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“Customer Perceptions on Logistics Outsourcing in the European Consumer Goods Industry” *International Journal of Physical Distribution & Logistics Management* Vol. 34 No.8 (2004) pp 628-624.

CUSTOMER PERCEPTIONS ON LOGISTICS OUTSOURCING IN THE EUROPEAN CONSUMER GOODS INDUSTRY

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Abstract

This paper investigates customer perceptions on three key logistics outsourcing decisions: why to outsource, what to outsource and how to manage satisfaction within third party logistics providers (3PLs) partnerships. In addition to an analysis of the current literature, a Europe-wide postal and telephone survey revealed that outsourcing in the consumer good industry is heavily service driven and focused on the traditional logistics functions.

The key findings of the work are that cost aspects play a smaller role for outsourcing in the consumer goods industry than anticipated, and that performance measurement systems will require increased sophistication over the coming years. We also found a considerable number of consumer goods companies admitting that soft issues, such as cultural incompatibility and poor communication, may lead to the failure of the 3PL partnership.

Keywords: customer perception, logistics, outsourcing, consumer goods

1. Introduction

This paper discusses logistics outsourcing decisions in the European consumer goods industry. Outsourcing or third party logistics is generally defined as the provision of a single or multiple logistics services by a vendor on a contractual basis (Razzaque & Sheng 1998). The providers of these services are generally referred to as 3PLs (third party logistics providers). Some definitions of outsourcing contain additional constraints, for example, on the minimum number of services acquired and the minimum duration of the contract (Bradley 1994 and Laarhoven et al. 2000).

Over the past few decades, the European consumer goods industry has experienced a power shift from manufacturers and suppliers to retailers, growing emphasis on service and pressure to further cut the level of inventory. Managing consumer goods companies in this increasingly demanding environment has made many firms turn to 3PLs for assistance. 3PLs are used for traditional logistics functions, such as transport or warehousing and for other services, such as reverse logistics. It has been estimated that about 40% of the global logistics is outsourced (Wong et al. 2000).

This study aims to identify the customer perceptions on key logistics outsourcing decisions in the consumer goods industry. In the context of this research, the key outsourcing decisions are:

- Why outsource?
- What logistics functions should be outsourced?
- How to manage satisfaction within a 3PL partnership?

The paper will present a literature review identifying a number of research questions that need to be addressed within the context of this environment. It proceeds to outline the research method used and finally it reviews the results of the survey, carried out as a part of this study, in the context of other academic research.

2. Literature review

2.1. Why Outsource?

In this section we give an overview of previous academic works on outsourcing and aim to identify the specific topics in logistics outsourcing that require further investigation.

The first of the three questions addressed in this article is why do companies outsource. Table 2.1 gives an overview of the main reasons as established by five previous studies (P-E International 1994, Boyson et al. 1999, Fernie 1999, Laarhoven et al. 2000, Penske Logistics 1999). Since different studies use different wording to refer to generically same or similar reasons, the first column is classificatory, indicating the area.

The table includes double ranking. First, authors of the cited studies ranked the reasons. Second, for the purpose of this research, an overall ranking was calculated. This was done by awarding 10 points to the top reason identified by each author, 8 points to the second highest reason, 6 to the third, 5 to the fourth and 4 to the fifth. For each of the studies, ranking 1 before a reason means that the largest share of companies surveyed claimed that particular reason to be their primary motivator for outsourcing, ranking 2 means that the second largest share of companies outsource for that reason etc. The points were summed up and are presented in the right-hand column.

The maximum score in Table 2.1 could be 50, in which case all five studies would have found the same reason to be the top driver for outsourcing. The table shows that cost reduction (40 points), improvement of service levels (27), increase in operational flexibility (26), focusing on core competencies (17), improvement of asset utilisation (16) and change management (16) are the most common reasons for outsourcing. We will attempt to assess in the empirical part of the study whether the main reasons for outsourcing in the consumer industry match these reasons.

Table 2.1. Reasons for outsourcing – summary of previous surveys

Type of reason	P-E International (1994): consumer goods industry	Boyson et al. (1999): all industries	Fernie (1999)*: retailers	Laarhoven et al. (2000): wide range of industries	Penske Logistics (1999): several industries	Score
1. Cost or revenue related	3. Reduce costs	1. Cost saving or revenue enhancement	5. Tends to be more cost efficient	1. Cost reduction	1. Reduce costs	40
2. Service related	2. Improve service levels		4. Provides more “specialist services”	2. Service improvement	3. Improved service levels	27
3. Operational flexibility related	1. Flexibility		1. Provides more flexible system	3. Strategic flexibility		26
4. Business focus related	5. Non-core activity	2. Outsourcing non-core business		4. Focus on core		17
5. Asset utilisation or efficiency related			2. Allows financial resources to be concentrated on mainstream business		2. Increased efficiency	16
5. Change management related		4. Re-design or re-engineering the supply chain		5. Change implementation	4. Overall improvement of distribution	16
7. 3PL expertise related			3. Exploits management expertise of contractors			6
7. Problem related		3. Outsourced area was a major problem for the company				6
9. Investment related	4. Avoid investment					5

* Note: in Fernie (1999) the survey distinguished transport and warehousing. For compiling this table, the average score of the two was calculated to identify the top 5 overall reasons for outsourcing.

2.2. What Logistics functions should be outsourced?

The second major outsourcing related question is: what logistics activities should be outsourced? Table 2.2 summarises the findings of five previous studies on the issue (Dapiran et al. 1996, Laarhoven et al. 1998, Boyson et al. 1999, MMH 2001, Sohail & Sohal 2003). The percentages in brackets refer to the share of companies that use a 3PL on that particular activity. The following conclusions can be drawn from Table 2.2:

- All five studies found that certain aspects of transport are outsourced to a large degree.
- There are considerable differences in the level that third parties are used on warehousing.
- Information systems have a low priority in outsourcing. This is in sharp contrast with the fact that many 3PL wish to provide IT related services and have made large-scale investments in information technology.
- Almost any logistics activity can be outsourced. For any logistics activity that researchers have included in their surveys, there has always been at least one company outsourcing that function.

Most of the articles referred to in Table 2.2 do not specify the criteria used to identify the outsourced areas. It can be assumed that in most cases operations where a third party is used in any way are classified as outsourced. However, this does not necessarily mean that the entire operation is outsourced. Especially in warehousing and areas involving advanced technology, a combination of in-house and third party operations is very likely.

According to Millen et al. (1997) outsourcing should not be seen as an “all or nothing” kind of decision. Their analysis suggests that a mixed system, combining the use of in-house and third party facilities, may prove the best. A recent study among transport managers in the US food industry also found that 38% the companies have outsourced between 25 and 99% of their transport (Food Logistics 2002). These arguments lead to the question of whether logistics outsourcing decisions are perceived as “all or nothing” propositions or do companies prefer the combined use of 3PL and in-house resources.

While many studies look at what companies outsource, few researchers have so far addressed the issue of what logistics functions should be kept in-house. Therefore we will try to assess which logistics functions are perceived as the best and the worst suited for outsourcing by the European consumer goods companies.

Table 2.2. Outsourced logistics areas – summary of academic works

Category of logistics function	Dapiran et al. (1996): wide range of industries	Laarhoven et al. (1998): wide range of industries	Boyson et al. (1999): all industries	MMH (2001): wide range of industries	Sohail & Sohal (2003): manufacturers
Transport and shipment related	Fleet management (53%) Shipment consolidation (42%) Carrier selection (27%)	Line haul (81%) Network based transport (70%) Emergency transport (70%)	Freight payment & auditing (57%) Carrier selection & Rate negotiation (24%) Shipment planning (18%) Fleet management (17%)	Direct transport services (63%) Freight payment (52%) Shipment consolidation (48%) Carrier selection (44%)	Shipment consolidation (58%) Fleet management & operations (49%) Freight payment (42%) Carrier selection (39%)
Warehousing and inventory related	Warehouse management (47%) Order fulfilment (33%) Order processing (16%)	Storage (87%) Order picking (79%) Inventory administration (64%)	Warehouse operations (29%) Inventory management (8%)	Warehouse management (60%)	Warehouse management & operations (33%) Order fulfilment (30%) Inventory replenishment (24%)
Information systems related	Logistics information systems (22%)	Tracking and tracing (64%) Order entry (11%) Forecasting (2%)	Information systems (20%)	Tracking and tracing (33%)	Logistics information systems (21%)
Other (related to value added services)	Product returns (33%) Product assembly & installation (13%)	Labelling (52%) Customisation (26%) Assembly (19%)	Packaging (15%) Product returns (15%)	Freight forwarding (46%) Customs brokerage (41%)	Product returns (20%)

Note: percentages refer to the share of companies outsourcing these logistics functions as identified by the five studies.

2.3. How to manage satisfaction within a 3PL partnership

The third major question addressed in this paper is how to manage a 3PL partnership. Previous studies addressing this question include P-E International 1994, Millen et al. 1997, Boyson et al. 1999, Laarhoven 2000, Murphy & Poist 2000. Table 2.3 summarises these studies. The following conclusions can be drawn from Table 2.3:

- Users of third party logistics services are usually satisfied with their 3PLs. However, most studies do not address the details of their satisfaction. Of the five studies presented in Table 2.3, only Millen et al. (1997) go in more depth and discuss satisfaction with specific aspects of the 3PL relationship. Therefore we will study satisfaction with 3PLs from five facets of the partnership.
- Exchange of information between the logistics service provider and user, clarity of contracts and the monitoring and measuring of 3PL performance are common themes in most studies analysing the success factors in 3PL partnerships. Ideally, the set of performance measures should cover a full range of angles: cost, service, productivity, asset management, and customer and employee satisfaction (Fawcett & Cooper 1998). Most studies stress the importance of performance measurement, yet it remains often unspecified which KPIs are or should be used.
- The main reasons for 3PL relationships to fail relate to cost and poor communication. However, it must be said that previous research has primarily focused on the success factors rather than the reasons for failure of 3PL partnerships. Murphy & Poist (2000) argue that factors or determinants in unsuccessful 3PL relationships should be further investigated. Therefore we will attempt to pinpoint the main reasons for 3PL relationships to fail.

Table 2.3. Managing a 3PL partnership – summary of academic studies

Factors affecting the partnership	P-E International (1994): consumer goods industry	Millen et al. (1997): all industries	Boyson et al. (1999): all industries	Laarhoven et al. (2000): wide range of industries	Murphy & Poist (2000): all industries
Overall satisfaction with outsourcing	75% of users are satisfied. Manufacturers are more satisfied than retailers.	Over 90% are satisfied with impact of 3PLs on costs, logistics system performance and customer satisfaction.	Not addressed.	Over 50% of users call their partnership “highly successful” and the contract renewal rate is high.	Logistics service users (77%) are less satisfied than providers (82%) with their partnerships.
Key success factors and/or causes for failures	Success: Avoiding “hire-and-fire” approach, build partnerships. Failure: Poor exchange of information, level of cost, management issues. 3PL users admit their part of the blame (insufficient controls, poorly specified contracts).	Success: Clear definition of service, informing 3PL about company policies and requirements.	Success: Information sharing and cooperative monitoring (performance metrics, joint review meetings etc.) Failure: unclear estimation of internal costs.	Success: well defined requirements, procedures and systems; close relationship; top management involvement; clear separation of responsibilities; strong performance orientation.	Success: customer orientation and dependability are most important. Cost savings are more important to users (ranked 7 th) than providers (12 th). Control and performance appraisal are more important to providers (6 th) than users (15 th).

3. Research methodology

In order to clarify questions raised within the literature review, we developed a questionnaire addressing the issues in need of further examination. The survey form was sent to consumer goods companies all around Europe. A number of semi-structured interviews with logistics consultants and managers working in the industry were undertaken. Such a mixed approach, combining a written questionnaire with telephone or face-to-face interviews, provides a comprehensive set of data. The quantitative data generated by the questionnaire responses is easily processed on a statistical software package while the qualitative data gathered during the interviews adds further insights on the subject.

The majority of companies were contacted by telephone before the survey form was sent out to ensure that an appropriate person – usually the logistics manager – receives it. If in three weeks the response had not been received, the companies were telephoned once more to check whether the questionnaire had been received. If not, the questionnaire was mailed for the second time. A cover letter accompanied the questionnaire form explaining the purpose and the reach (Europe-wide) of the study. A self-addressed prepaid envelope was enclosed for mailed forms.

The statistical population of the survey was made up of all European consumer goods companies. A total of 330 questionnaires were sent out, primarily in the UK, France and Germany. The addressees of the survey were randomly chosen from the electronic Amadeus database (<http://amadeus.bvdep.com/ip>). 52 responses were received within the specified timeframe. 50 of the returned forms were usable. This gave a response rate of 15%. The UK, France and Belgium represent 78% of all responses. It may hence be argued that the responses are biased towards North-western Europe. However, it should be noted that the country of origin does not necessarily coincide with the only or main location of the company: most firms operate in more than one country.

4. Findings of the survey

4.1. Introduction

In this section we discuss the findings of our study. The remainder of the introduction outlines the profile of the survey respondents. The rest of the section is structured such that each part is dedicated to one of the three research questions: why to outsource, what to outsource and how to manage a 3PL partnership.

The largest share of survey respondents operate in the fast-moving consumer goods sector (46% in non-food and 44% in food), with just over a quarter (26%) being in the fashion business. The majority of firms are involved in retailing (54%) or manufacturing (52%). 16% of the respondents are wholesalers. Since companies were

asked to list all of their industry types and core competencies, the percentages add up to over 100.

The share of current logistics budget outsourced ranges from 0% to 100%. Such a high degree of variation implies that the results provide a comprehensive picture of the entire industry, not only that of the companies relying heavily on outsourcing. Figure 4.1 demonstrates that the largest share of companies have outsourced between 30 and 50% of their logistics budget. Complete or nearly complete outsourcing (over 90%) is exceptional.

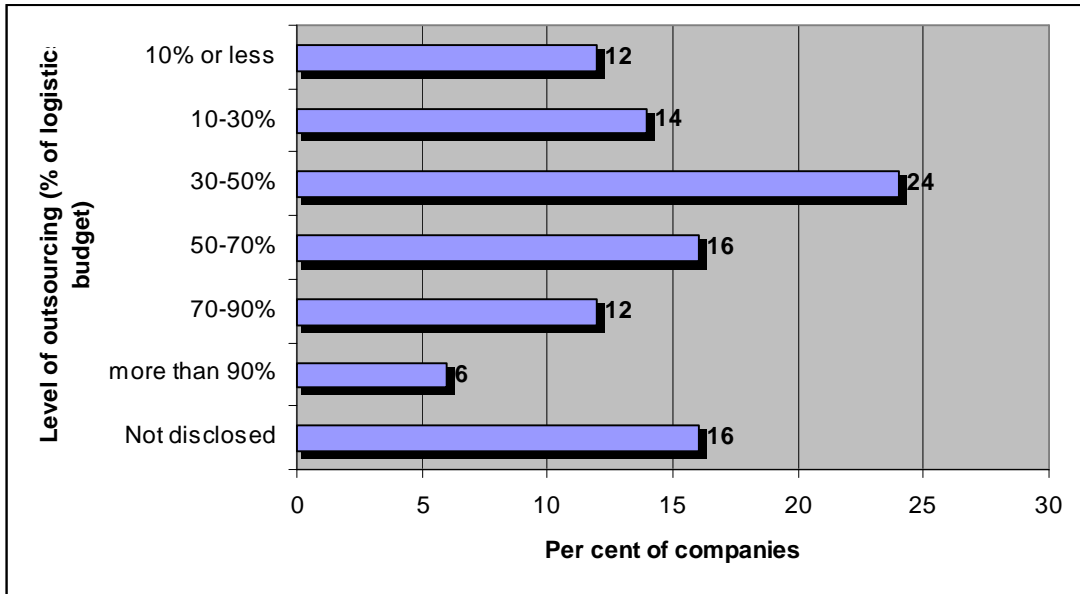


Figure 4.1. Per cent of the logistics budget outsourced.

4.2. Why Outsource?

In this part we discuss why consumer good companies outsource. The surveyed companies were asked to list three of their primary reasons for outsourcing. The question was closed-ended, i.e. a list of options was provided. Figure 4.2 presents the top-scoring reasons graphically.

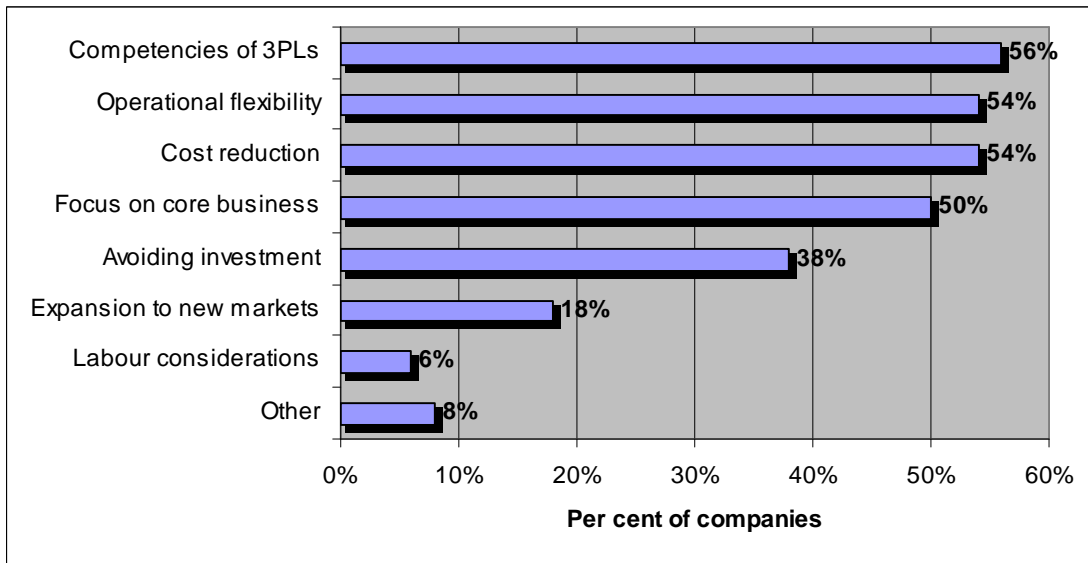


Figure 4.2. Reasons for outsourcing.

The literature review showed that costs are the single most common reason for outsourcing. However, according to this survey, consumer goods companies choose to outsource primarily in order to benefit from the competencies of 3PLs. Flexibility and cost objectives are very important too but cost reduction is definitely not an uncontested leader. There are several reasons why so few firms outsource for cost reasons:

- Primary business focus is on service, rather than cost. Of the four main drivers for outsourcing (3PL competencies, cost, flexibility and focus on core), only one is cost related. The other ones are directly or indirectly service-related, showing that service considerations dominate over cost ones. It may be argued that outsourcing decisions in the consumer goods logistics tend to be less cost-driven than they are on average over all industries.
- Costs are a qualifying, not a winning factor. Companies assume low costs from 3PLs and make outsourcing decisions on other grounds, such as service. Szymankiewicz (1994) even suggests that grocery retailers take both low cost and good service from 3PLs for granted.
- 3PLs' ability to actually lower logistics costs. Our evidence suggests that consumer good companies are aware of the fact that not every outsourcing decision decreases costs and therefore they do not expect cost cuts in the first place. A profit margin charged by 3PLs is reflected in the price for the services and may mean that keeping logistics in-house is cheaper than outsourcing.

Avoiding investment ranks somewhat higher in the list of reasons than the literature review implied. A reason for that may be that the logistics of consumer goods industry requires larger investments than many other industries and companies are therefore more likely to avoid these investments by outsourcing.

Poor labour availability or quality within the surveyed organisations is not a considerable driver for outsourcing. This result is in line with the literature review and

may be an indication that the historically adverse nature of industrial relations in the consumer goods industry has improved (Hunt 1995, p. 27).

Some survey respondents outsourced for alternative reasons that had not been included in the list. Two firms outsourced to solve capacity problems. One company was motivated by a major organisational change (de-merger) and another one was looking to find synergy with the 3PL.

4.3 What logistics functions should be outsourced?

As previously discussed, outsourcing should not be seen as an “all or nothing” kind of decision. The survey results confirm this suggestion: 72% of the survey respondents use both 3PLs and the in-house logistics department to manage at least one logistics function. There are, indeed, logistics functions, where these firms only use either 3PL or in-house department. However, the fact that almost three quarters of companies have at least one function where 3PL and in-house are combined implies that mixed systems are common.

To assess which logistics functions are seen as the best and the worst suited for outsourcing, we asked the companies whether they used 3PLs in eleven logistics areas. Table 4.1 shows the preference of survey respondents.

Table 4.1. Logistics functions most likely to be outsourced, kept in-house or managed with a mixed system (% of companies)

Logistics functions most commonly fully outsourced	Logistics functions most commonly managed as a mixed system	Logistics functions most commonly kept fully in-house
Primary transport – 68%	Additional storage during peak periods – 38%	Carrier selection –82%
Secondary transport – 52%	Storage during off peak periods – 34%	Logistics information systems – 78%
Additional storage during peak periods – 36%	Secondary transport – 30%	Returns and reverse logistics – 56%
Fleet management – 36%	Primary transport – 22%	Storage during off peak periods – 44%
Re-labelling and re-packaging – 26%	Returns and reverse logistics – 20%	Final product customisation – 42%

Based on the data provided by the survey respondents, an “outsourcability” index was calculated. If all the surveyed companies had fully outsourced a logistics function, the index for that function would equal 100. In the other extreme, if all companies kept a logistics function completely in-house, the index would equal 0. Since companies were asked to reveal their share of 3PLs if they combined 3PL and in-house logistics

department, we were able to calculate a weighted average level of outsourcing for all logistics functions. The results are presented on Figure 4.3.

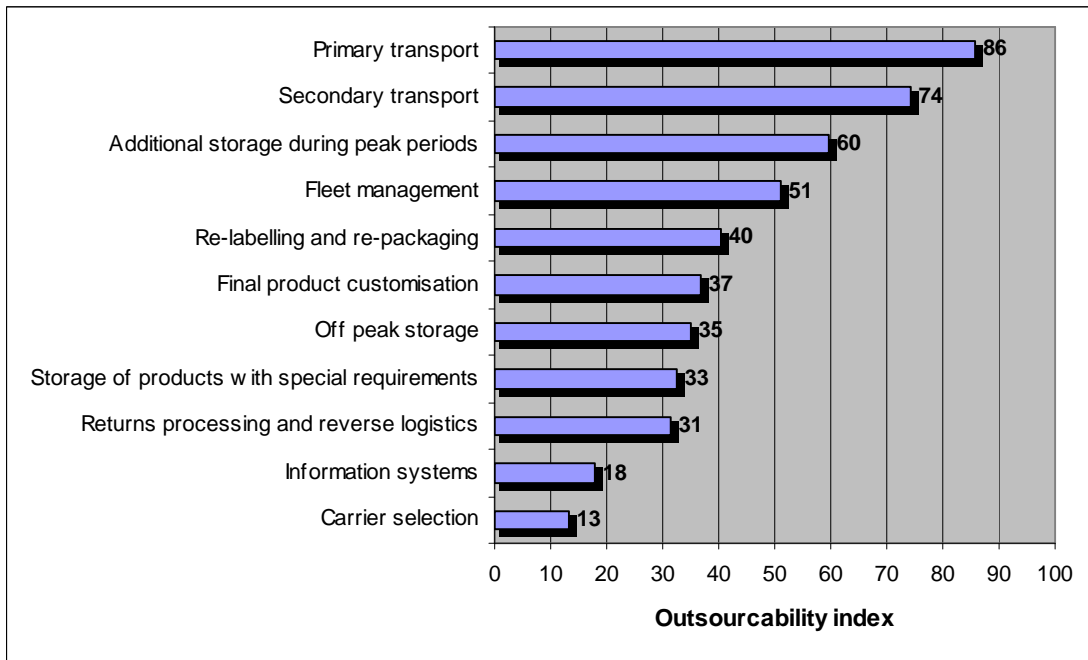


Figure 4.3 “Outsourcability” of different logistics functions.

Based on Table 4.1 and Figure 4.3, the following can be said about the outsourcing of logistics functions:

- Transport is the most likely logistics function to be fully outsourced, confirming the results of previous research.
- Carrier selection is least likely to be outsourced. The companies wish to preserve some sort of supervision of their carriers even if transport is outsourced. An interview with the logistics manager of a European beverage producer revealed that the company uses about 40 contractors on transport. Such wide selection of haulage companies to choose from adds flexibility to the producer’s operations. Competition between carriers also motivates them to deliver better service quality.
- Regular storage (during off-peak seasons) is usually kept in-house or is shared between in-house and 3PL. A similar pattern is apparent for storage of products requiring special conditions, such as certain temperature range, hanging garments for companies whose main business is not clothes etc. We see two main reasons behind the dominance of in-house in regular storage. Firstly, historic reasons: many companies in mainland Europe had invested heavily in the physical logistics network before the 3PL industry had emerged. Some companies may still be reluctant to give up their facilities, even though there might be no pragmatic reason to hold on to them (Paché 1998, p. 305). Secondly, the need for facilities may be very specialist: interviews with several

logistics managers and consultants showed that many parts of Europe lack suitable warehousing space of sufficient capacity and storage possibilities.

- Additional storage during peak periods is usually fully outsourced or co-managed by the in-house logistics department and a 3PL. This strategy implies that companies are looking for flexibility in their storage activities. While regular storage is often kept in-house to utilise the existing facilities, 3PLs are used for additional storage during the peak periods of the year, for example, before Christmas.
- Outsourcing of logistics information systems has a low priority to most consumer goods companies. The findings of the current study are in line with other research. We see three main reasons for keeping information systems in-house. Firstly, the systems are seen as an essential element of the business. Especially major retailers have invested heavily in information systems to ensure that up-to-date POS (point of sale) data and forecasts are available. A study by Andersen Consulting found that investing in POS systems has the highest IT investment priority among retailers (Chain Store Age 2001). Secondly, 3PLs are poor at delivering high quality information systems. Gutiérrez and Durán (1997, p. 79) found that many companies are dissatisfied with the quality and integration of information provided by 3PLs. The same view was expressed by several of our interviewees. Lastly, many companies aim for systems integration, for example, logistics system with ERP – Enterprise Resource Planning. This is done more easily if all systems are kept in-house.
- Relatively lower percentages in the second column of Table 4.1 indicate that mixed system tends to be less common than full outsourcing or full in-house operations.

So far we have focused on current practices. Yet, companies were also asked how they expected their 3PL and in-house balance to change over the next three years. Almost half of the respondents (46%) expect to change the 3PL and in-house balance, that is to outsource new activities or bring some activities in-house. 40% of respondents expect no changes and the remaining 14% did not disclose their anticipations.

Of the companies that expect changes to the 3PL and in-house balance, 69% claim that they intend to use 3PLs more than they do now. 22% plan to move logistics more in-house. The remaining 9% intend to change the balance but not necessarily by increasing the share of one of the two, for example, by increasing 3PL use on some logistics functions and reducing on others.

The changes are most likely to occur in the areas relating to transport or warehousing with over 20% of all companies planning for modifications in those functions. Some of the 3PLs that have invested heavily to become 4PLs may find this result disappointing as their clients do not appear to see a strong need for advanced services.

4.4. How to manage satisfaction within a 3PL partnership?

In the last part we present the survey results on the management of 3PL partnerships. Firstly we discuss how outsourcing has affected the service user in five areas: cost, service, personnel, added value services and industry-specific knowledge. We asked the companies to compare the values of these indicators before they had outsourced and now. See Figure 4.4 for details.

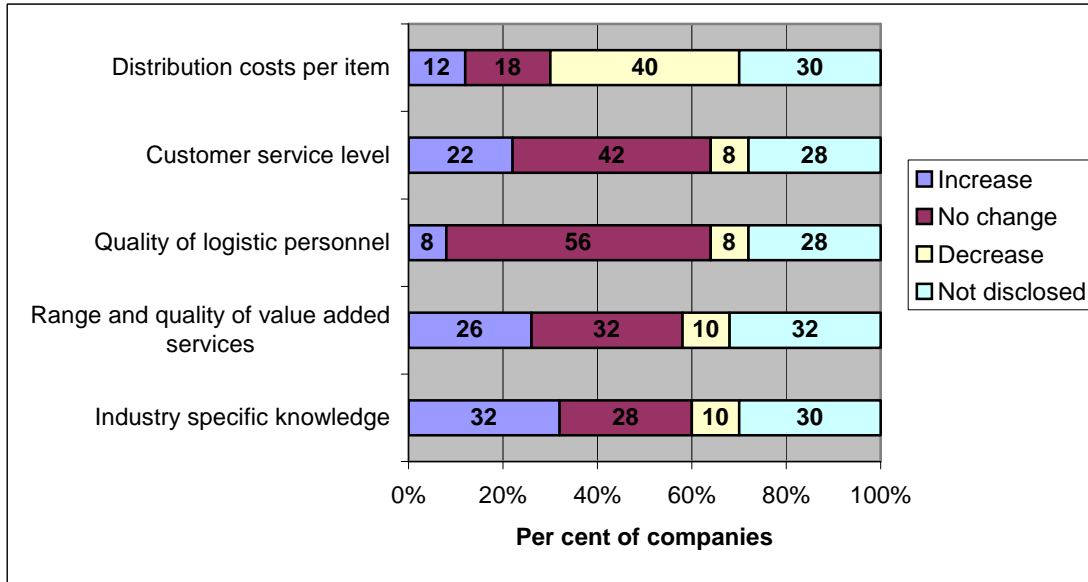


Figure 4.4. Impact of outsourcing on five aspects of logistics.

We observed that consumer goods logistics companies have generally experienced positive changes since they began to use 3PLs. The largest effect has occurred in cost containment: 40% of respondents disclosed that their average distribution costs per unit had fallen. The impact on service levels is generally positive, although the largest share of companies reports no change to service levels due to outsourcing.

We tested whether there is a correlation between the overall satisfaction with outsourced logistics services and the level of outsourcing. The logic behind the hypothesis is that if a company is more satisfied with its third parties then it can be expected to outsource a large share of its logistics activities.

Companies were asked what percentage of their logistics budget is outsourced and what changes they have experienced in five categories since they started to use a 3PL, as presented in Figure 4.4. To quantify the responses the following calculation was made: positive changes were awarded three points, no change was awarded one point and negative changes were awarded zero points. A negative change is, for instance, decrease in the service level due to 3PL use. Points were summed up and converted into an index of satisfaction, ranging from 0 to 100, where 100 indicates only positive changes in all five categories and 0 only negative changes.

The 3, 1, 0 scoring system has advantages compared to e.g. 1, 0, -1 scoring system. The latter scoring system may easily lead to a total of zero for different sets of positive and negative changes and thus neglect these differences. Also, the 3, 1, 0 system is a

better representation of the expectations of a rational management that having decided to outsource logistics, expect improvements in these five aspects.

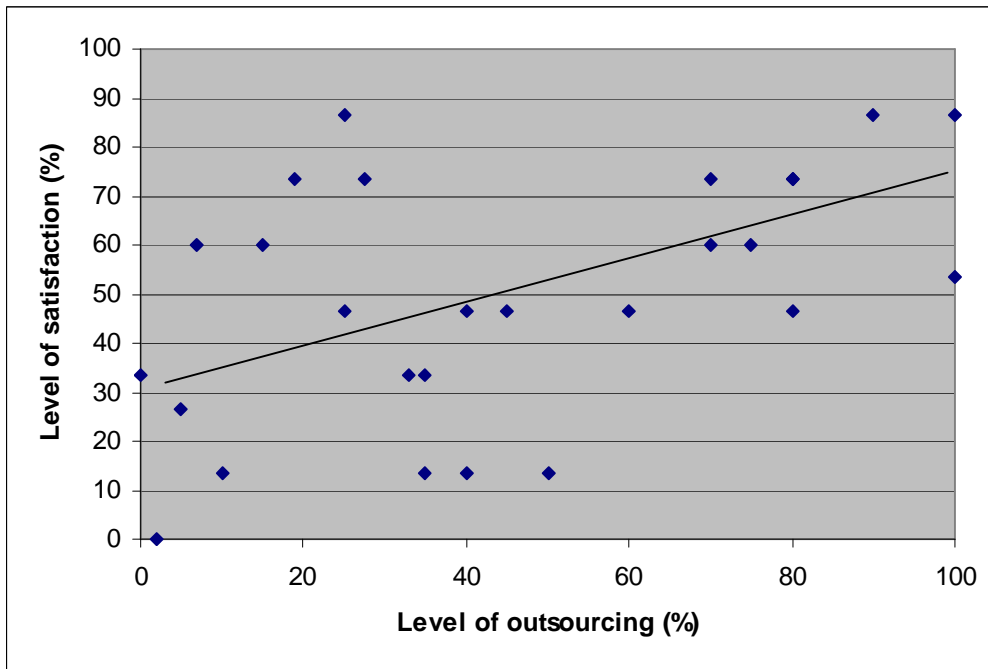


Figure 4.5. Level of satisfaction versus level of outsourcing.

The satisfaction index was plotted against the level of outsourcing on to Figure 4.5, both being expressed as on a scale from 0 to 100. Each point on the Figure 4.5 refers to one company. The relationship between the level of satisfaction and the level of outsourcing is weak (correlation coefficient of 0.48). The satisfaction index only takes into account the five aspects of change brought about by 3PL use shown on Figure 4.4. We acknowledge the fact that the scale might not explain 100% of variance, i.e. there may be other factors that influence satisfaction with logistics providers.

The following implications can be drawn from Figure 4.5:

- There is a great variety of practices: the level of outsourcing ranges from 0 to 100 per cent. Also, satisfaction ranges from 0 to 87 per cent.
- A regression line was plotted on the Figure. It can be seen that the line has a positive slope. This indicates that the hypothesis made above about the relationship between the levels of satisfaction and degree of outsourcing is indeed true. However, a fairly low correlation coefficient signals that the relationship is weak. Therefore we can see a link between an organisation's experience and outsourcing although it is not significant. The regression output is as follows:

	Coefficients	Standard error	t Statistic	P-value
Intercept	15.27009	11.9697	1.27572	0.21377
Satisfaction	0.604656	0.216788	2.78915	0.00996

P-values show that the coefficient for ‘level of satisfaction’ is statistically different to zero and the coefficient for the intercept is not at 95% confidence level.

- There are no companies in the bottom right-hand corner that denotes high level of outsourcing but low satisfaction with 3PLs. The implication is that if a company is not happy with the third party then it is likely to bring the logistics activities back in-house. This means that the companies would move to the bottom left-hand corner of the box.

It is surprising to note on Figure 4.4 how many companies have not disclosed their response to the question about level of satisfaction (32% of the companies). This may indicate that the companies consider this information to be commercially sensitive. Another explanation is that the companies do not possess that information themselves, i.e. they have not measured what the impact of using third parties has actually been. This proposition leads to the questions of what aspects of 3PL performance are actually measured.

Measuring the performance of third parties provides valuable information about the changes that outsourcing has brought about in terms of cost, service etc. It is also critical to managing the partnership with the 3PLs.

An open-ended question in the survey addressed the use of performance measures among the respondents. Not surprisingly, a large majority (78%) stated that they use some sort of formalised performance measurement. Only 10% claimed the opposite, while the remaining 12% did not disclose their strategy.

Companies were asked to list the measures they use. Respondents use a wide range of performance measures, some of which are similar in essence. The most popular performance measures focus on service (indicated by 54% of companies) and cost (32%). In addition to the standard set of KPIs, some companies have also introduced less common measurements to match their specific needs. Performance measures listed by companies were classified and are presented in Table 4.2. Notice should be taken of the fact that as options were not provided, the respondents might not have listed the entire range of KPIs that they actually use.

Table 4.2. Use of performance measures

Clusters of performance measures	Actual performance measures used (quoted from the respondents)	Per cent of companies
Delivery timeliness	Delivery timeliness, delivery punctuality, delivery accuracy, delivery quality, schedule adherence, delivery failures, delivery performance	46
Cost	Costs per unit, full visibility of costs, cost control, financial bonus-penalty system	32
Overall quality	Includes broadly defined measures such as service level, quality of orders, overall quality, fleet quality	22

Inventory management	Stock turnover, shortage claims, throughput, stock accuracy, inventory difference	20
Picking accuracy	Picking accuracy, picking quality	18
Responsiveness and flexibility	Reactivity, response to queries, administration, customer service, flexibility to fluctuations in capacity	14
Error and damage assessment	Percent of damages, error rates	14
Lead-time	Re-supply speed, inbound lead-time	6
Receiving/unloading and despatch/loading	Despatch punctuality, unload/load time	4
Documentation	Receipt accuracy	4
Variation in actual and expected performance	Comparison of performance and expectations	4
Other	Product temperature, scanning accuracy, vehicle utilisation, staff and customer satisfaction, units per man hour	10

Companies use many KPIs relating to costs and transport and warehouse operations. Some performance measures tend to be broadly defined. It is difficult to conceive how the actual measurement is carried out in some of these cases, for example, how fleet quality is measured.

Although performance measurement is in place in most 3PL relationships, a vast majority of companies (over 90%) are considering further development of KPIs.

One of the most surprising findings of the survey is that 74% of the survey respondents have at least once declined from renewing a 3PL contract with the same service provider. This suggests that the majority of consumer goods companies have, at some point, been seriously dissatisfied with the services they receive from the third parties. The dissatisfaction has been so significant that the companies have chosen to switch to a different 3PL. Just 10% of respondents claim that they have never experienced problems leading to not renewing contracts with the third parties. The remaining 16% chose not to disclose their experiences.

Table 4.3 demonstrates that the top reasons for not renewing 3PL contracts relate to service and quality (indicated by 68% of companies) and cost (52%). Almost a fifth of the companies also listed communication, trust or responsiveness to changes as a reason for non-renewal.

Table 4.3. Reasons for not renewing contracts with 3PLs

Reasons	Citing per cent of companies
Service and quality issues: poor performance, poor service, customer service problems	68
Cost issues	52
Trust and communication problems: poor information flow, relationship breakdown, failure to reach an agreement, culture, inability to help in a crisis situation	10

Change management: inability to adapt with changes, lack of innovation	8
Strategic decisions: decision to go in-house, centralisation of distribution	4
Poor management	4
Competing offer	2
Financial instability	2
No value added	2
Acceptability of trade credit	2

It is surprising how many companies have had disappointing experiences with third parties. This indicates that the level of 3PLs operating in Europe varies considerably. Findings discussed above suggest most companies to be satisfied with their current 3PL relationships. It appears that most consumer goods companies go through a learning phase until they find a 3PL able to provide sufficient service level.

Quality, service and cost reasons can be expected to top the list of reasons for non-renewal. It is significant that 18% of the companies realise that 'soft issues', such as communication and trust problems may lead to the termination of a 3PL relationship. The consumer goods companies might not be willing to accept that communication and trust have been an issue because this would mean that the relationship has failed at least partially because of the user of logistics services.

Conclusion

This Europe-wide survey has provided some useful insights into the customer perceptions of 3PLs within the consumer goods sector. It revealed that outsourcing in the consumer goods industry is less cost-driven than other studies have demonstrated. Various aspects of service are more or equally important to cost in the market characterised by fierce competition and ever-increasing customer focus. The good news for managers of 3PLs is that their customers in the consumer goods industry state competences of 3PLs as the primary reason for contracting out logistics.

Our survey as well as many previous studies highlights that consumer goods companies perceive transport to be the best and information systems the worst suited for outsourcing. A large number of practices are in place for managing storage. Companies looking to outsource warehousing often face the lack of suitable facilities in terms of capacity and specialist requirements.

The combined use of 3PLs and in-house logistics department is often neglected in logistics studies. Our survey showed that over two thirds of companies actually manage at least one logistics function with such a mixed system. Given the flexibility it gives to the consumer goods companies we expect the mixed systems to become even more popular.

Whilst the inevitability of performance measurement is repeatedly stressed in academic research, the set of KPIs actually used by consumer goods companies to assess their 3PLs has not received significant attention by researchers. We identified that delivery timeliness is the most common performance indicator. This result is expected given that transport is the most common logistics function to be outsourced. Surprisingly, though, just about one third of companies stated that they measure the 3PLs on cost.

The survey confirmed the findings of previous research in that the use of 3PLs has usually had a positive impact on companies' performance, especially on cost. At the same time, researchers often understate that outsourcing is a learning experience for a considerable number of companies. As over 70% of the consumer goods companies have at some point declined from renewing their contract with a 3PL, finding the right 3PL requires more effort than many firms expect. The primary reasons for switching 3PLs relate to service. This raises the question of how the learning experience could be made less painful: what features must be present in 3PLs to take an educated guess about the reliability of the service provider?

Further research could also address how managerial and balance of power issues are handled where both a 3PL and an in-house department manage logistics. It is worth studying the provider perceptions on the same areas of logistics outsourcing as we did on the customer perceptions. Finally, a more exhaustive list of the aspects of satisfaction with outsourcing could be studied.

Acknowledgements

The authors of this research would like to acknowledge management consultancy Kurt Salmon Associates for their sponsorship and assistance on the research.

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