• Contract may not fully represent what is agreed</li> </ul>

**Table 1: Understanding the Dynamics of 3PL Exchange Design – Relational, Economic and Contractual Aspects**

In cases of repeated purchases the specification and design of service appears to be path-dependent Teece, Pisano and Shuen, 2000). Past choices regarding equipment acquisition and investment in logistics infrastructure influence the design of the solution. Over time the 3PL provider develops a detailed knowledge of logistics operations and client’s business requirements. This knowledge is used to suggest ways of achieving operational synergies and cost efficiencies. Through repetition and learning the supplier is also able to undertake additional activities because the costs of defining, designing and measuring such activities decline over time (hence MTCs

decline and transfers are turned into transactions in Baldwin and Clarke's terms). For example, in the HiTechCo case the provider managed to significantly expand the service scope over the years using his knowledge of client business and was thus able to achieve operational and cost synergies by combining activities (e.g. product pre-install) within the warehouse. The service offering is also continuously transformed through joint projects and strategic initiatives taken by the service provider to drive costs out of the supply chain and improve service levels (e.g. PaintCo service frequency project). Such modeling exercises and consulting services are undertaken for free on the expectation of relationship continuity

Despite this continuous process of qualification/re-qualification, 3PL service characteristics need to be standardized at specific points in time in order for the service provider-client relationship to move forward. During the tendering process commercial and contractual considerations appear to mediate the relationship effect and shift emphasis onto economic benefits and risk reduction. Despite the collaborative operational relationship, contracting parties seek to update their prices and costs, improve their commercial positions (e.g. management fee), minimize their risks and revise contracts with the aim of securing the best possible deal. This is achieved through revision and renegotiation of service characteristics until the moment that an agreement is concluded. In this sense it can be argued that the contract serves as a temporary stabilization of the 3PL service offering.

Evidence suggests that considerable emphasis is put on the economic deal and the contract during the tendering process as parties attempt to carve out the commercial details of the deal and manage their risks. Economic considerations such as capital layout requirements and imposition of financial penalties for provider may impact on specification of resources/assets and service levels. For example in the FurnitureCo case the level of resource had to be scaled down at the service design stage due to commercial flexibility requirements of the client. In the HiTechCo case several KPIs, which are used to manage the operation, are not included in the contract because there are interdependencies with other buyer processes (e.g. order management) and hence the service provider don't have complete control of these service levels.

The 3PL contract not only specifies the content of the service in terms of activities, volumes, resources, processes and service levels but also includes a variety of provisions and clauses (e.g. open-book charging, service variations clause) whose purpose is to mediate uncertainty and provide a framework for service adaptation in the event of changing business conditions. Managers also seem to accept that the end result of the qualification process i.e. the contract, is not perfect and hence in the post-contracting period they appear to re-orient their behavior and actions based on the normative framework of the business relationship (Collins, 2003) with the aim of improving exchange performance. The service offering is again destabilized with parties working jointly to enhance service and reduce costs. That was most evident in the FurnitureCo case where the parties had to re-work the service solution and adapt it according to the client's changing business requirements. In this case the service provider decided to accept a change in the contractual specification and payment mechanism on the expectation of long-term economic benefits and relationship continuity.

This discussion also suggests that 3PL contracts should not be treated as substitutes for inter-firm trust; even when a long-term, collaborative relationship is in place there is still a need to negotiate and agree detailed contracts. This is mainly because provision of logistics services entails high capital investment (in logistics facilities and equipment) which introduces financial and commercial risks to parties and especially to 3PLs. The contract agreement in this sense complements the business relationship by increasing "contractual trust" (Sako, 1992) and providing a flexible contractual environment within which parties can interact and adapt the service on an on-going basis (Mouzas and Ford, 2006; Poppo and Zenger, 2002). Evidence also suggests that 3PL contracts are not successful in capturing all relationship developments. According to empirical evidence presented here, examples of practices excluded from the formal contract scope are establishing operational logistics measures, issuing detailed working

instructions for the performance of the service and designing and executing performance improvement projects on the expectation of relationship continuity.

In line with Harrison's (2004) suggestion, this study has attempted to incorporate economic/contractual issues into the study of inter-organizational relationship dynamics. It has been argued that the process of designing services is on-going, with the characteristics of the service offering being continuously revisited and adapted according to changing business requirements. In this continuous process of qualification/re-qualification, contracting parties seem to shift their focus among economic, contractual and relational mechanisms. Evidence shows that despite the priority given to relationship continuity, parties also pay considerable attention to risk management and investment issues during the contracting process. Economic and contractual considerations impact on the nature of service design e.g. resource levels and performance measures. However, it is also accepted that changes to the service offering and the deal are inevitable because of evolving business requirements. In this context contracts, rather than being treated as rigid specification documents, appear to provide a flexible framework for service development and adaptation. It is recognized that such findings are hard to generalize and thus should be treated with care. Further empirical evidence is required to test and refine the conclusions of the present study. For instance, longitudinal studies in a variety of service sectors would provide richer insights into the dynamics of business services design.

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