

Pricing from a 4PL perspective

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The main objective of this study is to create knowledge about different pricing methods used in the 4PL industry, but also to discuss potential pricing methods for the 4PL provider that is the client of the thesis, Schenker Dedicated Services AB (SDS). In order to fulfil the purpose, we have conducted a multiple case study where we analyzed how five different service characteristics interplay with the choice of pricing method. The findings are presented in this article.

Introduction

The competition is fierce on many markets these days and companies are thus often forced to solely dedicate themselves to their core business. As a result, the demand for outsourcing has increased and therefore, the fourth party logistics services industry (4PL) is expected to grow significantly in the years to come (Ambruster, 2002, Hilletoft & Hilmola, 2010).

However, although the market is expanding, the 4PL provider faces competition, not only from other third- or fourth-party logistics providers, but also from companies that provide substitutes to some extent, e.g. IT, supply chain consulting, freight-bill auditing and freight procurement. (These substitutes will be referred to as functional substitutes.) Hence, in order to stay competitive, it is important to know how these companies price their services.

Purpose and problem formulation

The purpose of the study is to create knowledge about different pricing methods used in 4PL, and to discuss potential pricing methods for SDS.

To address this purpose, we will study the following issues:

- A. What are the most common pricing methods that are discussed in research covering

the third- and fourth-party logistics industry?

- B. What pricing methods are currently used at SDS?
 - What are the disadvantages and advantages with the different pricing methods?
 - What effects do the pricing methods create in terms of:
 - Who bears the risk?
 - What incentives are created from using these pricing methods?
- C. What pricing methods do functional substitutes use?
 - What are the disadvantages and advantages with their different pricing methods?
 - What effects do the pricing methods create in terms of:
 - Who bears the risk?
 - What incentives are created from using these pricing methods?
 - What are the most salient convergent patterns between the industries?
 - How do certain service characteristics interplay with the choice of pricing method?
- D. Based on the findings from the statements above, is there any

indication that SDS should use other pricing methods?

Focus and delimitations

Essentially, there are three factors that influence what price level that can be set; the cost derived from producing the service, the value that is created for the customer and, finally, the customer's alternative on the market (Axelsson & Wynstra 2002). The study will, however, be delimited to solely focus on the pricing methods used by the competition, where the primary focus will be on the pricing methods that are used by functional substitutes to SDS.

Methodology

The research started with a literature review followed by an investigation of SDS's currently used pricing methods. Then, a multiple case study, consisting of six cases, was conducted with the aim of finding convergent patterns of how different industries price their services. The case study methodology is a very useful research method when studying relatively unknown areas, as it provides depth and insight into the studied phenomenon (Ellram, 1996). In this study, the methodology developed by Yin (1994) was used. Hence, after studying relevant theory, appropriate cases were selected and a case study protocol was designed, showing the structure of the interviews as well as the questions asked. Personal interviews were the main source of information for the case studies, since we believed that the companies included in the study would be more willing to share sensitive information regarding pricing during a personal meeting compared to a telephone interview. After conducting each individual case study, cross-case conclusions were drawn from the different cases (Yin, 1994).

The cases included in this study are mainly functional substitutes to SDS and consist of two IT-companies (IT-1 and IT-2), one Freight-Bill Auditing company (Economy Supplier), one

company specialized in tender- and freight procurement processes (Transport Procurement), one consulting company (SCM Consulting), and finally, one company that serves as a 4PL provider (FreightMovement). Each case company has been asked to rank their own business on a seven-level Likert scale, showing on the scale how their business can be described with respect to five service characteristics that we believe may influence the choice of pricing method. These parameters are: ease of specifying the service, degree of customization, degree of complexity, the nature of the relationship and the scope of the relationship. The parameters were identified by studying theory covering service classification and through discussions with academics at the Faculty of Engineering, Lund University. Complexity is here referred to as a service that requires extensive knowledge, the nature of the relationship describes whether it is long-term or short-term, and the scope of the relationship shows the share of service that a customer purchases that will be given to the specific service provider. The findings from the cross-case analysis are shortly discussed in this paper. Finally, the findings were applied on SDS's fourth-party logistics context, in order to see if there is any indication that SDS should use other pricing methods than the one currently used.

Theoretical frame of reference

The studied frame of reference includes three main fields: the most common pricing methods used within either the logistics services industry or by companies that offer services that are substitutes to SDS's services, service classification and the third- and fourth-party logistics market. The intersection of the three fields respectively, i.e. pricing of services and pricing of logistics services, were also investigated. The main sources used covering pricing methods are Lynch (2000), Shipley & Jobber (2001),

Hinterhuber (2008) and Sols et. al (2007). The chapter covering service classification is mainly based on the work of Axelsson & Wynstra (2004), while the main sources of information used for describing third- and fourth party logistics are Win (2008) and Skjoett-Larsen et. al (2003). Pricing of services is based on work by Docters et. al (2004) and Avlonitis and Indounas (2005, 2006) while pricing of logistics services is mainly covered by the work by Lukassen and Wallenburg (2010).

Findings cross-case analysis

Out of the five service characteristics that were studied, patterns were identified for the following three; degree of complexity, degree of customization, and the ease of specifying the service in advance. Companies that provide services that are complex and customized either used customer perceived value pricing, increasingly wanted to do so or indicated that it would be the ideal pricing method. Similar findings were observed for companies that offer services that are difficult to specify in advance, however, the result was not as evident as for the two previously mentioned service characteristics.

Companies that were ranked as standardized, simple and easy to specify in advance used a market-based pricing method (or cost-based where the price level was influenced by the market). We suggest that the reason why is that the alternatives on the market are easier to compare when the service is described by the abovementioned characteristics, whereby companies are forced to price according to the market. Overall, the most widely used pricing method among the case companies was cost-plus pricing.

Conclusions

A. *What are the most common pricing methods that are discussed in research covering the third- and fourth-party logistics industry?*

There seems to be no consensus in the logistics research when a certain type of pricing method should be used. There is, however, a predominance of research concerning cost-based pricing methods. This is also reflected on a global scale, as cost-based contracts and transaction-based fees are becoming increasingly utilized. Performance-based contracts have also increased in usage, whereas risk/reward-sharing agreements, such as gain-sharing, have decreased (Lukassen and Wallenburg, 2010). Prerequisites for such contracts are that the service outcome must be easy to define, measureable and possible to transform into monetary payouts (Thomson and Anderson, 2000). Issues regarding the identification of suitable metrics, or difficulties in measuring the same, are brought up as key concerns. Research concerning value-based pricing for the logistics services industry is rare. It is, however, a suggested field for further research (Lukassen and Wallenburg, 2010).

In order to create the optimal contract design, some authors argue for a combination of pricing methods in order to transfer risk and to create incentives (Liu et. al, 2007, Schlissel and Chasin, 1991). Examples of two such pricing methods that have been discussed within logistics research are cost-plus management fee and cost-plus incentive fee (Lynch 2000, Berends, 2000).

B. *What pricing methods are currently used at SDS?*

Today, SDS uses cost-plus pricing for its services and the customers are charged per transaction, i.e. per transport.

When SDS is bound by the contract towards the carriers, the risk that the carrier may not fulfil its commitment is born by SDS. However, SDS is also exposed to risk in terms of external factors, such as fluctuating exchange rates, changes in fuel price etc. When the external factors are incorporated in the price, by adding them as risk factors, SDS bears the risk. When the external factors are not incorporated, the

customer will get charged for cost increases above a certain interval. Hence, the risk is shared between SDS and the customer.

According to our analysis of pricing methods, cost-based pricing results in a low motivation for the provider to perform in the customer's best interest. Moreover, since the provider's contractual incentive to perform is low, cost-based contracts do not ascertain that the customer's goals are achieved. Hence, no incentives are created from SDS pricing methods.

C. What pricing methods do functional substitutes use?

Companies within the below mentioned industries will pose a threat to SDS if they grow strong enough to become a competitive alternative to SDS's services. It is therefore important to investigate how they price their offerings.

In general, cost-plus contracts transfer the risk to the customer, while a fixed-price or an outcome-based agreement transfers the risk to the provider. The provider's motivation to perform is high for outcome-based contracts, whereas no such incentives are created for a fixed price or cost-plus.

Supply Chain Consulting

Cost-based pricing or customer perceived value pricing is used, however value-based pricing is believed to be the ideal pricing method for both companies. SCM Consulting mentions that their counterpart on the customer side is usually a logistics manager who cares less about value and more about cutting costs. It is therefore difficult to price according to the customer perceived value. Cost-plus is believed to be industry standard.

Both companies charge for consulting either with a fixed price or with running price per hour. SCM Consulting has noticed that customers with a low turnover are more likely to ask for a fixed price. It is suggested that this is

due to the fact that their financial situation cannot bear considerable cost variations and, hence, they value the certainty of knowing the exact price beforehand. A fixed price can be beneficial for the consulting firm if the project is standardized and easy to specify in advance. In that case, the project can be executed quickly and the consulting firm can reap the benefit of not having to declare the amount of hours spent on the project.

Information & Technology

IT-1 prices its services based on the generated value, while IT-2 uses a market-based pricing method. Based on the cross-case analysis, this difference could be explained by the fact that IT-1 offers significantly more customized and complex services than IT-2. IT-2 believes that a market-based pricing method is industry standard for the same kind of standardized modules that they offer. IT-1, on the other and, only mentions that a yearly fixed price is industry standard for more customized IT-solutions.

Historically, both companies charged their services with a fixed price per year, however, a trend towards transaction-based pricing is noted. The most prominent advantages with a transaction-based payment principle is that it is more profitable than charging a yearly fixed price. The reason why it is more profitable might be that a transaction-based pricing method better reflects how much the customer uses the service. The finding is interesting considering that the companies in fact take a smaller risk when they use a variable payment principle as opposed to a fixed price. Another advantage with a variable pricing is that it creates a more even cash-flow, which in turn affects where in the customer's organization the decision about purchasing the service can be made. For instance, an invoice that is sent once a month with a smaller amount can usually be approved on a lower level than an invoice that is sent

once a year and that has accumulated the cost over the year.

Freight-Bill Auditing

The company that participated in the case study uses two different approaches when calculating the price for their services. Both approaches are, however, derived from a cost-plus logic. For low volume customers, or standardized services, a set price per transaction is used. This price is partly determined by cost and partly by what the market is willing to pay. For high volume customers, or customized services, on the other hand, a unique price per transaction is calculated for every agreement. The starting-point for the calculation is to add 50% on direct costs. In the event that configuration is needed, this seems to be charged by the hour. Overall, pricing within the industry is ad-hoc.

Tendering and Freight Procurement

Gain-sharing is considered to be industry standard for freight procurement projects. The service is very straightforward and the savings can easily be measured. Therefore, gain-sharing contracts are appropriate for freight procurement.

A drawback with gain-sharing from the service provider's perspective is that there is always a risk involved in estimating potential savings. Similarly, there is also a risk that the customer

does not choose to implement the full range of improvements that can be made. An advantage that was mentioned is that the pricing method is easy to understand for the customers.

D. Based on the findings from the statements above, is there any indication that SDS should use other pricing methods?

Based on the cross-case analysis, and the fact that SDS offers services that are complex and customized in nature, we suggest that SDS should investigate whether customer perceived value pricing could be used for SDS's services. We also suggest that SDS must be better at communicating the value that they create as a 4PL provider. One way of doing so is through the pricing method used. We believe that customer perceived value pricing would fulfil that purpose. However, if SDS finds that customer perceived value is a difficult approach to pursue since it often is difficult to estimate and quantify, we suggest that SDS should consider other value-based pricing methods that are more established within the logistics industry, such as gain-sharing or performance-based pricing. We believe that the incorporation of such pricing methods in the all-in price would allow for SDS to better communicate the value that is created and, hence, would distinguish SDS from the 3PL providers on the market.

Bibliography

Ambruster, W. (2002). Third-party logistics producers are well-established; now lead logistics providers are springing up to manage them. *Journal of Commerce, JoC WEEK*.

Avlonitis, G., & Indounas, K. (2006). How are prices set? An exploratory investigation in the Greek services sector. *Journal of Product & Brand management, 15* (3), 203-212.

Avlonitis, G., Indounas, K., & Avlonitis, G. (2005 B). Pricing objectives and pricing methods in the services sector. *Journal of Services Marketing, 19* (1), 47-57.

Axelsson, B., & Wynstra, F. (2002). *Buying Business Services* (1st ed.). Chichester: John Wiley and Sons Ltd.

- Berends, K. (2000). Cost-plus incentive fee contracting - Experiences and structuring. *International Journal of Project Management*, 18, 165-171.
- Docters, R., Reopel, M., Sun, J.-M., & Tanny, S. (2004). Capturing the Unique Value of Services: Why Pricing of Services is Different. *Journal of Business Strategy*, 25 (2), 23-28.
- Ellram, L. (1996). The Use of Case Study Research in Logistics Research. *Journal of Business Logistics*, 17 (2), 93-138.
- Hilletofth, P., & Hilmola, O.-P. (2010). Role of logistics outsourcing on supply chain strategy. *Strategic outsourcing: An International Journal*, 3 (1), 46-61.
- Hinterhuber, A. (2008). Customer value-based pricing strategies: why companies resist. *Journal of Business Strategy*, 29 (4), 41-50.
- Liu, Sun, & Tian. (2007). *Incentive Contract Design to Improve the Service Quality in Third Party Logistics: a Moral Hazard Model*. Retrieved 2011 йил 16-02 from IEEE: <http://ieeexplore.ieee.org.ludwig.lub.lu.se/stampPDF/getPDF.jsp?tp=&arnumber=04340951&isnumber=4339775&tag=1>
- Lukassen, P. J., & Wallenburg, C. M. (2010). Pricing Third-Party Logistics Services: Integrating Insights from the Logistics and Industrial Services Literature. *Transportation Journal*, Spring.
- Lynch, C. F. (2000). *Logistics Outsourcing*. Council of Logistics Management.
- Schlissel, M. R., & Chasin, J. (1991). Pricing of Services: An Interdisciplinary Review. *Service Industries Journal*, 11 (3), 271-286.
- Shipley, D., & Jobber, D. (2001). Integrative pricing via the pricing wheel. *Industrial Marketing Management*, 30, 301-314.
- Skjoett-Larsen, T., Halldórsson, Á., Andersson, D., Dreyer, H., Virum, H., & Ojala, L. (2003). Third-party logistics: a nordic research approach. In T. Skjoett-Larsen, & Á. Halldórsson, *Dynamics of relationship governance in TPL arrangements: a dyadic perspective* (pp. 135-153). Turku, Finland: Turun Kauppakorkeakoulun Julkaisuja.
- Sols, A., Nowick, D., & Verma, D. (2007). Defining the fundamental framework of an effective performance-based logistics (PBL) contract. *Engineering Management Journal*, 19 (2), 40-50.
- Thomson, J. B., & Anderson, J. C. (2000). Pursuing risk-sharing, gain-sharing arrangements. *Marketing Management*, 9 (2), 40-47.
- Win, A. (2008). The value a 4PL provider can contribute to an organisation. *International journal of physical distribution & logistics management*, 38 (9), 674-684.
- Yin, R. K. (1994). *Case Study Research: Design and Methods* (4th ed.). California: Sage Publications.