

An empirical investigation of 3rd- and 4th-party logistics provider practices in Australia

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Abstract

This research reports on Australian industry characteristics and trends of logistics activities performed through outsourced partners, based on survey research of Australian Shippers and Logistics Service Providers (LSPs). This paper reports on the main findings in terms of customer satisfaction with, and future scope and use of, logistics services provided. Both shippers and logistics service providers were subsequently compared in their views along dimensions of strategic alliances, partnerships and collaboration; cross-company integration and collaboration; customer alignment; geography and physical infrastructure; and recruiting, developing and retaining people. Important areas of alignment and mis-alignment are identified.

Introduction

Ever increasing competition in today's global markets, the introduction of products with shorter life cycles, faster dissemination and proliferation of information, and heightened expectations of customers have forced business organizations to invest in, and focus attention on, their entire supply chain.

Third party providers (3PL) have become an integral part of a company's supply chain and as the competitive pressures increased, 3PLs became more and more integrated with their customers, creating strategic alliances and partnership with other complimentary service providers to enhance overall value proposition set. An often-expressed complaint about 3PLs from their clients is the significant amount of time they (the client company) still have to spend managing their outsourced logistics tasks (Millen et.al., 1997; Sohal et.al., 2002).

One of the primary roles of 3PLs in the marketplace is in managing and outsourcing transportation for Shippers. This industry is highly fragmented, although over the past few years there have been large international consolidations (Peters, 2000; Salkever, 2000). The larger 3PLs have a greater economy of scale - which enables successful negotiation of contacts across regions, as well as meeting the needs of shipping companies that are working to reduce the number of their vendors (Carter, 2001). A recent change in this sector of the logistics industry has been the development of LLPs, that function as 'supply chain masters' for shipping companies - acting as a single point of contact while managing a network of 3PLs for service delivery. Two predicted consequences of the use of LLPs by Shippers are: increased business for larger 3PLs that meet Shipper's demands; and smaller 3PLs struggling with reduced margins, forced technological compliance, and possibly termination (Gordon, 2003). LLPs are primarily the same as 3PL providers, with extra visibility tools, optimisation modelling for decision support purposes, and payment rewarded by a fee or tariff, linked to some mathematical modelling of costs, and corresponding benefits.

Recent new business models in supply chain include the 4PL® (Fourth Party Logistics® or 4PL® are global trademarks of the management consultancy firm Accenture). In this model, the entire set of supply chain processes is outsourced to a single 4PL. A fourth party logistics provider is a supply chain integrator that assembles and manages the resources, capabilities, and technology of its own organization and other complementary service providers to design, deliver and run a unique and comprehensive supply chain solutions with the ability to unlock value in its principal's supply chain by offering solutions to modern supply chain challenges (Gattorna, 2003).

Today some companies are extending their reach outside of traditional supply chain boundaries and engage in activities that go beyond their own sphere of control. To do this, they organize in and form competitive networks of companies to develop and access supply chain capabilities for the organizations that are part of such value-adding networks.

This research will report on Australian industry characteristics and trends of logistics activities performed through outsourced partners, based on survey research of Australian shippers and Logistics Service Providers (LSPs). Trends of progression towards more collaborative fourth party supply chain integrators are investigated. Throughout the research, the concept of Logistics Service Provider (LSP) is used to encompass any forms of 3PL, LLP or 4PL or beyond; in order to avoid any confusion reported earlier in a Cap Gemini Ernst & Young study (Langley and CGE&Y, 2003), where 75% of respondents found the term 4 PL confusing.

The remainder of this paper summarizes a brief overview of logistics outsourcing, the research framework and postulated research questions, followed by a detailed discussion of the results. Overall conclusions are then drawn from the study to provide some insights into outsourced logistics activities of Australian companies and their logistics service providers.

Logistics Outsourcing in Australia and Abroad

Logistics activities comprise a significant proportion of economic activity in Australia. The estimate of around 9.2% of Australia's GDP for logistics for the period 1999-2000 compares with figures of 11% for wholesale and retail trade, 12% for manufacturing, and 12% for mining, construction and utilities combined. The importance of this industry is highlighted when compared to other industries: construction 5.9%, retail 5.2%, education 4.4%, and tourism 4.5% (DOTARS, 2002).

Comparative data from the USA confirms similar relationships to those found in Australia, albeit 10 times the value. The GDP of the United States was about USD10.21 trillion 2001. Logistics costs have decreased from USD1.003 trillion in 2000 to \$970 billion in 2001, and account for 9.5% of the GDP. A total of 63% of the logistics costs are related to transportation, 25% to inventory carrying cost and 8% to warehousing; and the remainder is related to logistics administration. The European logistics market is worth an estimated EUR710 billion, or 8% of Europe's GDP. Of this, EUR320 billion, or 45% is currently outsourced (Logistics in Europe website).

Logistics outsourcing is here to stay. A recent study in China showed that LSPs indicated their intent to improve the scope of their services offered to the market (Huang, 2003). A comparison with a survey conducted in the Singaporean logistics industry¹ finds that over three-quarters (76.3%), of the users indicated that their firm's commitment to the contract services concept was *moderate* or *extensive*, while the remaining users indicated that their firms' commitment was *limited* or *very limited*. (Bhatnagar et al., 1999). A global logistics study conducted by CGEY, 2003, found a similar trend, with Shippers responding positively when questioned as to their intended use of 3PLs over the next 3 to 5 years (Langley, 2003). In Europe, businesses outsource USD31 billion of logistics activities to LSPs; contributing 25% of the logistics services market revenue (Sohal et al., 2002). Over the past few years there has been an increasing preference by leading European manufacturing companies to separate sales function(s) from physical fulfilment. This separation of sales and fulfilment activities involves business process outsourcing, and is creating growth opportunities for LSPs as well.

Our study focuses on LSP service provision in Australia from both perspectives of the end-users or shippers, and the service providers themselves. The aim is to shed light on customer satisfaction with, and future scope and use of, logistics services provided in Australia, as well as a comparative analysis of shippers and LSPs along dimensions of strategic alliances, partnerships and collaboration; cross-company integration and collaboration; customer alignment; geography and physical infrastructure; and recruiting, developing and retaining people. This will allow identification of areas of alignment and mis-alignment between shippers and LSPs.

The underlying research framework is discussed next.

Research Framework

Two target populations were identified: Australian customers of outsourced logistics services (shippers), and Australian logistics service providers (LSPs). Examples of shippers may include food retailers such

as Woolworths, and Coles; whereas LSPs may include well-known logistics service providers such as DHL, Danzas and Exel. A sample of 1028 Shippers were contacted, with 97 valid responses (9.44% response rate); whereas 271 LSPs contacted resulted in 61 usable responses (22.51% response rate).

A survey instrument was developed, modified and adapted from a basic research framework that focuses on three constructs to determine future use of outsourced logistics services, as is illustrated in Figure 1 (Bhatnagar, Sohal, and Millen, 1999):

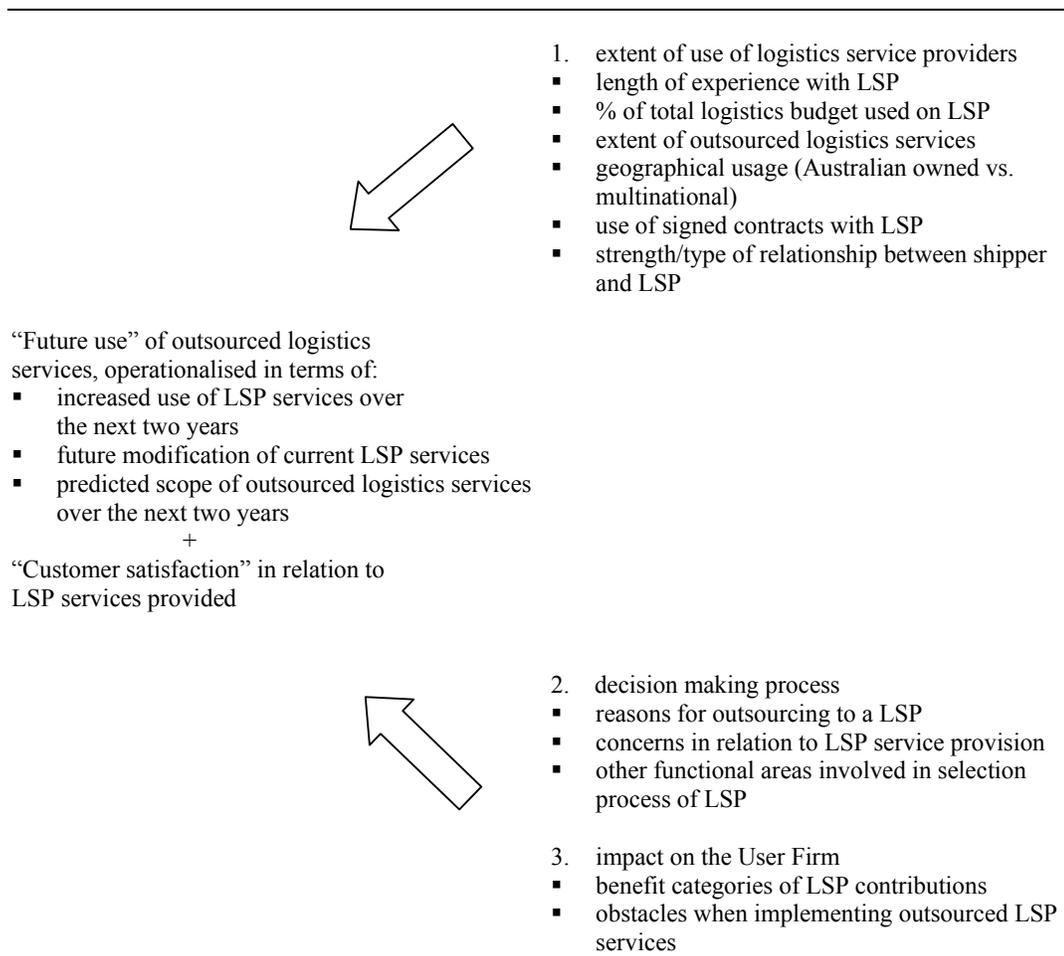


Figure 1: Research Framework (adapted from Bhatnagar, Sohal, and Millen, 1999)

The original research framework (Bhatnagar, Sohal, and Millen, 1999) included detailed questions that were readily adapted to address strategic alliances, partnerships and collaboration; cross-company integration and collaboration; customer alignment; geography and physical infrastructure; and recruiting, developing and retaining people. Constructs from the research framework listed above were used to estimate customer satisfaction, operationalised as “customer satisfaction in relation to LSP services provided”, measured on a 4-point Likert scale, ranging from Very Satisfied, Satisfied, Dissatisfied, to Very Dissatisfied.

The fact that both shippers and logistics providers were surveyed in this study resulted in development of two related survey instruments. Phrasing of the relevant questions was done in such a way that both shipper- and LSP-responses could be directly compared on most dimensions. This resulted in a 4-page self-administered questionnaire with 30 main questions for shippers and 28 main questions for LSPs. Most questions were modelled with response categories scaled on a 5-point Likert-scale, ranging from not important to very important; or low to high; pending on the type of question asked. This allowed, in principle, for estimation of relationships to predict customer satisfaction, the chance of increased use of future logistics provision, and predicted modification from current LSP practices, respectively.

A number of research questions were investigated in the survey:

1. a. Investigation of the importance of the reasons for outsourcing activities to a LSP
b. Reasons for selecting the LSP
2. a. Extent to which particular logistics activities were outsourced
b. Importance of the contributions made by a LSP to the organisation
3. a. Investigation of relationships between LSPs and Shipper
b. Investigation of impediments that prevent the organisation to achieve the full potential of Supply Chain Management
c. Likelihood that the organisation is going to increase the use of LSP-services over the next two years
d. Degree of future modification of LSP-services if given complete corporate responsibility to make that decision
4. a. Degree of satisfaction with performance of the LSP
b. Emphasis put by organisation over the next two years to improve overall logistics performance
5. a. Extent of use of logistics information and communication technologies
b. Extent to which the company’s information and communication technologies support logistics processes
6. Evaluation of the cost-effectiveness of outsourced LSP-service

A statistical analysis was conducted, including investigation of some contrasts between shipper- and LSP responses, a correlation analysis among select variables, and regression analyses to estimate drivers that predict customer satisfaction level, the chance of increased use of future logistics provision, and predicted modification from current LSP practices, respectively. This is reported on next in the analysis of the results.

Analysis of Results

Customer satisfaction

From a shippers' perspective, customer satisfaction with LSP's is statistically significantly influenced by:

- having a signed contract with the LSP, which negatively impacted on customer satisfaction. This can be explained by the fact that organizations only invoke signed contracts to resolve disputes, and therefore may have experienced lower levels of customer satisfaction
- concerns of customer quality provided by the LSP and uncertainty about cultural fit of the organization with the LSP both have a significantly positive effect on customer satisfaction. This means that organizations who put greater emphasis on managing these concerns with their LSP tend to have higher levels of customer satisfaction with the LSP
- the most important explanatory variables were obstacles rated as important in implementing LSP services, such as coordination and integration between the company and the LSP, and LSP having insufficient understanding about the company's operations. Both factors rated negatively in terms of customer satisfaction, meaning that the more important these factors were rated in the implementation process, the lower the customer satisfaction experienced. This may indicate that LSP's may need to work on improving on these factors to boost customer satisfaction.

The results must be put in perspective in that over 70% of the variation in customer satisfaction levels is still to be explained by factors other than the ones indicated above (refer to Appendix A). Nevertheless, preliminary indications can be pointed out to improve on customer satisfaction with LSP's. Furthermore, a correlation analysis between customer satisfaction levels with LSP and the reasons for outsourcing to a LSP, selection criteria, contribution made by LSP, and the concerns and obstacles in relation to LSP implementation interestingly showed no significant bi-variate correlation, except for a negative correlation with LSP's having insufficient understanding about the company's operations. This correlation was statistically significant, but relatively weak ($r = -0.283$).

Future modification of current LSP service

In regard to modifying future LSP-services, both shippers' and LSP-perspectives were tested:

- shippers identified a higher level of their company's ICT technology supporting collaborative supply planning with suppliers as having a positive effect on further increasing the use of LSP services (a negative coefficient is shown as the question was reverse coded)
- LSP's identified negotiation on price as a significant factor, which impedes on increasing the future scope of the LSP-services offered. At the same time, having stronger collaborative relationships with customers/shippers has a positive effect on further increasing the scope of LSP-services offered (again, resulting in a negative coefficient as the question was reverse coded). This effect was only marginally significant.

These results also have to be put in perspective, as the variation in levels of increased/decreased modification of LSP-services remains largely unexplained (only 10% and 13%, respectively, of the variation was explained by the model) (refer to appendix B and C).

The next session puts the statistically significant contrasts of the mean responses between the two groups in perspective by means of a comprehensive comparative analysis of shippers and LSPs, based on the overall survey results. The respective questions and scales are displayed in the footnotes.

Comparative analysis of shippers and LSPs

Scope of Logistics Outsourcing

The respondents in our research indicate that both, shippers and LSP confirm the value of the outsourcing business model in Australia. From our research we conclude that logistics outsourcing is here to stay. Outsourcing scale and scope will increase in the foreseeable future. Over two thirds % of respondents indicated that they are likely or very likely going to increase the use of outsourced logistics services in the next two years, while three quarters of LSP state that they will improve the scope of their services offered to the market.

In our survey, approximately 90% of shippers were satisfied or very satisfied with the services provided by LSPs. This is a shift from a number of years ago (period 1995-1999) when the majority of shippers were not satisfied (Sohal et.al., 2002). This seems to indicate that the LSP have improved and that there is a reasonable match between LSP services/level of service and what the shipper expects.

Our research finds that companies tend to outsource clusters of functions with the objective of achieving improvements in their logistics performance. Many companies still tend to focus on outsourcing groups of basic physical and transactional functions across transportation, warehousing and inventory management. This is in contrast to more forward thinking companies which partner with LSPs to integrate their services across logistics areas that are linked by active flows of goods, thereby integrating the outsourcing of logistics information systems with the information flows across functions such as inventory management and transport scheduling and capacity planning.

Strategic alliances, partnerships and collaboration

In our research a partnership or alliance is defined as a formal or informal collaborative arrangement between two or more businesses, with the aim of facilitating the achievement of each one's objective(s). This alliance may involve equity holdings (e.g., 4PLs), or be a loose network arrangement. Typically, partnerships between two businesses are influenced by other working relationships such as: arrangements between Shippers; the users of services (e.g., computer company); providers of logistics services (e.g., carriers, integrated logistics providers; local and overseas freight forwarders; packaging firms; and storage/distribution firms); and major consultants or information technology specialists (BTRE Report, 2001). The creation of a partnership/alliance reflects the intention to pursue a common objective by improving coordination of business activities through mechanisms such as collaboration, i.e. better

understanding of the partner's business; greater information sharing; coordinated investments and joint planning. In the ALPHA survey, Shippers rated the responsibility of LSPs to "help them focus on their core business"¹ (mean 3.8, ranked 6), as a lower priority than LSPs² (mean 4.07, ranked 2). The results of the ALPHA survey compared to figures from the 1990s (Sohal et.al., 2002) demonstrate an increased range of services offered by LSPs in Australia.

Shippers, mostly being the more powerful in their partnership with LSPs, tend to determine the extent of the relationship and the level of information sharing. Typical contractual arrangements between Shippers and LSPs result in an environment that restricts development of the latter's capabilities. The cost squeeze during negotiations and the lack of room to add-value during the ensuing contract period, contribute to this situation.

Shippers³ and LSPs⁴ both use adversarial (means of 4.16, and 4.18 respectively), and collaborative relationships (means of 3.9, and 4.11 respectively), in their logistics relationships. Collaborative relationships are defined as the relationships in an environment in which there is synchronisation of different parts of the supply chain(s), and where there are generally trusting relationships between customers, suppliers, LSPs, and internal business units. Adversarial relationships do not have these attributes, and are generally characterised by lack of trust and a "stand-off-mode" between business partners, usually on price. Shippers may apply adversarial approaches for cost and productivity-enhancement.

Shippers continue to be driven by cost considerations. This mindset is reflected in the contractual system (and related sanctioning mechanisms), that governs past and existing business relationships between the two parties. Shippers appear to lack sophistication in their selection of LSPs. One-way forward is for Shippers to start selecting LSPs on factors other than price, as shown in Figure 2 (scaled from 1-low to 5-high).

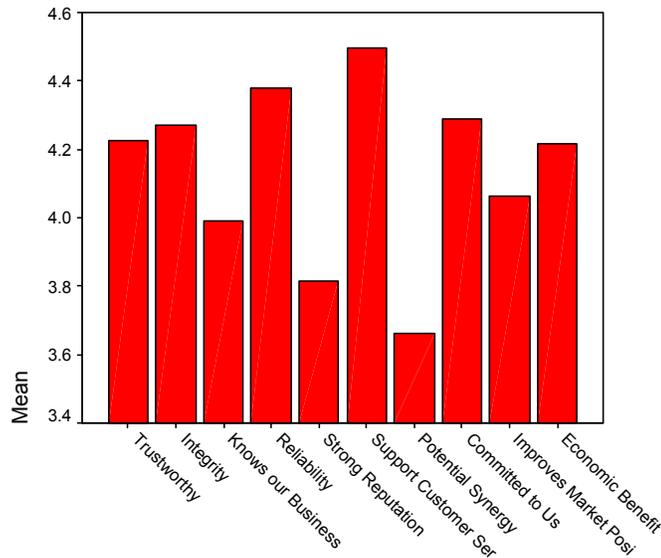
¹ Survey Question: "How important are the contributions of your logistics services provider(s) to the benefit categories below?" Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

² Survey Question: "To what extent can the logistics services your company offers help improve your customers' overall logistics performance?" Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

³ Survey Question: "If you work with more than one logistics services provider, to what extent do the following descriptions apply?" Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

⁴ Survey Question: "In working with your customers, to what extent do the following descriptions apply?" Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

Figure 2: Reasons for selecting a LSP



LSPs⁵ have the view that Shippers⁶ are hiding behind other factors: “uncertainty about LSP service provision” (Shippers rate this 4.53, and LSPs 2.74 out of 5); “cost of outsourcing” (Shippers: 3.97 and LSPs: 3.26); and “uncertainty about service capability of LSPs” (Shippers: 3.66 and LSPs 2.71). Shippers have the power balance, and own the business being transacted so they should be leading development activities and setting up the business environment to enable and encourage LSPs to innovate.

Shippers⁷ have indicated that flexibility is important, however there is no way to legislate creativity - other than by creating the conditions to allow it to flourish, e.g., by determining mutually agreed milestones and equitable distribution of benefits. LSPs⁸ ranked flexibility as a reason for outsourcing, “lower” than Shippers. This mis-alignment of priorities and meaning seems to indicate an innovation mis-alignment. Initiatives are needed on both sides to close this gap.

⁵ Survey Question: “Rate the importance of the following concerns in relation to outsourced logistics services provision?” Responses: 5-point Likert-scale 1 (Not Important) to 5 (Very Important).

⁶ Survey Question: “Rate the importance of the following concerns in relation to outsourced logistics services provision?” Responses: 5-point Likert-scale 1 (Not Important) to 5 (Very Important).

⁷ Survey Question: “How important to your company were the following reasons for outsourcing activities to a Logistics Service Provider?” Responses: 5-point Likert-scale 1 (Not Important) to 5 (Very Important).

⁸ Survey Question: “How important to your customers were the following reasons for outsourcing logistics activities?” Responses: 5-point Likert-scale 1 (Not Important) to 5 (Very Important).

Shippers⁹ and LSPs¹⁰ responded that “lack of cooperation” (means of 2.74, and 2.75 respectively), and “lack of interest to participate in the supply chain” (means of 2.66, and 2.54, respectively) are factors preventing development of the full potential of logistics services. This indicates Shippers are still acting as “islands of excellence”, focusing on optimising their own operations, rather than collaborating with their supply chain partners, including LSPs. Interestingly, the issue of trust was ranked “low” by both groups (ranked 7 out of 9, with a mean 2.41 by Shippers, and ranked 6 out of 10, with mean 2.46 by the LSPs).

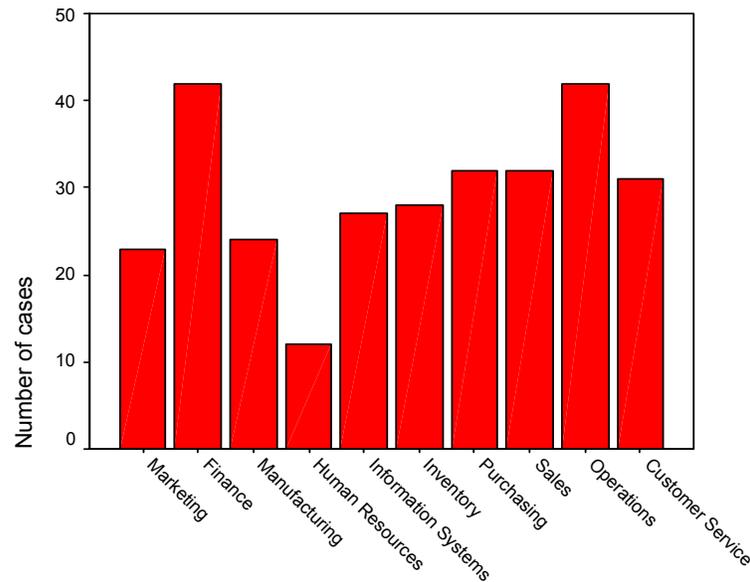
ALPHA survey results demonstrated that in selecting LSPs, Shippers¹¹ often included other departments in the decision to outsource activities (see Figure 3). Almost 50% (sample size of 97) of the respondents indicated that the Finance and Operations Managers were involved on the decision to outsource. This may be an indicator of the increased perception of the level of integration involved in logistics functions in the business.

⁹ Survey Question: “To what extent do each of these issues prevent your company from achieving the full potential of supply chain management?” Responses: 5-point Likert-scale 1, Not at all or Low to 5 Very Extensive or High.

¹⁰ Survey Question: “How much do each of these issues prevent your company from delivering the full potential of your logistics services?” Response: 5-point Likert-scale 1, Not at all or Low to 5 Very Extensive or High.

¹¹ Survey Question: “Were managers from other functional area actively involved in the decision to use contract logistics companies?” Responses: Marketing; Finance; Manufacturing; Human Resources; Information Systems; Inventory Planning/Control; Purchasing; Sales; Operations; Customer Services; Other.

Figure 3: Department Managers Involved in Decision to Use Contract Logistics Companies



Businesses are realising the need for outsourcing the management of entire logistics processes to a single entity, for greater visibility and optimisation across supply chains. This has led directly to the emergence of Lead Logistics Providers (LLPs) and new business models such as 4PLs.

When asked about their “future emphasis to improve overall logistics performance”, both Shippers¹² and LSPs¹³ indicated a reduction of product/service cost as “important”, but for Shippers it was “very important”. Shippers ranked the importance of cost as 2 out of 8, with a mean of 4.16; LSPs ranked the same issue 7 out of 8, with a mean of 3.58. This indicates that more Shippers continue to see the future as cost-driven, whereas LSPs are looking for value-add solutions.

¹² Survey Question: “Indicate your company’s emphasis over the next two years to improve overall logistics performance:” Responses: 5-point Likert-scale 1 (Insufficiently - Low) to 6 (Very Well – High).

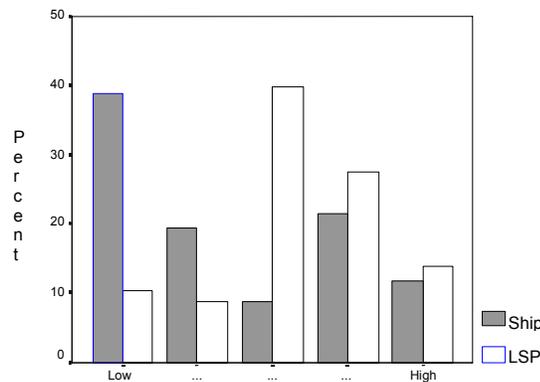
¹³ Survey Question: “Indicate your company’s emphasis over the next two years to improve overall logistics performance:” Responses: 5-point Likert-scale 1 (Insufficiently - Low) to 6 (Very Well – High). (Both Shippers and LSPs were asked the same question.)

Our survey found that Shippers and LSPs have contrasting views about ceding responsibility to a single LLP to coordinate other LSPs. In particular, Shippers¹⁴ rate this “low importance” (rank 8 of 8, with a mean of 2.05), whereas LSPs¹⁵ rated this as “medium to high” importance, (with a rank 5 of 9, and 3.53).

Cross-company integration and collaboration

Information systems and technology are an integral part of supply chains, and essential to their effective management. Indeed, supply chains cannot function properly without the visibility that good IT provides. An effective technological environment also enables additional value-added services to be offered to Shippers, should these be required. Results from our survey indicated Shippers¹⁶ and LSPs¹⁷ ranked the importance of LSPs contributing to Shippers’ “access to up-to-date techniques” lower than factors such as; contribution to reliable and consistent service; reduced costs; flexibility; etc. Shippers ranked “access to up-to-date techniques” as 10 (out of 12, mean of 3.22), which is a lower ranking than LSPs gave this factor (ranked 7 out of 12, mean 3.84). This difference is illustrated graphically in Figure 4.

Figure 4: Extent of Outsourced IT: Shipper and LSP Perceptions



¹⁴ Survey Question: “If you work with more than one Logistics Service Provider, to what extent do the following apply?” Responses: 5-point Likert-scale 1 (Not Important or Low) to 5 (Very Important or High).

¹⁵ Survey Question: “In working with your customers, to what extent do the following descriptions apply?” Responses: 5-point Likert-scale 1 (Not Important or Low) to 5 (Very Important or High).

¹⁶ Survey Question: “How important are the contributions of your Logistics Service Provider(s) to the benefit categories below?” Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

¹⁷ Survey Question: “To what extent can the logistics services your company offers help improve your customers’ overall logistics performance?” Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

In our survey Shippers¹⁸ and LSPs¹⁹ were asked to determine the extent to which they used “logistics information and communication technologies.” Responses for all listed technologies (e.g., EDI, internet, stand-alone) for both parties were between a mean of 2.5 and 3.5 (maximum of 5, for “Heavy Use or High”). However, the standard deviation (range of responses) were + or - 1.5, (indicating that the extremes of the range lay between the values of 1 and 5). The reason for the responses ranging effectively from “low” to “high” is due to the type of question – these systems are alternatives to each other and it would be expected if a company has installed one type of information technology, they would score a high response, and a very low one for others. However, the results indicate a wide range of IT systems being used by both Shippers and LSPs, with no one type of system (stand-alone or integrated), being a strong leader in the industry.

Our survey furthermore revealed that both Shippers²⁰ and LSPs²¹ ranked 1, the “issues preventing your company from achieving full potential of supply chain management / delivering the full potential of logistics services.” The mean response for Shippers was 3.48, but for LSPs it was lower at 2.82 (both with a standard deviation of more than 1.2), indicating the LSPs rated this as less of a problem than Shippers.

Client (Shipper) alignment

Our results showed Shippers²² rated the importance of the support of LSPs²³ to help them achieve customer service objectives, significantly higher than LSPs rated the same issue (rank 1 with mean 4.49, compared with rank 8, mean 4.05, respectively). This indicates a significant ‘mis-alignment’ on this issue between the two parties. So called ‘collaboration and partnering strategies’ by Shippers all seem to driven by cost reduction motives, sometimes at the expense of end-customer satisfaction. This seems to further confirm ALPHA findings that supply chain partners still do not share a common vision, or act on the same performance metrics and priorities. See Figure 5.

¹⁸ Survey Question: “To what extent are you using any of the following logistics information and communication technologies listed below?” Responses: 5-point Likert-scale 1, Not Use or Low to 5 Heavy Use or High.

¹⁹ Survey Question: “To what extent are you using any of the logistics information and communication technologies listed below?” Responses: 5-point Likert-scale 1, Not Use or Low to 5 Heavy Use or High.

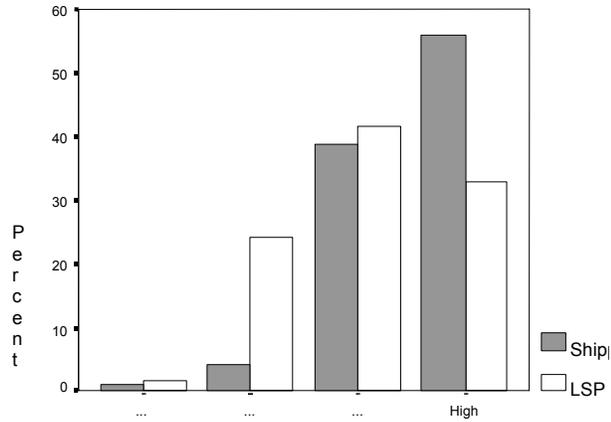
²⁰ Survey Question: “How much do each of these issues preventing your company from achieving full potential of supply chain management?” Responses: 5-point Likert-scale 1, Not At All or Low to 5 Very Important or High.

²¹ Survey Question: “How much do each of these issues preventing your company from delivering the full potential of your logistics services?” Responses: 5-point Likert-scale 1, Not At All or Low to 5 Very Important or High.

²² Survey Question: “To what extent do the statements below reflect your reasons for selecting your logistics partner(s)?” Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

²³ Survey Question: “In your opinion, to what extent do the statements below reflect your customer’s reasons for selecting your company as their logistics partner?” Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

Figure 5: Importance of Customer Service Orientation for Selecting LSPs

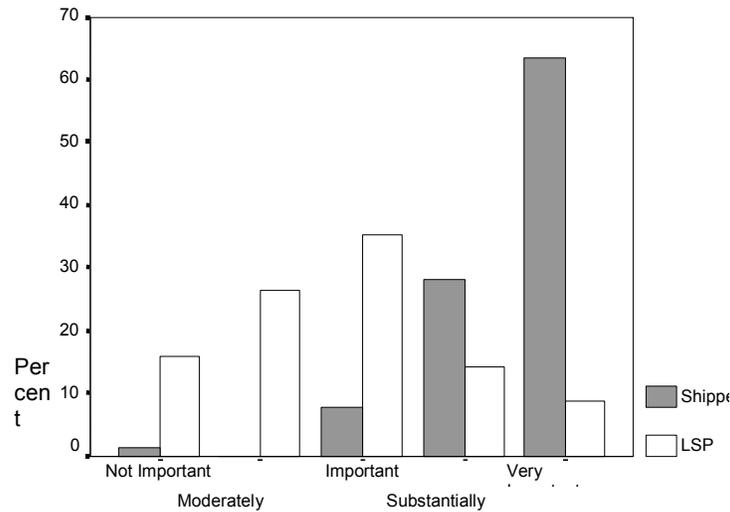


Shippers²⁴ and LSPs²⁵ agree that the support of Shippers to achieve customer service objectives is “very important” (means 4.35 and 4.10, respectively). Both ranked this factor as 1 (out of 12), showing alignment in this aspect. However, Shippers placed a much higher emphasis on cost and productivity (rank 2 out of 8 items, and an average mean of 4.14) compared to LSPs (rank 7, and a mean of 3.58) indicating a mis-alignment on other contributions of LSPs to Shippers’ business, see Figure 6.

²⁴ Survey Question: “How important are the contributions of your Logistics Service Provider(s) to the benefit categories below?” Responses: 5-point Likert-scale 1, Not Important or Low to 5, Very Important or High.

²⁵ Survey Question: “To what extent can the logistics services your company offers help improve your customers’ overall logistics performance?” Responses: 5-point Likert-scale 1, Not Important or Low to 5, Very Important or High.

Figure 6: Importance of LSPs' Contribution to "Increase reliable and consistent service"



Our results revealed the top three partnership and relationship management issues for LSPs²⁶ were: integrity, trustworthiness, and reputation. All rated “high”, with average scores of 4.34, 4.29 and 4.26 respectively. The corresponding response by Shippers²⁷ ranked these issues lower, although mean scores were similar to the LSPs. It is evident that LSPs are emphasising the characteristics of true partnership, but the Shippers at this stage are not placing the same importance on these qualities, and are not responding along the same dimensions. This indicates that LSPs are either not successfully communicating their desired emphasis to the Shippers, or the uptake by the Shippers is simply slow.

Geography and physical infrastructure

Previously, the relatively large distances between Australian cities were perceived as an impediment to business. However, ALPHA survey results revealed that both Shippers²⁸ and LSPs²⁹ regard suppliers’

²⁶ Survey Question: “In your opinion, to what extent do the statements below reflect your customer’s reasons for selecting your company as their logistics partner?” Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

²⁷ Survey Question: “To what extent do the statements below reflect your reasons for selecting your logistics partner(s)?” Responses: 5-point Likert-scale 1, Not Important or Low to 5 Very Important or High.

²⁸ Survey Question: “How much do each of these issues prevent your company from achieving full potential of supply chain management?” Responses: 5-point Likert-scale 1, Not At All or Low to 5 Very Important or High.

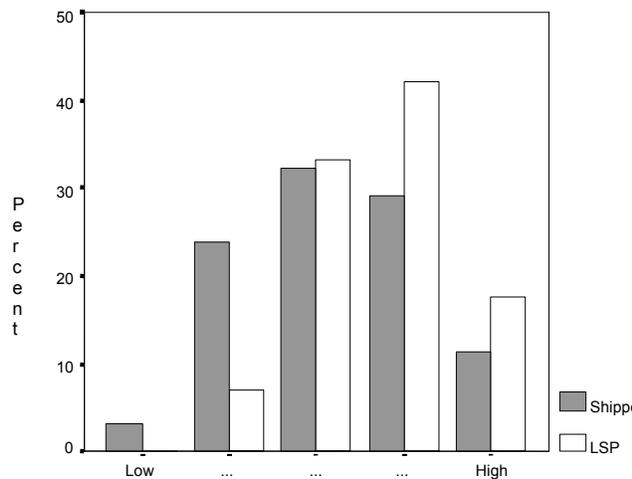
geographical distance as “low” importance (mean 2.33 and 1.98 respectively), and customers’ geographical distance of even lower importance.

Recruiting, developing and retaining people

In Australia, freight logistics was recognised as 9% of GDP in 2002 (Freight e-business News & Resources, 2002) and provided a core service for other industries. As part of the Commonwealth Government’s Freight Transport Logistics Industry Action Agenda, “AusLink”, has specified a number of proposals, including: “boosting the industry’s investment in its people, making the industry a more attractive career option for existing and prospective employees, particularly young men and women.” (ibid). Another AusLink proposal is to improve the occupational, health and safety record of the logistics sector.

Our survey found Shippers³⁰ and LSPs³¹ both placed slightly above average emphasis on the “increased training /development of employees,” however, Shippers ranked this at 7(mean 3.22), and LSPs ranked it at 6 (mean 3.7) (Refer to Figure 7). Given the challenges highlighted above, this ranking is surprisingly low.

Figure 7: Shipper and LSP Emphasis *Over the Next Two Years* to Improve Logistics Performance by Training/Development of Employees



²⁹ Survey Question: “How much do each of these issues preventing your company from delivering the full potential of your logistics services?” Responses: 5-point Likert-scale 1, Not At All or Low to 5 Very Important or High.

³⁰ Survey Question: “Indicate your company’s emphasis over the next two years to improve overall logistics performance:” Responses: 5-point Likert-scale 1, Insufficiently - Low to 5 Very Well – High.

³¹ Survey Question: “Indicate your company’s emphasis over the next two years to improve overall logistics performance:” Response: 5-point Likert-scale 1, Insufficiently - Low to 5 Very Well – High.

Conclusions

The main points can be summarised as:

Strategic Alliances, Partnerships and Collaboration

The creation of a partnership/alliance between companies typically reflects the intention to pursue a common objective by improving process coordination through collaboration, better understanding of the partner's business, greater information sharing, coordinated investments, and joint planning. In the Shipper survey, 90% of Shippers were "satisfied" or "very satisfied" with LSP services, indicating a match of the needs of Shippers' outsourcing requirements by their LSPs. However, further analysis of data, revealed differing priorities and business approaches between Shippers and LSPs:

- *LSPs have significantly increased the range of services offered to Shippers in Australia over the last decade.*
- *Commodity-type contractual arrangements between Shippers and LSPs often restrict the development of new LSP capabilities.*
- *Shipper-LSP partnerships have to be based on factors other than price alone.*
- *Leadership is required from within the ranks of Shippers and LSPs, to introduce innovative new practices throughout supply chains.*

Cross-company Integration and Collaboration

Information technology (IT) has an integral role in the success of a company and its supply chain network. An effective technological environment enables additional value-added services, such as: full visibility; and tracking of products through the supply chain.

- *IT remains the key enabler for achieving benefits in outsourcing, however there is disagreement about exactly what capabilities are needed.*
- *Lack of IT capabilities (or lack of access to IT capabilities), are quoted as the main reasons for not achieving full supply chain benefits.*
- *Technology is enabling end-to-end supply chain visibility across a variety of platforms.*

Client (Shipper) Alignment

The original measures of value creation were cost reduction, and improved operational efficiency. However, successful outsourcing relies more on an understanding of end-customers' and clients' (Shippers'), business requirements.

- *The main performance criterion in a Shipper-LSP relationship is achieving high levels of satisfaction as perceived by the end-customer.*
- *Mis-alignment between Shipper and LSP (observed on several dimensions) results in lower customer service and lost revenue opportunities.*
- *Formal contracts are no guarantee of achieving superior supply chain performance in today's dynamic environment.*

Geography and Physical Infrastructure

Survey results indicate physical distance (away from customers and suppliers), is now of less concern than other issues.

Recruiting, Developing and Retaining People

The recruitment and development of high calibre personnel is perhaps the biggest issue facing LSPs as they grow rapidly over the next decade. Some of these people will come from Shippers that have outsourced their business, but this will be far from enough. What will be needed is significant investment by LSPs, in a multi-tiered education program that will deliver the required numbers of human resources at the appropriate capability levels. Based on the results of our survey both Shippers and LSPs appear to have missed this important point.

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Appendix A: Estimated regression model – customer satisfaction of LSP-services

Model

Model	R	R Square	Adjusted R Square	Std. Error of The estimate
1	.512 ^a	.262	.208	.727

a. Predictors: (Constant), Q12 Obstacles Understanding Company, Q3 Current Contracts, Q11 Concerns of Service Obstacles Coordinating Company and Concerns of Cutlural

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.762	5	2.552	4.835	.001 ^a
	Residual	35.900	68	.528		
	Total	48.662	73			

a. Predictors: (Constant), Q12 Obstacles in LSP Understanding Company, Q3 Current Signed Contracts, Q11 Concerns of Service Quality, Q12 Obstacles Coordinating Company and LSP, Q11 Concerns of Cutlural Fit
 b. Dependent Variable: Q14 Satisfied with LSP Performance

Coefficients^a

Model		Unstandardize Coefficient		Standardize Coefficient	t	Sig.
		B	Std.	Beta		
1	(Constant	1.362	.810		1.680	.097
	Q3 Current Contract	-.413	.219	-.200	-1.890	.063
	Q11 Concerns of Qualit	.321	.143	.241	2.243	.028
	Q11 Concerns of Fit	.218	.084	.300	2.602	.011
	Q12 Coordinating and	-.307	.116	-.303	-2.647	.010
	Q12 Obstacles in Understanding	-.264	.090	-.315	-2.921	.005

a. Dependent Variable: Q14 Satisfied with LSP

Appendix B: Estimated regression model – modification of future lsp services - shippers

Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.312 ^a	.097	.088	.749

a. Predictors: (Constant), Q17 Support - Supply

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.570	1	5.570	9.919	.002 ^a
	Residual	51.664	92	.562		
	Total	57.234	93			

a. Predictors: (Constant), Q17 Support - Collaborative Supply Planning

b. Dependent Variable: Q21 Modify LSP Services

Coefficients^a

Model		Unstandardize Coefficient		Standardize Coefficient	t	Sig.
		B	Std.	Beta		
1	(Constant)	1.040	.173		6.019	.000
	Q17 Support Collaborativ Supply	-.179	.057	-.312	-3.149	.002

a. Dependent Variable: Q21 Modify LSP

Appendix C: Estimated regression model – modification of future lsp services – LSPs

Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.359 ^a	.129	.094	.586

a. Predictors: (Constant), Q12 Work - Relationships, Q11 Obstacles -

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.535	2	1.268	3.693	.032 ^a
	Residual	17.163	50	.343		
	Total	19.698	52			

a. Predictors: (Constant), Q12 Work - Collaborative Relationships, Q11 Obstacles - Negotiating Price

b. Dependent Variable: Q17 Modify LSP Services

Coefficients^a

Model		Unstandardize Coefficient		Standardize Coefficient	t	Sig.
		B	Std.	Beta		
1	(Constant)	1.107	.498		2.226	.031
	Q11 Obstacles Negotiating	.173	.080	.287	2.160	.036
	Q12 Work - Relationship	-.196	.104	-.250	-1.879	.066

a. Dependent Variable: Q17 Modify LSP

