



Results and Findings of the 2002 Seventh Annual Study





Third-Party Logistics Study

2002

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**Key Learnings From Facilitated Sessions
with 3PL Users at CGE&Y's
Accelerated Solutions Environment**

Third-Party Logistics Study Results and Findings of the 2002 Seventh Annual Study

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² The structure and content of this study benefited significantly from suggestions made by executives of Cap Gemini Ernst & Young and Ryder System, Inc., and other professionals who are customers of 3PL service providers. Among those significantly involved were Al Montgomery, Greg Pins, and Mario Hegewald, all of CGE&Y, and Kevin Bott, Kevin Hagerty, and Barry Burnette, executives at Ryder System, Inc. In addition, the study benefited from the thoughts and perspectives of several industry executives who are users of 3PL services. This global study of the 3PL industry will continue annually to examine and document key trends in the 3PL marketplace.

Study Objectives and Methodology

During the spring and summer of 2002, C. John Langley Jr., Ph.D., of the Georgia Institute of Technology, with Cap Gemini Ernst & Young and Ryder System, Inc., conducted an extensive study of the use of third-party logistics (3PL) services in North America and Western Europe. This is the seventh annual research study to examine critical trends and issues among key markets and key customers in the 3PL industry. In addition to including Western Europe in this year's study, a limited study was conducted of 3PL customers in the Asia-Pacific region.



Study Objectives

- ▶ Measure the development and growth of the 3PL industry across major industry segments.
- ▶ Identify customer needs and how well 3PLs are responding to those needs.
- ▶ Understand how customers select and manage 3PLs.
- ▶ Examine why customers outsource or elect not to outsource to 3PLs.
- ▶ Summarize the current use of 3PL services.
- ▶ Investigate leading topics, including the use of technology, how to structure effective 3PL relationships, and how to properly measure 3PL performance.
- ▶ Provide a strategic assessment of the future of the 3PL industry in North America, Western Europe, and Asia-Pacific.

An important goal of each year's 3PL study is to improve upon the design and conduct of previous years' studies. The following are the ways in which the 2002 3PL study

significantly enhances the scope and conduct of earlier studies:

- ▶ Extend the 3PL study to include Western Europe and Asia-Pacific.³ Although the results from Asia-Pacific are preliminary, the analysis that follows includes a number of meaningful comparisons between results from North America and Western Europe.
- ▶ Use the Internet to conduct the study. Although this survey approach was pioneered in last year's study, this year's study involved a web-based, commercial firm to administer and manage all activities relating to survey e-mailing, field, and tabulation, and preparing reports for analysis.
- ▶ Revise certain content and terminology to be current and to respond to recent advances in the logistics, supply chain, and 3PL industries.
- ▶ Use Cap Gemini Ernst & Young's Accelerated Solutions Environment (ASE) resource in Atlanta, Georgia, USA, to get feedback and perspectives on this

³ North American companies are mostly concentrated in the United States. A number of firms operating in Canada and Mexico are included in the study. Western Europe includes the United Kingdom (U.K.); Asia-Pacific refers mostly to China and Japan.

Exhibit 1

| Survey Response Rates | | | |
|-----------------------|--------------------|------------------|---------------|
| | Companies e-mailed | Usable Responses | Response Rate |
| North America | 1,458 | 212 | 15% |
| Western Europe | 439 | 38 | 9% |
| Asia-Pacific | 68 | 10 | 15% |

year's study results from industry executives who manage the use of 3PL services. The function of this resource and the findings from its use are detailed in a thought piece following the main body of this report.

Survey recipients were asked to think of a "third-party logistics provider" as one that provides multiple services for its clients and customers.⁴ Following several examples of firms that would be typical of such a definition,⁵ recipients were asked to think of a "LLM (lead logistics manager) or fourth-party provider" of logistics services as one that may include more project program management of sub-contractor 3PL operations.⁶ Specific questions within the 2002 study were intended to see how well recipients understood terms such as these.⁷

Exhibit 1 shows by geographic area the total number of companies a survey was sent to, the number of usable returns received, and the response rate. The greatest response was from firms operating in North America. This is understandable as the first six years of the study focused exclusively on North America and the contact list has been significantly enhanced over that time. Considering this first-year experience in Western Europe (including the U.K.), the number of responses is sufficient to provide meaningful comparisons of results with those from North America. Although the response from Asia-Pacific is not sufficient at this time to meaningfully compare most results with those from the other two geographic areas, even the small number of responses provides insights into the use of 3PL services in the Asia-Pacific. These will be highlighted in this report.

The following list identifies a number of key characteristics about the firms participating in the 2002 3PL study:

- ▶ *The respondent companies represent a relatively broad cross-section of industries.*

The study methodology included sending an e-mail addressed to logistics and supply chain executives across North America, Western Europe, and Asia-Pacific, asking for their participation in the study. (For purposes of this study, "executive" is defined as a person holding the title of manager, director, or vice-president of logistics or supply chain management.) In the e-mail, executives were asked to "click on" a web address that would access the 2002 3PL survey. Once the survey was completed, a final click on "end survey" entered the responses into the overall study database.

The industries represented by the intended recipients include:

- ▶ *Automotive*
- ▶ *Chemical*
- ▶ *Computers and Peripherals*
- ▶ *Consumer Products*
- ▶ *Electronics*
- ▶ *Medical Supplies and Devices*
- ▶ *Retail*
- ▶ *Telecommunications*

These industries were selected because they view logistics as strategically important and because they are purposely moving toward integrated supply chain management.

4 Respondents classified as "users" of 3PL services were those who indicated they currently use or are planning to use these services.

5 The firms cited as examples included Deutsche Post, Exel, FedEx Supply Chain Services, Menlo Logistics, Ryder, Schneider Logistics, Tibbitt & Britten, and UPS Worldwide Logistics.

6 As explained later in this report, the industry executives participating in the ASE session helped to develop a more comprehensive definition of a lead logistics manager (LLM). They defined a LLM as a firm that "designs, builds, and manages supply chain assets, process, people, and technology."

7 Last year, the study asked respondents what characteristics they consider when thinking of a 3PL provider. Results suggest that three characteristics stand out: "multiple activities," "integration of activities," and "provides solutions to logistics/supply chain problems."

While there are small differences between respondent companies from North America and Western Europe, approximately 75% to 80% are from the manufacturing sector, 10% to 15% from the wholesale and retail sectors, and 3% to 5% from the raw materials supply sector. These percentages are consistent with the small number of responses from Asia-Pacific.

▶ 3PL service users indicated broad geographical coverage for their logistics operations. As shown in Exhibit 2, respondents from North America-based companies also have logistics responsibilities in Europe (42%), Asia-Pacific (42%), Middle East (24%), South America (34%), and Africa (11%). Geographic responsibilities for their Western European counterparts extend to North America (33%), Asia-Pacific (33%), Middle East (29%), South America (24%), and Africa (29%). Thus, the 3PL users whose views are reflected in this study clearly have global or at least multi-national responsibilities for their company's logistics activities.

▶ Respondent organizations have a relatively broad range of anticipated sales revenues for 2002. Of the North American respondents, approximately 57% of the firms have revenues between \$1 billion and \$25 billion; another 8% project revenues over \$25 billion. In contrast, only 38% of the firms from Western Europe project revenues between \$1 billion and \$25

billion, with none expecting revenues greater than \$25 billion. The anticipated revenues of firms from the small number of Asia-Pacific respondents tend to look more like those of Western Europe than like North America.

▶ Users of 3PL services indicated a number of factors having a significant impact on the industries in which they compete. Primary among these are "significant pressures to reduce cost," "consolidations, mergers, and acquisitions," and "emphasis on improved supply chain management." Of somewhat less, but still viewed as having a significant impact, are "globalization," "rapidly accelerating new product introductions," and "significant

Exhibit 2

| Geographic Scope of Logistics Responsibilities | | |
|--|--------------------------|----------------------------|
| Geographic Scope of Logistics Responsibility | North American 3PL Users | Western European 3PL Users |
| North America | 100% | 33% |
| Europe | 42 | 100 |
| Asia-Pacific | 42 | 33 |
| Middle East | 24 | 29 |
| South America | 34 | 24 |
| Africa | 11 | 29 |

pressures to significantly enhance logistics customer service." Although recent world events may suggest that "security issues" would be significant, only about one-fourth of the respondents cited this as notable.

▶ *The respondents attach great importance to logistics processes and supply chain issues. For example, 89% of the North American respondents and 90% of the Western European respondents agreed that “logistics represents a strategic, competitive advantage for our company.” While most North American and Western European respondents (+90%) suggested that their “customers are placing greater emphasis on logistics customer service,” more than one-half of all respondents (50% to 60%) feel that their customers are more interested in price than service. Overall, 71% of North American firms and 86% of Western European firms indicated agreement with “using 3PLs is a key to satisfying their company’s customers.”*

These characteristics reinforce the relevance and applicability of the study findings.

Organization of This Report

Following a summary of key study findings, the findings from the 2002 3PL study are discussed in four sections. The first is “Logistics Outsourcing Practices in Profile,” where you will find a high-level discussion of overall trends among users and non-users of 3PL services. The next three sections deal with areas of strategic interest to 3PL use: “Strategic Role of Information Technology,” “Management and Relationship Issues,” and “Customer Value Framework.” The discussions will encompass results from this year’s study, including Western Europe and Asia-Pacific as appropriate, and will provide a perspective on the study findings over its 7-year history.

The last section in the main body of the report identifies likely changes in priority for the 3PL industry. It also explains the types of value readers should derive from this year’s 3PL study.

The report concludes with a description of the 3PL user group session held at Cap Gemini Ernst & Young’s ASE. In addition to a description of this resource and how the session was conducted, key learnings will be profiled.

Summary of Key Findings

This study helps provide a better understanding of the marketplace for 3PL services and the ways in which providers of such services continue to develop and grow. Considering that the total annual revenues of U.S.-based 3PLs are slightly over \$60 billion,⁸ the services offered by 3PL providers continue to consume a significant portion of overall logistics and supply chain budgets.⁹

The following points capture the major findings of this research study:

▶ **SCOPE OF STUDY.** *Expanding this annual 3PL study from North America to include Western Europe and Asia-Pacific was successful. Although the Asia-Pacific response was limited, the study’s findings confirm that the use of 3PL services is prevalent throughout the three major regions of the world we studied. Additionally, Cap Gemini Ernst & Young’s ASE in Atlanta helped us better understand the perspectives of 3PL users, especially as they pertain to this year’s study.*

⁸ Source: Armstrong & Associates, Inc., www.3plogistics.com. Estimated total contract logistics market revenues were \$56.4 billion for 2000 and \$60.8 billion for 2001. Estimated growth rate for 2000 was approximately 20% and for 2001 was 7.4%.

⁹ Robert V. Delaney, *13th Annual State of Logistics Report* (St. Louis, MO: Cass Information Systems and ProLogis, June, 2002). According to this study, U.S. business logistics systems costs totaled \$970 billion in 2001.

Although 3PL use is similar around the world, the study highlights a number of key differences. It will be interesting to analyze the yearly results worldwide in future studies, as well as to monitor key metrics over time.

▶ **MARKET TRENDS.** *The markets for 3PL services continue to change. Both users and providers are becoming more capable. Moreover, their expectations of each other are rising. Operating performance, cost management, and service delivery are continuing concerns to 3PL customers in each of the key geographic regions studied. Today's marketplace is also seeing more productive and meaningful 3PL-customer relationships evolving. Aside from the fact that customers generally report high levels of success with their 3PLs, a gap exists between what the customers receive and what they expect to receive. Consequently, 3PLs should now focus on a number of key objectives, including implementing capable information technologies, instituting effective management and relationship processes, integrating services and technologies globally, and delivering comprehensive solutions that create value for the users and their supply chains. Considering that customer demands for performance and sophistication are accelerating, improving these areas is a key imperative for 3PLs.*

▶ **3PL USER CHARACTERISTICS.** *The Seventh Annual Study provided new key metrics about 3PL use across three geographic regions.*

- 3PL use among the North American companies surveyed increased to 78% in 2002, representing an increase from the 68% to 73% usage rates reported in the previous six years. The 2002 study indicated the percent of 3PL users from Western Europe was 94%; from Asia-Pacific, 92%. Although the latter sample size is limited, the data suggest the 3PL usage rate among Western European firms that use 3PLs is significantly greater than that among North American firms.

- Respondents in Western Europe currently spend a larger percentage of their logistics dollar or Euro (51%) on 3PL services than do those in North America (43%). Both groups project increases in these percentages over the next three to five years.

- Results pertaining to the specific logistics services that are outsourced in North America are similar to the findings of previous studies. Among the most prevalent activities outsourced are outbound and inbound transportation, warehousing, freight bill auditing/payment, and international services such as customs brokerage, freight forwarding, and customs clearance. While the level of "integration" of 3PL services in North America appears greater than in Western Europe, significant opportunity for further integration remains in both of these regions.

▶ **INFORMATION TECHNOLOGY (IT).**

The availability of capable IT-based services is an expected dimension of 3PL service offerings. The cost of entry into the 3PL arena now includes technology and implementation capabilities for warehouse management, transportation management, and web-enabled communications. The focused efforts of 3PLs to continually upgrade and expand IT capabilities has reduced many of the once differentiating high-value technologies to what are now minimum requirements. Users of 3PL services anticipate that the near-term differentiators will include electronic markets, supplier management systems, and supply chain planning. Going forward, the success of 3PLs will depend on their ability to deliver an integrated, end-to-end solution that provides significant financial and operational performance improvements.

▶ **MANAGEMENT AND RELATIONSHIP ISSUES.**

As the 3PL industry continues to evolve, the challenges in developing and sustaining successful relationships will intensify. Creating relationships based on trust, continual improvement, collaboration, and mutual risk and reward are imperative to ensuring ongoing success. Greater pressure to improve relationship management skills is attributed to increasing customer expectations, the rapid pace of technological change, expansion into advanced service offerings, and globalization. To gain greater insight into these issues, the Seventh Annual 3PL Study utilized a “Consumer Relevancy” model to

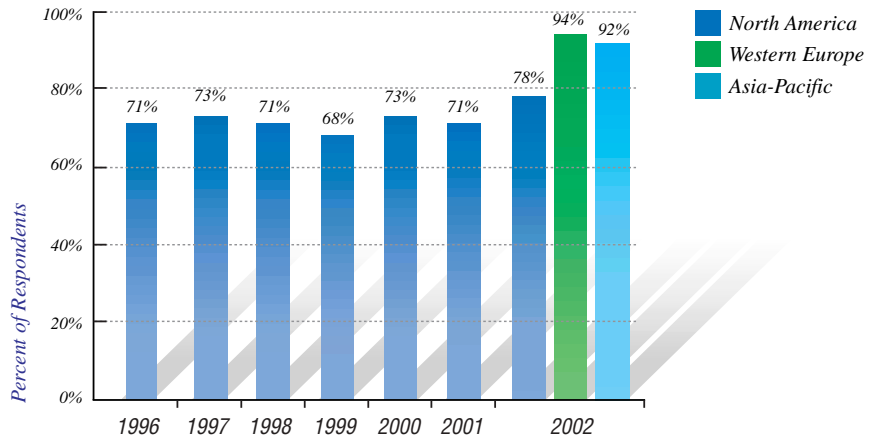
segment 3PL attributes into several categories. This resource helped us better understand that opportunities exist for 3PL providers to improve their capabilities around the availability of advanced services. These improved capabilities should have a direct correlation on the success of 3PL providers’ customer relationships.

▶ **CUSTOMER VALUE.** *Again in 2002, most 3PL users consider their relationships with 3PLs to be successful. The percentages of customers who feel their 3PL relationships are successful are as follows: 89% in North America, 81% in Western Europe, and 89% in Asia-Pacific.* Aside from this positive perception, the study reported a number of areas where improving 3PL relationships is desirable. A logical conclusion is that there is a significant gap between what 3PL users expect to receive and what they actually realize from their 3PLs. The improvements that study respondents cited as a priority represent a starting point for continuous improvement. Among the areas of greatest need are eCommerce, international supply chain solutions, and supply chain integration solutions.

▶ **CONCLUSIONS.** *As we observed last year, 3PL users again want their 3PL service providers to take on more meaningful, strategic roles. While they are just “warming up” to the idea of involving a commercial firm as “lead logistics manager,” 3PL users feel that existing 3PLs represent a key source of this expertise.* A large percentage of respondents (approximately 90% in North America

Exhibit 3

3PL User Experience 1996-2002



and Western Europe) feel that logistics represents a strategic, competitive advantage for their companies. And yet, considerable room exists for improving the current and future relationships 3PL users have with their 3PL providers.

Logistics Outsourcing Practices in Profile

Exhibit 3 provides a 7-year view of the firms using 3PL services. From 1996 through 2001, the percentage of users remained relatively constant for North American respondents, generally between 68% to 73%; however, this percentage increased to 78% in this year's study. Now with the geographical expansion of the study this year, we see that the percentage of 3PL users from Western Europe in 2002 is 94% and 92% for those in Asia-Pacific.¹⁰

Although the overall percentage of companies using 3PL services remains relatively constant from year to year, the use of 3PL services varies by the industries studied. For example, two industries that tend to have higher use of 3PL services are computers and peripherals, and consumer products. Among those industries that use fewer 3PL services are automotive, chemical, and retail.

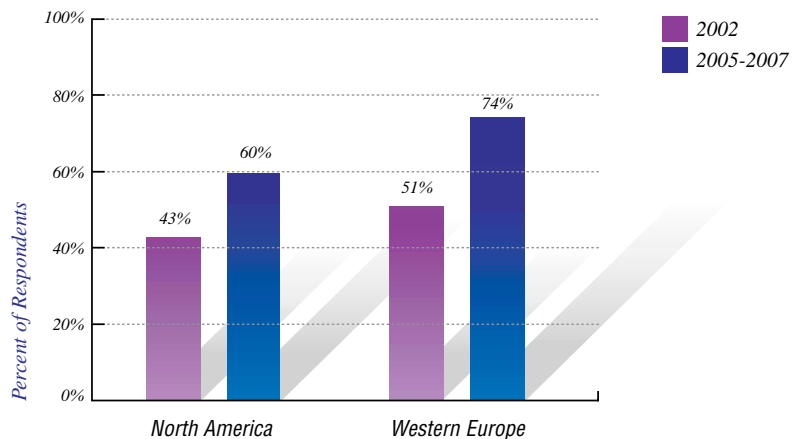
Again in this year's study, respondents were asked what percentage of total logistics expenditures, defined as transportation, distribution, or value-added services, are directed to outsourcing. Exhibit 4 shows the current (2002) versus projected (2005-2007) percentages directed to outsourcing for both North American and Western European 3PL users. From this information, it is apparent that

respondents in Western Europe currently spend a larger percentage of their logistics dollar or Euro (51%) on outsourcing than do those in North America (43%). Of significance is that respondents from both geographic areas project increases in this percentage over the next three to five years. As shown in Exhibit 4, respondents in Western Europe project a greater relative increase (from 51% to 74%) in their future spending than do those in North America (from 43% to 60%). Results from both regions suggest increases in the market for 3PL services over the next several years.

10 Based on the small sample size, the Asia-Pacific results are less reliable than those from North America and Western Europe.

Exhibit 4

Current vs. Projected Logistics Expenditures Directed to Outsourcing



Logistics Activities Outsourced

Exhibit 5 summarizes the use of specific logistics services that were outsourced by respondents in North America and Western Europe in 2002. Differences between the results from these two regions will be discussed in the following sections. Comparing the 2002 results for North America to those from the 2001 study, the overall activity usage percentages have only modest changes from those observed last year. Aside from small differences that may be observed for specific outsourced activities, the available results do not suggest that any major shift in usage is occurring.

According to the 2002 study, the activities most frequently outsourced to 3PLs are outbound transportation (68% in North America; 86% in Western Europe), warehousing (65%; 70%), inbound transportation (52%; 70%), freight bill auditing/payment (48%; 11%), customs brokerage (44%; 33%), freight forwarding (43%; 41%), and customs clearance (41%; 33%).

Of note from these figures is that there appears to be a greater use of outsourcing in Western Europe for activities relating to outbound and inbound transportation and warehousing. This may be because European business firms have been more involved historically in the use of outsourced logistics services than their counterparts in North America. Interestingly, the study data indicate significantly less usage of freight bill auditing/payment services by Western European 3PL users than for those from North America. Apparently, the use of financially related

logistics services is less well developed in Western Europe than in North America. In contrast, a number of activities appear to be outsourced less frequently in North America as well as in Western Europe. These activities include those directly related to customers (e.g., order fulfillment, customer service, and order entry/order processing), IT, and strategic services (e.g., consulting and supply chain integrators). There does appear to be modest use of certain operationally focused activities, such as cross-docking, shipment consolidation/distribution, selected manufacturing activities, and product marking/labeling.

An issue that was addressed in some earlier studies, and again in 2002, is the extent to which 3PL services are “integrated” or “tied together” by the 3PL service providers. Previous years’ studies in North America found that 60% to 70% of the 3PL services were “tied together or integrated” by the providers of such services. In the 2002 study, 63% of the North American respondents and 56% of those from Western Europe indicated that the services were integrated to some extent. This supports the continuing contention that considerable additional progress through integration remains to be experienced. On a positive note, North American 3PL users suggested their future goal is that 86% of the services are to be integrated; for Western European respondents, this figure was 100%.

A strategic issue is how customers feel 3PLs should position themselves in terms of depth and breadth of their service. Overall, and consistent with findings reported in previous studies, this year’s respondents (North American and Western European) significantly

Exhibit 5

| Outsourced Logistics Services | | |
|--|---------------|----------------|
| Logistics Activity | North America | Western Europe |
| <i>Outbound Transportation</i> | 68% | 86% |
| <i>Warehousing</i> | 65 | 70 |
| <i>Inbound Transportation</i> | 52 | 70 |
| <i>Freight Bill Auditing/Payment</i> | 48 | 11 |
| <i>Customs Brokerage</i> | 44 | 33 |
| <i>Freight Forwarding</i> | 43 | 41 |
| <i>Customs Clearance</i> | 41 | 33 |
| <i>Cross-Docking</i> | 31 | 41 |
| <i>Shipment Consolidation/Distribution</i> | 30 | 41 |
| <i>Selected Manufacturing Activities</i> | 24 | 11 |
| <i>Product Marking/Labeling</i> | 24 | 37 |
| <i>Consulting Services</i> | 24 | 19 |
| <i>Order Fulfillment</i> | 23 | 7 |
| <i>Product Returns and Repair</i> | 17 | 22 |
| <i>Information Technology</i> | 17 | 19 |
| <i>Procurement of Logistics</i> | 15 | 19 |
| <i>Carrier Selection</i> | 14 | 22 |
| <i>Rate Negotiation</i> | 14 | 19 |
| <i>Inventory Management</i> | 12 | 22 |
| <i>Product Assembly/Installation</i> | 11 | 15 |
| <i>Fleet Management</i> | 11 | 11 |
| <i>Distribution Control</i> | 6 | 19 |
| <i>Supply Chain Manager/Integrator</i> | 5 | 4 |
| <i>Lead Logistics Provider</i> | 5 | 19 |
| <i>Customer Service</i> | 4 | 0 |
| <i>Order Entry/Order Processing</i> | 2 | 15 |
| <i>Factoring (Trade Financing)</i> | 1 | 4 |

agreed that “third-party suppliers should provide a broad, comprehensive set of service offerings.” The relationship of this finding to the desire by customers for single-source solutions, or “lead logistics manager” relationships, will be discussed later in this report.

Views of Non-Users

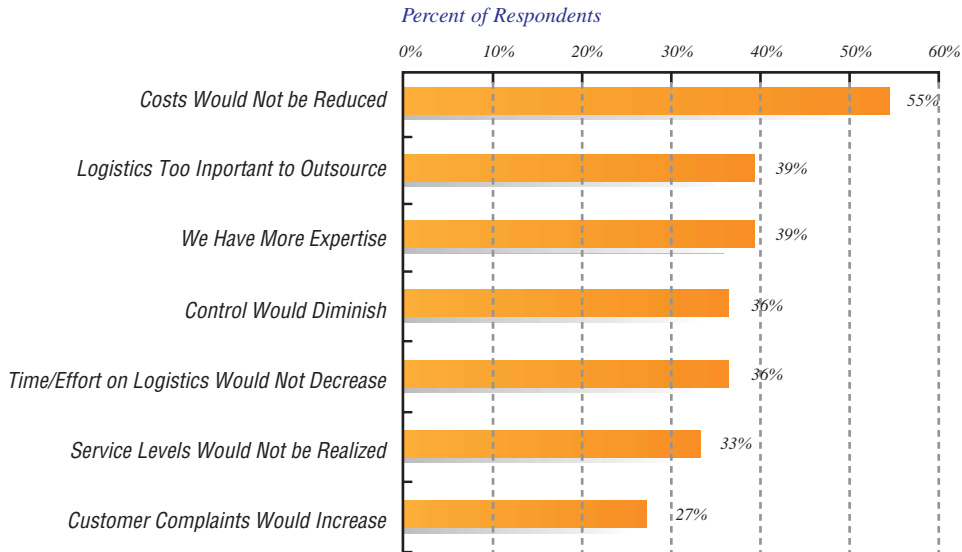
The 2002 study asked a number of questions to help better understand why some respondents were not using 3PL services. Exhibit 6 shows a number of reasons why organizations chose not to outsource logistics services. Primary among these are “costs would not be reduced,” “logistics too important to outsource,” “we have more (logistics) expertise,” “control would diminish,” and “time/effort spent on logistics would not decrease.” Interestingly, and as reported in previous years, many 3PL customers have been satisfied with such relationships because they help to *improve* (rather than diminish) control over certain outsourced activities.

Looking objectively at the range of reasons why non-users chose not to outsource to 3PLs, it is important to respect the judgment and perceptions of these respondents. Regarding issues relating to expertise and results, it would not make sense for a firm to outsource an activity when doing so may likely produce an inferior result. In cases such as this, the choice of not using a 3PL is understandable. What is important to consider in the decision to outsource, however, is whether the conduct of the object logistics activities on an internal basis represents a strategic fit with the firm’s core competencies, and whether the internal alternative will produce an acceptable financial return.

Again, the results from user firms, however, document that although there is room for improvement, users historically have been satisfied with 3PLs both from a cost and a service viewpoint.

Regardless of these explanations, good logistics management suggests that non-users should investigate the 3PL alternative. By the way, we should point out that the reasons respondents do not use 3PL services are often the very same used by other respondents to justify using those services. Of those companies not

Non-User Respondents: Rationale for Not Using 3PL Services



Note: Results apply to North American responses only. Western European results provided insufficient number of responses for meaningful analysis of non-user results.

currently using 3PL services, 91% of the respondents from North America indicate they have no future plans to do so.

Strategic Role of Information Technology

As in previous years, the 2002 3PL survey identifies what IT-based services are currently available through 3PLs, and presumably the respondents use, as well as what services those respondents will require in the future. The survey also attempts to quantify the respondents' satisfaction with these technologies, and identifies the leading 3PL-specific IT technologies. This year's findings support the contention that IT-based services are among the key expectations of 3PL customers. The findings also provide insight into the types of services that are viewed as being most critical to customer logistics and supply chain operations.

Information Technology-Based Services

Survey respondents, given a list of IT-based services, were asked which of these services were provided currently by their 3PLs, and which are among their future requirements. Exhibit 7 summarizes the results from this

question for 3PL users in North America and in Western Europe.

For North American respondents, the top five information technologies in 2002 are warehouse/distribution center management (77%), web-enabled communications (64%), transportation management (64%), shipment tracking/tracing/event management (62%), and export/import/freight forwarding/customs clearance (61%). Although the same IT-based services were included in the top five in both 2002 and 2001, it is interesting, but not surprising, to note that web-enabled communications moved from fifth place in 2001 (48%) to second place this year (64%). This 33% increase in respondents implementing web-enabled communications clearly shows the requirement for real-time information, such as inventory visibility and order status updates.

Overall, however, there were only a few other instances among North American respondents where the availability of specific IT-based services increased from 2001 to 2002.

Included were the increases in warehouse/distribution center management technologies (70% in 2001; 77% in 2002), product vertical electronic markets such as business-

to-business exchanges (0%; 11%), and supply chain planning systems (2%; 6%).

The increase seen for warehouse/distribution center management technologies suggests a continued recognition of the core value provided by such solutions to the logistics and supply chain needs of 3PL users. The increase for product vertical electronic markets suggests a change has occurred from the 2001 outlook; namely, the industry is beginning to understand the value of electronic marketplaces. Although the percentages are obviously smaller, a parallel conclusion may be reached with respect to the availability of IT-based technologies for supply chain planning.

With the exception discussed above, the availability of other IT-based services did not exhibit increases between 2001 and 2002. A case in point is that of supplier management systems: 9% of the 2001 respondents indicated

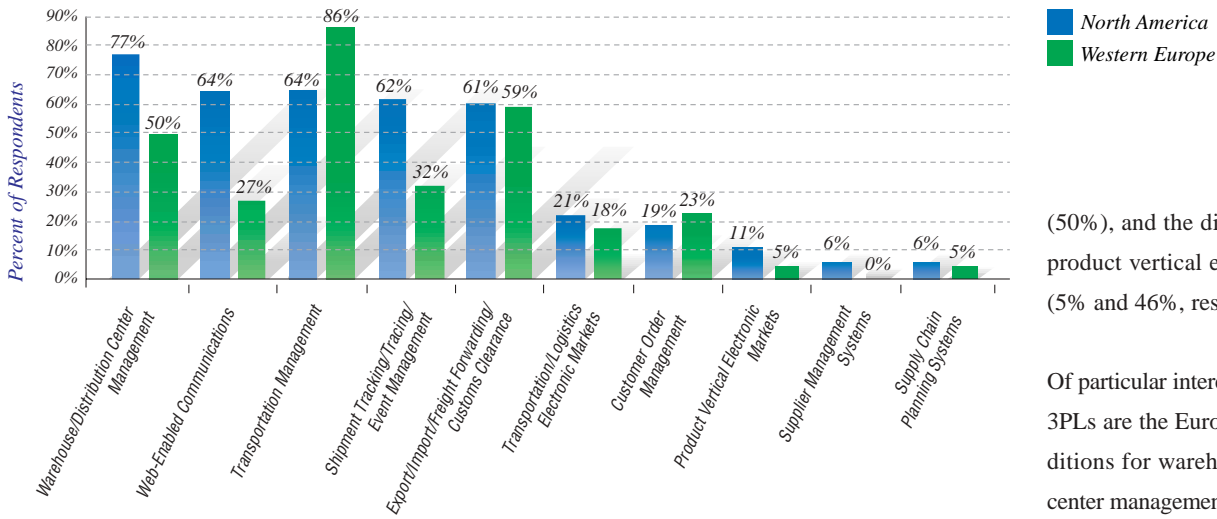
availability and 44% suggested that such systems would be among future requirements. In spite of this optimistic projection, the availability of supplier management systems in 2002 was 6%. This retraction suggests that 3PL customers are re-evaluating whether supplier management is a core competence that should be kept in-house—or that customers must develop much stronger strategic relationships with their service providers before proceeding with supplier management systems.

These observations are counter to the 2001 study figures that suggest future requirements would result in an overall increase in the availability of the IT-based services studied. A partial explanation for the decrease might be because of the trauma experienced by the economy's technology sector in the past two years, with logistics and supply chain technologies being among those significantly affected.

Exhibit 7

| Summary of Current Availability and Future Requirements of IT-Based Services | | | | |
|---|----------------------------|---------------------------|----------------------------|---------------------------|
| <i>Service Category</i> | North America | | Western Europe | |
| | <i>Currently Available</i> | <i>Future Requirement</i> | <i>Currently Available</i> | <i>Future Requirement</i> |
| <i>Warehouse/Distribution Center Management</i> | 77% | 11% | 50% | 41% |
| <i>Web-Enabled Communications</i> | 64 | 29 | 27 | 59 |
| <i>Transportation Management</i> | 64 | 18 | 86 | 18 |
| <i>Shipment Tracking/Tracing/Event Management</i> | 62 | 26 | 32 | 68 |
| <i>Export/Import/Freight Forwarding/Customs Clearance</i> | 61 | 14 | 59 | 32 |
| <i>Transportation/Logistics Electronic Markets</i> | 21 | 37 | 18 | 50 |
| <i>Customer Order Management</i> | 19 | 27 | 23 | 27 |
| <i>Product Vertical Electronic Markets</i> | 11 | 38 | 5 | 46 |
| <i>Supplier Management Systems</i> | 6 | 36 | 0 | 59 |
| <i>Supply Chain Planning Systems</i> | 6 | 32 | 5 | 41 |

Current Availability of IT-Based Services: North America vs. Western Europe



(50%), and the differences for product vertical electronic markets (5% and 46%, respectively).

Of particular interest to international 3PLs are the European market conditions for warehouse/distribution center management. Only 50% of the

Exhibit 8 shows the current availability of IT-based 3PL services in North America and Western Europe, and Exhibit 9 identifies the percentages of respondents who characterized these services as future requirements. Exhibit 8 suggests that North American 3PL users have greater availability of the following IT-based services: warehouse/distribution center management, web-enabled communications, shipment tracking/event management, transportation/logistics electronic markets, and product vertical electronic markets. Although as previously mentioned, web-enabled technology made large gains this year in North America; only 27% of the Western European respondents indicated that this technology is currently available. On a positive note, 59% of the Western European respondents indicated web-enabled communications to be a future requirement.

Shipment tracking/tracing/event management reflects similar differences in what is available now and what Western European respondents expect to require in the future. The current availability and future requirements for these services among Western European respondents are 32% and 68%, respectively. Also of note is the difference between the availability of transportation/logistics electronic markets among Western European 3PL users (18%) and the assessment of future requirements

Western European respondents say this service is currently available, compared to 77% of the North American respondents; about 41% feel it will be a future requirement, compared to the North American figure of 11%. On the other hand, Western Europe significantly leads North America in the availability of transportation management systems (86% compared to 64%). Interestingly, IT-based export/import/freight forwarding/customs clearance services have about the same current availability in both regions.

Going Forward

Respondents feel that product vertical electronic markets, transportation/logistics electronic markets, supplier management, and supply chain planning comprise the next generation of high-value differentiation between 3PL provided solutions. This prediction is supported by both the recent trends in current availability of some of these IT-based services, as well as because over 30% of the survey respondents identified each of these as future requirements. And again, web-enabled communications also received a strong response, with 29% of North American and 59% of Western European respondents indicating this IT-based service as a future requirement. The current availability of supply

chain planning technologies grew by over 200%—from 2% in 2001 to 6% this year for North American respondents. While 6% is not a particularly high level of availability, the projected rate of growth is. This rate suggests that 3PL providers are becoming more successful at increasing the complexity of service offerings, expanding capabilities further across the supply chain, and establishing more strategic partnerships with customers at a rapid pace.

Although these projections for the future use of IT-based services are somewhat optimistic, the comparisons of yearly data suggest that respondents have been overly ambitious in their projections. Only time will tell whether this is because of customer-specific or overall market and business conditions.

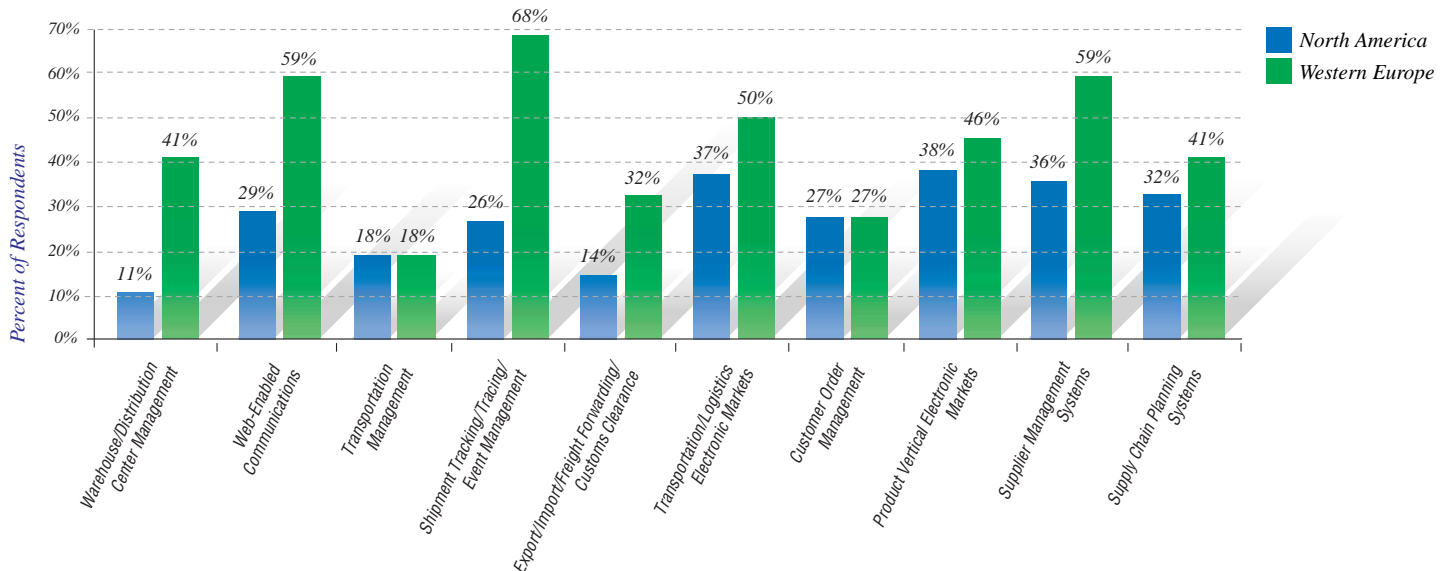
Sources of Technology

One of the objectives of this study is to determine the extent to which 3PL service providers will be expected to provide IT solutions, versus working with internal development teams or with technology vendors (such as Caps Logistics, EXE Technologies, i2, Insight, Manhattan Associates, Manugistics, and Servigistics). There were no significant surprises last year as most 3PL customers (69%) indicated they would rely on technology vendors (that is, vendors unaffiliated with 3PLs) to deliver IT solutions. The remaining 31% was split 20% and 11% between 3PLs and internal development, respectively, as to origins of 3PL-specific IT.

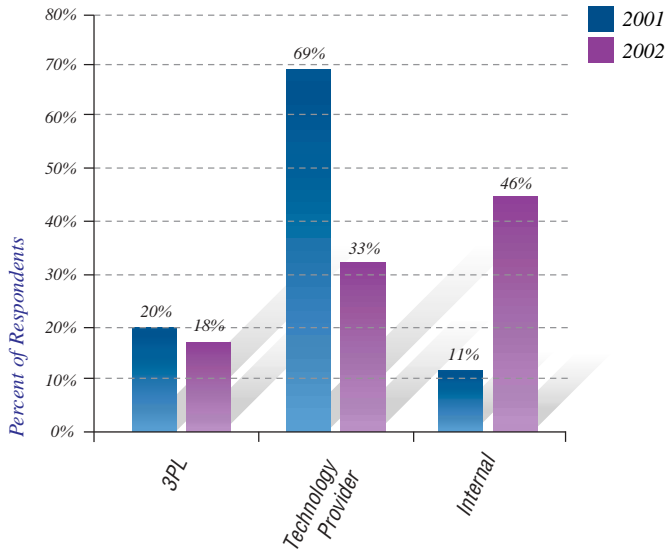
Exhibit 10 shows the North American sources of needed IT as reported in the 2001 and 2002 studies. Exhibit 11 compares the 2002 responses to this question between North American and Western European 3PL users.

Exhibit 9

Future Requirements of IT-Based Services: North America vs. Western Europe



2001 and 2002 Sources of Technology in North America



This year, North American respondents witnessed a shift to internally developed IT (from 11% in the 2001 study to 46% this year), and a decreased reliance on IT vendors (from 69% to 33% during the same time). This apparent shift is due in part to refinement in the survey question; we specifically added in 2002 “develop our own IT-based services” as a category for where 3PL-specific IT came from, in contrast to the category labeled “internal” in the 2001 study.

Because the use of 3PL-provided technologies has hovered around 20% for the past two years, the results do not support reported trends that shippers are turning to 3PLs to replace outdated legacy systems. This inconsistency bears watching in future surveys.

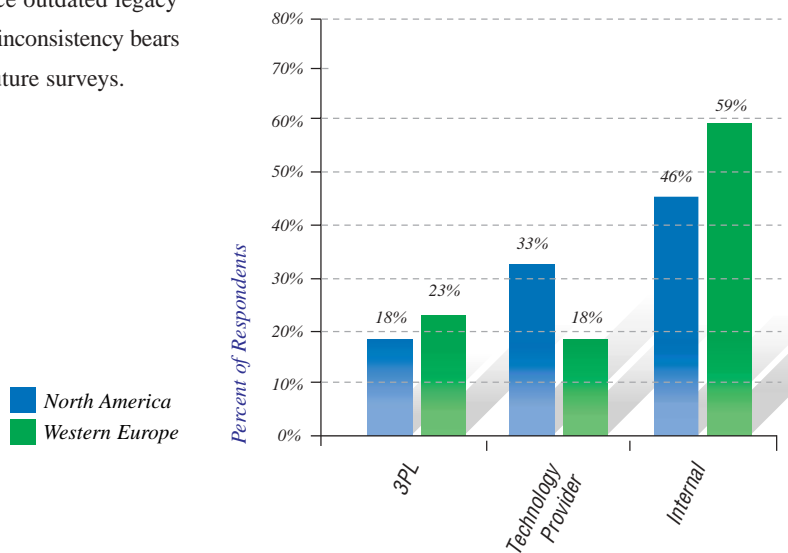
Use of Internet and Independent Electronic Markets

In 2000, this study began tracking the current and projected use of Internet-based independent trading exchanges. We tracked two categories of these exchanges: industry vertical procurement and transportation/logistics. Last year, we saw that the current availability of both remained fairly constant, while expectations for future use decreased dramatically from the previous year. Exhibits 12 and 13 show a three-year history of the use of these exchanges/markets in North America as monitored in the surveys over the past three years.

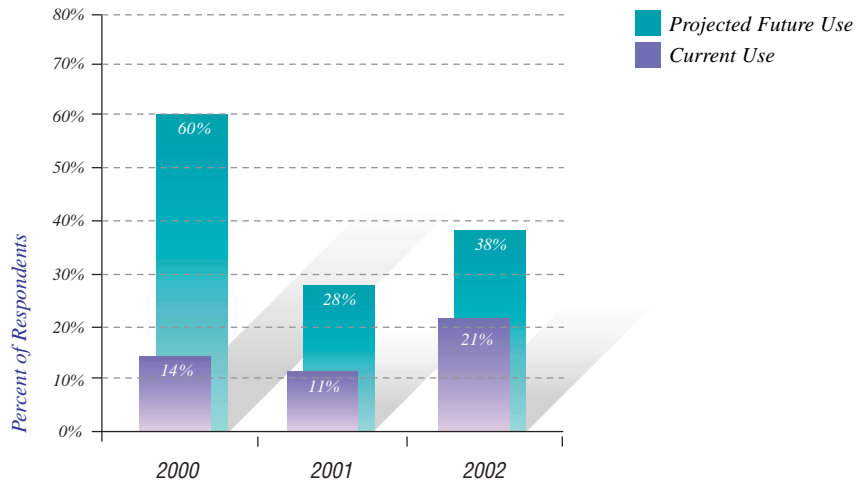
As reported in Exhibit 12, the current availability of industry vertical procurement markets rebounded this year to 21%, after dropping to 11% last year. Respondents anticipate increased demand going forward; 38% of the respondents indicated that such markets will be a future requirement. This is a substantial gain from 28% last year, but it still falls short of the optimistic 60% observed in 2000.

Exhibit 11

Sources of Technology: North America vs. Western Europe



North American Use of Industry Vertical Procurement Markets



Alternatively, referring to Exhibit 13, the current availability of transportation/logistics electronic markets has shown relatively stable growth from 10% in 2000, to 13% in 2001, to 16% this year. Projected future requirements, which decreased 21 percentage points from 2000 to 2001, dropped slightly this year from 50% to 49%. Overall, however, demand for this technology has stabilized and appears to be growing at a healthy rate.

Overall 3PL Customer Satisfaction with Technology

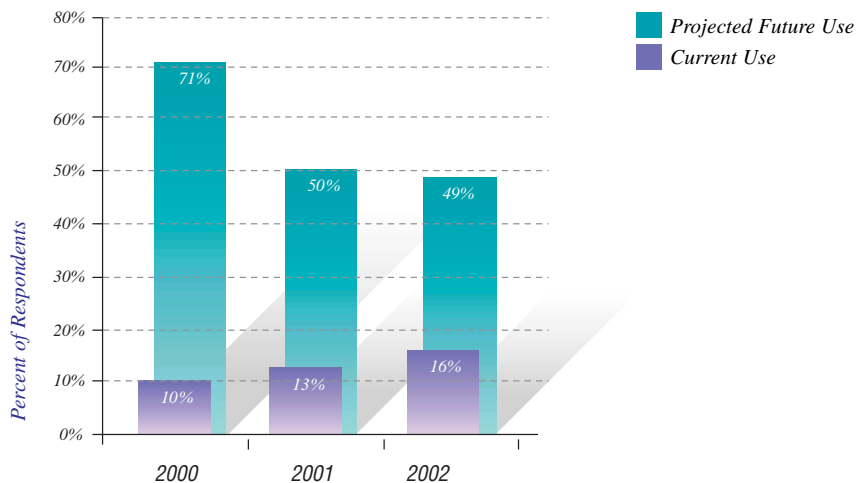
A majority of respondents (approximately 90% in North America and Western Europe) stated that IT capability is necessary, yet they do not rely on 3PLs to provide IT leadership. This is clarified in Exhibit 14 where customer perceptions of 3PL capabilities are contrasted between North American respondents and those from Western Europe. Granted, core capabilities such as warehouse management, are expected and readily available, but as such, these are not an instant qualification for a 3PL's inclusion into the "IT leadership" category. Insight into what is required for leadership can be extrapolated by comparing current availability to future requirements. In both North America and Western Europe, respondents indicated that the ratio of future requirements to current availability is greater than 3-to-1 for "product vertical markets," "supplier management systems," and "supply chain planning." Western European respondents also identified "Internet-based transportation/logistics

markets" as a significant requirement for future capability. Customers will begin to rely on 3PL service providers for more IT leadership as they successfully expand capabilities into these areas, as well as provide end-to-end integration and visibility.

Looking at the overall success customers achieve with the help of 3PLs (e.g., cost reduction, cycle time reduction, and inventory performance), the performance of 3PL-provided technology solutions is implied, but 3PL customers expect service providers to continue to expand their IT capabilities.

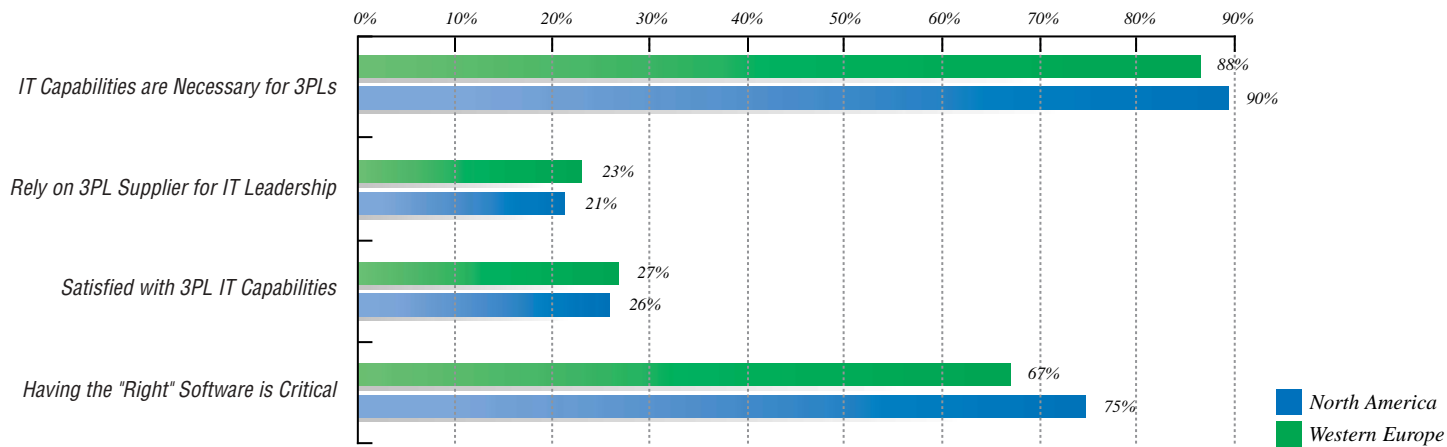
Exhibit 13

North American Use of Transportation/Logistics Electronic Markets



Customer Perception of 3PL Capabilities: North America vs. Western Europe

Percent of Respondents



Next-Generation 3PL

Since the inception of this study, we have tracked the joint evolution of 3PL service providers and their customers from relatively simple resource-driven relationships to what is now one of the most significant strategic partnerships a company can establish. Many companies that have realized the financial and operational improvements made possible through outsourcing are searching for new opportunities to leverage these partnerships. Along the way, these companies are pulling service providers deeper into their supply chains and pushing them to increase the breadth and complexity of their capabilities. This trend is leading to next-generation 3PLs (e.g., fourth-party logistics, 4PL, and lead logistics manager, LLM) and is the driving force behind most 3PL IT strategies.

We know from the survey and follow-up discussions that respondents were confused over the 4PL and LLM terminology, as well as the potential benefits from these relationships. So, while 3PLs are viewed as best suited to provide 4PL or LLM services (58% in North America; 84% in Western Europe), only about 5% of the users currently have moved to an LLM service. Clearly, much more work needs to be done to clarify distinctions and benefits of 4PL and LLM services.

The cost of entry into the 3PL arena now includes a technology solution as well as implementation capabilities for warehouse management, transportation management, and web-enabled communications. The focused efforts of 3PLs to continually upgrade and expand IT capabilities has reduced many of the once differentiating high-value technologies to what are now minimum requirements (now these are commodity services). Users of 3PL services anticipate that the near-term differentiators will include electronic markets, supplier management systems, and supply chain planning. The success of 3PLs will depend on them delivering an integrated, end-to-end solution that provides significant financial and operational improvements.

Management and Relationship Issues

As the 3PL industry continues to evolve, the challenge with developing and sustaining relationships intensifies. Although both 3PL providers and users have been improving their ability to create productive and effective business relationships, failed relationships are still prevalent. There are compelling reasons why providers should invest in their client relationships:¹¹

- ▶ *Those customers who are not 100% satisfied with their 3PL service providers will search for a better service provider.*

¹¹ Source: Customer Value Resource Center (Cleveland, OH), August 2001. The Customer Value Resource Center develops customer satisfaction and loyalty programs for its customers.

- ▶ *A very satisfied customer is nearly six times more likely to re-engage services than a customer who is merely satisfied.*
- ▶ *It costs five times as much to acquire a new customer as it does to gain repeat business from an existing customer.*

Since the inception of this survey, we have measured the level of customer satisfaction based on the degree of success with 3PL relationships. This year, which is consistent with previous results, 87% of those surveyed view their relationship as successful (59% “somewhat” successful and 28% “extremely” successful). These trends continue to be positive, but the real challenge for 3PL providers will be to shift more of these sorts of responses toward the “extremely successful” category.

To pinpoint the areas of improvement making this shift possible, we added a few questions to this year’s survey. These questions are based on a “Consumer Relevancy”¹² model that segments provider attributes into five categories:

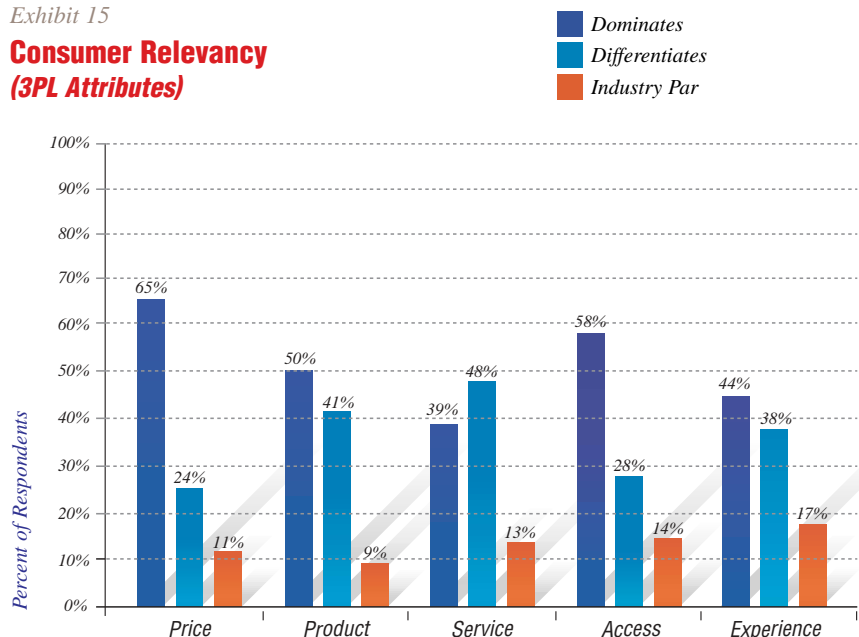
- ▶ **Price.** Attributes: Fees paid for 3PL services.
- ▶ **Product.** Attributes: Performance and capability of core or basic service offerings by a 3PL (e.g., transportation and warehousing services).
- ▶ **Service.** Attributes: Performance and capability of advanced service offerings by a 3PL (e.g., supply chain planning, supplier management, strategic consulting, change management, and order management).
- ▶ **Access.** Attributes: Ease of doing business with a 3PL.
- ▶ **Experience.** Attributes: Overall satisfaction and feeling about a 3PL.

Within each of these five attributes, respondents were asked if the 3PL “dominates,” “differentiates,” or performs at “industry par.” The overall goal for 3PL providers should be to dominate in one attribute, differentiate in a second, and maintain industry par in the remaining three Exhibit 15 provides the results from our question asking 3PL users to rate their 3PL providers across the five attributes. In general, the ratings are over 82% for “differentiates” and “dominates” combined. The providers received high ratings for “price,” “product,” and “access.” For the “service” and “experience” categories, the percentages for “dominates” ratings were noticeably lower (39% and 44%, respectively). Interestingly, the “experience” rating in Western Europe was the lowest—33%—compared to the other regions (that is, North America and Asia-Pacific). We conclude that opportunities exist for providers to improve their capabilities around advanced services. This, in turn, should have a direct correlation on overall customer satisfaction.

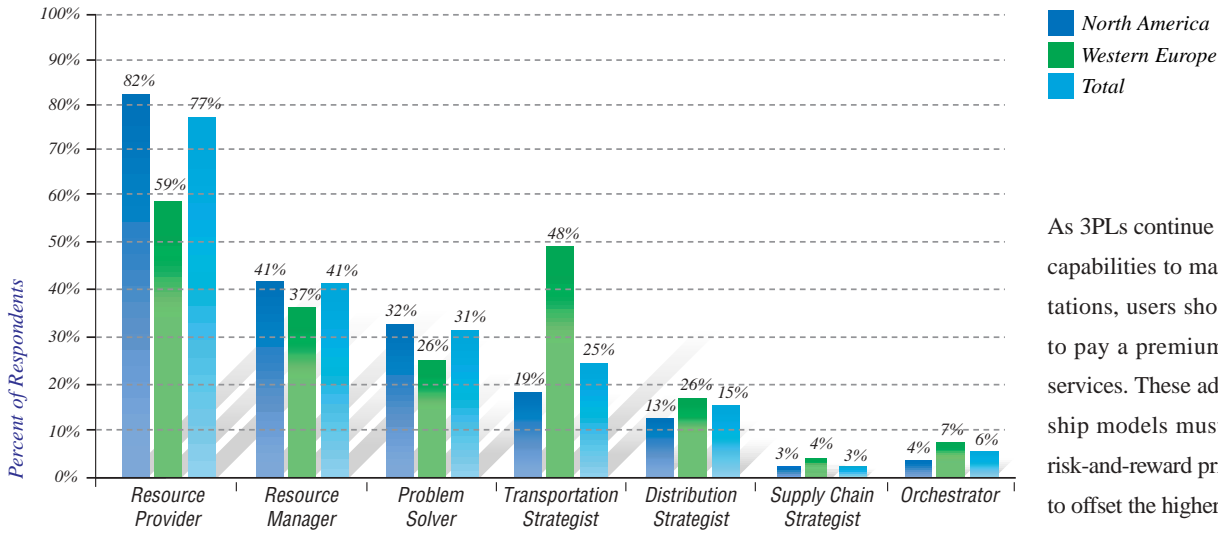
12 The Consumer Relevancy™ model is a Cap Gemini Ernst & Young licensed methodology used to assess customer buying behavior and satisfaction.

Exhibit 15

Consumer Relevancy (3PL Attributes)



3PL Provider Roles



As 3PLs continue to build out their capabilities to match client expectations, users should be prepared to pay a premium for advanced services. These advanced relationship models must incorporate risk-and-reward pricing mechanisms to offset the higher cost of satisfying service level expectations.

Key to a collaborative relationship between 3PL providers and 3PL users is whether customer expectations are properly aligned with the appropriate 3PL business model and relationship structure. 3PL users expect the continued expansion of their 3PL’s capabilities and advanced services. However, as depicted in Exhibit 16, this year’s study showed that 77% of the users view their 3PL as a “resource provider” and 41% view them as a “resource manager.” These results almost double last year’s survey responses (46% and 21%, respectively). Between 15% and 25% of the survey respondents view their 3PL providers as logistics strategists (that is, focused on transportation or distribution). Of note is that a higher percentage of European respondents view their providers as logistics “strategists.” Only 3% of the total respondents view their providers as “supply chain strategists” and 6% view them as “orchestrators.” Two conclusions can be drawn from these results. First, 3PLs are not building out their capabilities quickly enough to satisfy customer expectations. Second, 3PL users have not aligned expectations with the appropriate relationship structures and business models followed by the 3PL providers.

Relationship Processes

In a number of areas, this year’s study provides insight into the relationships between 3PLs and their customers. When asked whether “using 3PL(s) is a key to satisfying our company’s customers,” 75% of the respondents responded “yes” or “somewhat.” This is a slight decrease from last year’s response of 80%. Also, 80% responded similarly to the question of whether they feel they have a “collaborative” relationship with their 3PLs. This response equals last year’s response. There is an exception: the Western European response was lower (70%). These two findings suggest customers are concerned about developing—and benefiting from—improved relationships with their 3PL providers.

In time, we believe successful 3PL relationships will establish appropriate roles and responsibilities for both the 3PLs and their customers. While sometimes the use of a 3PL is interpreted simply as “turning over all logistics activities” to the outsourced provider, respondents to this year’s survey, as well as last year’s, suggest that a joint client-and-provider management structure represents a

highly effective way to manage 3PL relationships. Essentially, respondents are expressing their desire, as customers, to have sufficient power over operations until a track record of performance, or “trust” factor, is built. Although most customers (appropriately) retain control over strategy formulation and direction setting for their logistics activities, this hybrid approach to managing operations continues to be an innovative response to the challenge of successfully managing 3PL-client relationships.

3PL “Deal Structures”

In last year’s study, respondents were willing to share both gains and losses from alternative 3PL relationship structures. This year we asked a similar question to validate their interest toward alternative relationships and to identify what type of companies they see themselves partnering with when creating these alternative deal structures. We found that 60% of the respondents use alternative deal structures with the following types of companies:

- ▶ 48% with 3PL providers
- ▶ 22% with management consultants
- ▶ 19% with software providers
- ▶ 6% with trade exchanges
- ▶ 5% with financial institutions

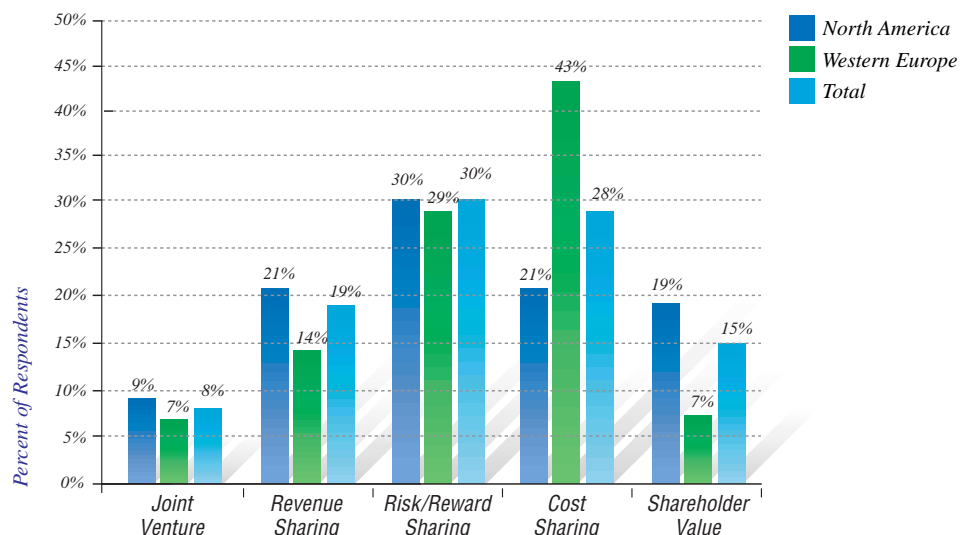
Upon further analysis, we saw that the alternative deal structures in Western Europe were more attributed to management consultants than the deal structures in North America. Exhibit 17 provides a perspective on a broader range of alternative “deal structures” that may be part of a 3PL relationship. Looking at the survey results, the

risk/reward sharing and cost sharing clearly are the preferred approaches. However, two noticeable differences between Western European and North American respondents stand out: Western Europe has a much higher incidence of cost-sharing programs (43% versus 21%), while North America has a higher incidence of shareholder value programs (19% versus 7%).

The difficulties with most value-based arrangements come down to two processes: measurement and savings distribution. Most of these arrangements are very complex to manage, requiring data accuracy and appropriate personnel to administer the process and associated baseline data. Additionally, once savings are identified, declaring the savings and distributing the dollars between supply chain partners is difficult.

Exhibit 17

Types of Deal Structures



To accommodate increasing customer expectations, implement alternative deal structures, and capture additional market share, 3PL providers are evolving their business models. These models are based on both an evolution of enhanced service offerings across the supply chain and an expansion of geographic coverage. The evolution includes a shift from logistics service providers to 3PL, to lead logistics provider (LLP), and finally to lead logistics manager (LLM), supply chain integrator (SCI), or fourth-party logistics provider (4PL).

We examined this evolution by adding some questions to this year’s survey. The responses clearly show that 3PL customers are confused by the terminology used by 3PLs, management consultants, and software providers. When we asked if the respondents understand the differences between a “3PL” and a “LLM,” over 70% responded “yes” or “somewhat.” But when we asked if LLM/SCI/4PL terminology is “confusing” and “ambiguous,” 85% responded “yes” or “somewhat.”

Respondents also had difficulty seeing the benefits of moving from a 3PL to an LLM; only 38% of the respondents replied “yes” or “somewhat” to the question about seeing the potential benefits of such a move.

Survey respondents were asked to rate the suitability of four types of companies to offer these advanced business models. As Exhibit 18 shows, the companies with the highest ratings were 3PLs and management consultants (47% and 24%, respectively).

Despite the general confusion over terminology and the value of the various logistics outsourcing models, and despite the fact that these models are new (approximately 5% of those surveyed currently use a LLM/SCI model), enough evidence exists to show that these evolved logistics outsourcing business models will continue to prosper.

Involvement of Management Consultants

Survey respondents consider management consultants valuable in helping “to assess the need for third-party services” and to assist with the “technology implementation and integration” (48% and 62%, respectively). Among the management consulting services that were not as desirable: “manage negotiation process with third-party suppliers” and “help manage multiple providers of component supply chain services.”

Although the results were objectively obtained, they understate the extent to which current and potential 3PL users actually do involve management consultants. Not surprisingly,

Exhibit 18
Types of Companies Best Suited to Offer LLM/SCI Services

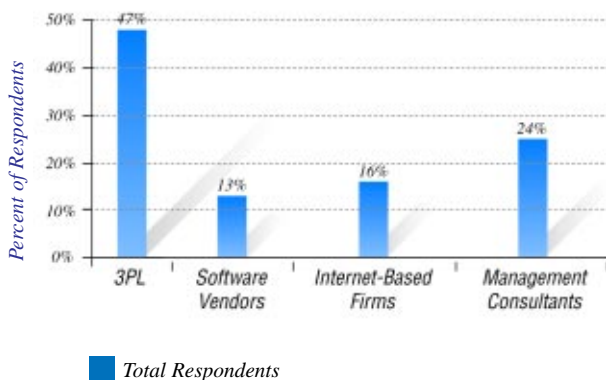
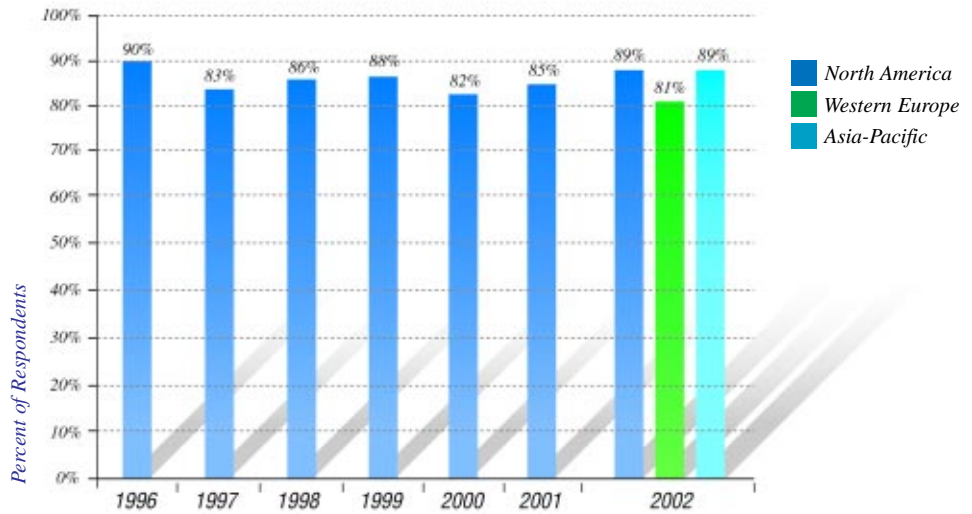


Exhibit 19

Customer Evaluation of Outsourcing Success (% Rating “Extremely” or “Very Successful”)



client relationships are of great interest to many management consulting firms. Obviously, the knowledge, technology, and relationship-based skills of management consultants are differentiators that can significantly benefit 3PL users.

Impacts of Globalization

The globalization of traditional businesses is a major factor affecting logistics and supply chain management. In particular, globalization involves these considerations: market expansion, new sources of supply, advanced security processes, continuous improvement initiatives, and the redesign of logistics and supply chains for greater efficiency and effectiveness.

To cover more of the world, we expanded this year’s survey to include 3PL users in Western Europe and Asia-Pacific. Approximately 41% of the 3PL study respondents worldwide felt that 3PL providers would be able to keep up with the challenges of global supply chain integration. This percentage is less than last year’s study. However, 50% of those surveyed felt that 3PLs would be up to this challenge. This change suggests a large opportunity for improvement by those 3PLs that provide global supply-chain solutions. This change also represents a key challenge for firms providing 3PL services—and a challenge that we will carefully monitor in the future.

3PL users also indicated a number of factors significantly affecting the industries in which they compete. In North America, globalization was respondents’ fourth concern, coming after “significant pressures to reduce cost,” “consolidations, mergers, and acquisitions,”

and “emphasis on improved supply chain management.” This was true even though recent world events might suggest that “security issues” would be a significant factor; only about a fourth of the respondents cited it as a factor of note.

Customer Value Framework

This section focuses on the topic of customer value, and how to better understand the complex value proposition that is experienced by 3PL users. Exhibit 19 provides a seven-year summary of the percentage of 3PL users indicating overall success with outsourcing. The experience of North American users exhibits a relatively consistent pattern of users indicating that their relationships with 3PL providers were either “extremely successful” or “very successful.”¹³ As shown in Exhibit 19, the percentages for North American respondents have remained in the 82% to 90% range for the duration of the study; the most recent three years show a somewhat steady increase to the 2002 success figure of 89%. The single-year success figure for Western European respondents was 81%, and 89% for the small sample of respondents from Asia-Pacific.

13 Although the 2001 3PL study reported a success percentage of 54% for the year 2001, subsequent investigation revealed that there was a problem with the design of this survey question, such that the reported result was misleading. Upon further examination and repair to the findings, it was agreed that the 85% success figure was a better representation of users experience for 2001. The research team apologizes for the need to re-do this analysis, but hopefully the results will better reflect the perceptions of the customer.

Quantifiable Measures of 3PL Success

A series of questions asked respondents how much their logistics operations have improved. Exhibit 20 summarizes the various performance metrics North American and Western European users report for the 3PL services they receive.

Overall, these figures are relatively consistent with those from previous studies.

- ▶ *The logistics cost reduction average of 7% for North American 3PL users compared well with last year's result of 8%. The 2002 experience of Western European 3PL users was somewhat more dramatic as they reported an average of 10% logistics cost reduction.*
- ▶ *The 16% fixed logistics asset reduction for North American 3PL users also compared well with the 16% figure in 2001. (There were insufficient responses to this question from Western Europe to reliably calculate an average fixed logistics asset reduction.)*

- ▶ *As in previous years, the average order cycle length was reported to have been reduced in North America by 2.2 days; in Western Europe, by 0.9 days.*
- ▶ *North American 3PL users report an average reduction of 9% in overall inventories; Western Europeans, a reduction of 8%.*
- ▶ *3PL users in both geographic regions report reductions in their cash-to-cash cycles, thus suggesting that 3PL involvement may lead to reductions in this important supply chain metric. Such reductions cause improvements in the working capital positions of the firms involved.*
- ▶ *On the topic of service improvement, 63% of the North American 3PL users and 40% of the Western Europeans report that service improvement did occur.*

Of greater significance is the extent to which these types of benefits help improve the financial performance of the firm using 3PL services. To the extent that this occurs, it is logical to expect that overall financial metrics, including Economic Value Added (EVA) and shareholder value, also would be positively affected. Future research should focus more attention on the eventual benefits of improvements experienced by users of 3PL services.

Areas for Improvement with 3PLs

Aside from the positive success ratings and the measurable benefits from 3PL use, the study respondents reported a number of "areas for improvement" in their relationships

Exhibit 20

| Quantifiable Measures of 3PL Success | | |
|--------------------------------------|-----------------------------|-----------------------------|
| | North America | Western Europe |
| Logistics Cost Reduction | 7% | 10% |
| Fixed Logistics Asset Reduction | 16% | Insufficient sample size |
| Average Order Cycle Length Changed | From 6.5 days to 4.3 days | From 4.4 days to 3.5 days |
| Overall Inventories Reduced By | 9% | 8% |
| Cash-To-Cash Cycle Reduced | From 20.4 days to 16.4 days | From 27.3 days to 20.0 days |
| Service Improvement | 63% Yes | 40% Yes |

Exhibit 21

| Areas for Improvement with 3PLs | | |
|---|---------------|----------------|
| Areas for Improvement | North America | Western Europe |
| <i>Service level commitments not realized</i> | 54% | 63% |
| <i>Cost “creep” and price increases once the relationship has commenced</i> | 43 | 26 |
| <i>Lack of continuous, ongoing improvements and achievements in offerings</i> | 38 | 53 |
| <i>Lack of strategic management skills</i> | 36 | 42 |
| <i>Cost reductions have not been realized</i> | 36 | 37 |
| <i>Time and effort spent on logistics not reduced</i> | 30 | 42 |
| <i>Unsatisfactory transition during the implementation stage</i> | 30 | 26 |
| <i>Not keeping up with advances in information technology</i> | 29 | 37 |
| <i>Inability to form meaningful and trusting relationships</i> | 28 | 21 |
| <i>Lack of global capabilities</i> | 28 | 37 |
| <i>Technology capabilities available, but not being delivered to client</i> | 26 | 32 |
| <i>Lack of consultative/knowledge-based skills</i> | 25 | 21 |
| <i>No improvement opportunities within the last year</i> | 15 | 54 |

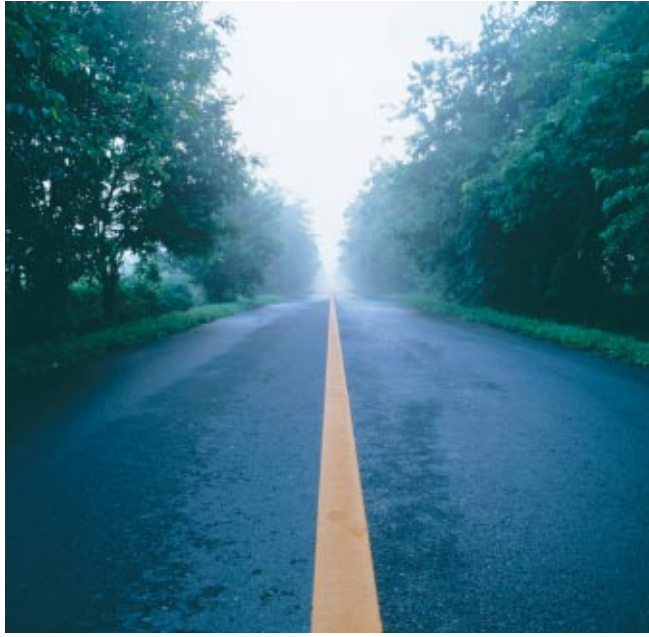
with 3PLs. Exhibit 21 summarizes the results for respondents from North America and Western Europe. The following list captures some of the key observations:

- ▶ *The need to realize service level commitments and to provide continuous, ongoing improvements and achievements in offerings were two key areas of concern.*
- ▶ *Users perceive problems with unsatisfactory transition during the implementation stage, which may be explained partly by the apparent lack of strategic management skills.*
- ▶ *To some extent, cost reductions have not been realized, and there is evidence (more among North American users) of cost “creep” and price increases once the relationship has commenced.*
- ▶ *There is a sentiment that some 3PLs are not keeping up with advances in information technology, and that technology capabilities may be available, but are not being delivered to the client.*
- ▶ *For some users, the time and effort spent on logistics has not decreased apparently as anticipated.*
- ▶ *Some users sense their 3PL is unable to form meaningful and trusting relationships, and there is a lack of global capabilities.*
- ▶ *Lack of consultative, knowledge-based skills.*

Overall, the responses from North American 3PL users were consistent with their Western European counterparts. To cite a few differences, respondents from Western Europe seemed to be concerned with issues relating to service quality and IT as areas for improvement, while North American users

felt greater opportunities to structure effective relationships with their 3PLs.

Additional questions were included in the 2002 3PL study to gain further insight into areas of strength and weakness. For several areas of strategic importance, respondents were asked to state whether they felt that their 3PL providers were accomplishing desired objectives. Generally, 3PL users felt that relevant objectives were being met with regard to supply chain improvement and geographical coverage. Areas needing improvement included solutions to eCommerce-related challenges, international supply chain, and supply chain integration. These results are similar for 3PL users in North America as well as Western Europe. 3PL providers should view this list as a starting point for continuous improvement. Overall, it suggests a need to meet service levels and cost objectives, and to avoid unnecessary increases



in pricing once the customer relationship has commenced. Also, it suggests that some 3PLs need to improve their strategic management, technology, and knowledge-based skills. Last, a number of 3PL users feel that the time and effort spent on logistics has not decreased, and that their control over the outsourced function may have lessened. In the latter instance, the move to “hybrid” management of the 3PL provider’s responsibility may be a useful alternative.

Logistics Strategic Value and the Role of 3PLs

Of the companies currently using or intending to use 3PL services, 89% of North American users and 91% of Western European users feel that “logistics represents a strategic, competitive advantage for our company.” More than 90% feel that “customers are placing greater emphasis on logistics customer service.” As suggested in each of the earlier studies, these figures imply that 3PL use is consistent with logistics being an area of strategic importance to the company. That is, a significant number of firms view logistics as a core competency and a source of competitive advantage; however, they have also elected to outsource portions of their logistics and supply chain processes.

Need for “Lead Logistics Managers”

As with last year’s research, the 2002 study shows that the future role for 3PLs will be a sophisticated one—and one that will require a great deal of integration into clients’ businesses. This observation is supported by user preferences for a broad range of 3PL services, the development and use of capable IT by 3PLs, and more collaborative relationships with 3PLs. These signals all point to a desire for 3PLs to essentially assume more of a “lead logistics manager” role than has been evident to date. This change should result in clients having more of a strategic view of their 3PLs, well above the “resource provider” and “resource manager” descriptors evident today.

In Conclusion

The trends identified in this study in the context of the 3PL marketplace are consistent with the larger trends occurring in business. The growth and development of technology capabilities, market expansion, advancements in services, and the ability to continually deliver and measure value are clearly identified as front-burner concerns for both users and 3PL service providers. This report’s conclusion comes in two sections. The first summarizes the likely changes in priorities for the 3PL industry; the second lists the value readers should get from this report.

Likely Changes for the Future

The 3PL industry continues to go through an evolutionary change. Not only are providers and their capabilities changing, but also

changing are the expectations that user firms have of 3PLs and their services. Based on the results of the 2002 3PL study, the following highlights some of the major changes that are likely for the future:

- ▶ *More demanding customer expectations of 3PL services and increasingly sophisticated requirements for technology-based and strategic supply chain services.*
- ▶ *Advanced technology offerings around strategy, planning, collaboration, supplier management, data management, decision support, and integration.*
- ▶ *Continued pressure to improve relationship skills in an effort to exceed customer expectations.*
- ▶ *Ongoing shifts in relationship models and deal structure in an effort to provide advanced services structured around mutual incentives.*
- ▶ *Improved measurement processes that address broader supply chain requirements, international trade, and partner integration.*
- ▶ *Further evidence of a need for 3PL providers or system integrators to assume a “lead logistics manager” role to more strategically serve their clients.*

Value of This 2002 Third-Party Logistics Report

Although this report principally emphasizes views about the 3PL industry from a customer perspective, we have written it to be of value to a broad range of interests in the logistics and supply chain arenas. The relevance of this study applies to users, non-users, service

providers, and management consultants from a number of vantage points:

- ▶ *Understand the development and growth of the 3PL industry.*
- ▶ *Compare personal experiences and results with market expectations and results.*
- ▶ *Gain a better understanding of the depth and breadth of 3PL services.*
- ▶ *Understand the 3PL value proposition and the results experienced by users.*
- ▶ *Assess your role within the 3PL market and determine market strategy.*
- ▶ *Understand sources of customer satisfaction and dissatisfaction with 3PLs.*
- ▶ *Utilize this information to help close performance gaps.*

From a management perspective, this study documents the increased interest in and sustainability of truly collaborative relationships between 3PLs and their customers. While the study certainly identifies ways in which all parties can improve these relationships, long-term success in the marketplace requires that more effective logistics and supply chain solutions be developed.

Finally, firms in all industries must see the 3PL option as one that can provide value creation for the user firm, its customers and suppliers, and the supply chain in general. As with last year’s study, we finish by again saying that 3PL providers will increasingly be at the focal points of strategy formulation, operational excellence, and information technology to make the maximum contribution in value creation for their customers.

Key Learnings From Facilitated Sessions with 3PL Users at CGE&Y's Accelerated Solutions Environment

What do you do with raw data from 260 returned surveys from the 2002 Third-Party Logistics Study? Although surely you have a number of ideas, and you have results from six preceding years of the study for comparison, the chance to gain feedback and insight from a group of 3PL users would be of great value. The question then turns to: How can we assemble a number of practitioners, current managers of logistics and supply chain operations, to benefit from their insight and experience? After all, these are the people who day in and day out are responsible for moving their company's goods across the globe.

Maybe it's time for a focus group? If so, then how do you entice busy, knowledgeable professionals to a "share-your-expertise" session? How do you provide a good answer to the "What's in it for me?" question that comes soon after the invitation to participate?

Enter the Accelerated Solutions Environment (ASE), Cap Gemini Ernst & Young's patented place and process that turns ordinary focus group sessions into exciting journeys of individual and group discovery. The ASE accelerates solution development and acceptance around issues ranging from the huge and complex (such as merger integration, new company development, product launches, and strategy development), to the tactical, yet far reaching (such as system implementation planning, Internet portal development, and use case testing).

What's it like? Walk into the Atlanta ASE and you immediately see books and toys scattered throughout an open and inviting space. Music wafting through this space invites you to relax and get comfortable. You will notice that almost every wall can be moved and written on. There are pictures, both permanent and temporary, to pique your curiosity and to explain the secrets of collaboration and group genius. There are models of the creative process, "vantage points," and the "Seven Domains" on the walls and windows. These models explain the secrets to building the individual and group intent so necessary to accelerate the processes of making, communicating, and implementing solutions.

This entire setting is to give you the feeling that sessions here will not be ordinary "sit 'n get" meetings. And that's true; a change in music—both in tempo and volume—is the signal that tells you it is time to do something different.

As you take your place in a section of the space set up theater style, you might still wonder if this playful place could actually yield serious results. You will not be alone.

Many ASE attendees settle into their chairs amused, yet understandably skeptical.

Sessions start with an overview of the ASE—the place, the process, and the people. The ASE is the result of years of research into how teams work and what makes them successful. The environment is the result of answering one simple question: "If you really want people to collaborate, if you really want 1 plus 1 to equal a lot more than 2, what sort of a work environment would you give them?" The ASE process is meant to appeal to all types of learners—those who learn by seeing, by doing, and by hearing. (The three groups of learners are about equal size.) The day's proceedings are supported by a group of knowledge workers who will capture your work, take care of the environment, and make the information you need available to you.

Facilitators talk about first "assignments." For the 3PL study, an assignment was to imagine yourself one year into the future and in the best possible 3PL relationship. You were then to create a model, using pictures or words, that pinpoints the characteristics of that relationship, as well as the path that took you there. You will have your own wall to address this scenario.

Such scenarios not only help you imagine yourself in the future, they also make it "easier to get here from there than it is to get there from here." This "axiom" is based on research that shows that executives can pinpoint key success factors more easily if they can place themselves in a future success scenario and look back, than if they take the conventional approach to look forward.

As you share your wall with your colleagues from other industries, you start to get what you came for. And so do your hosts. You are giving—and getting—insights. For this Seventh Annual 3PL Study, the insights explained why the survey numbers were what they were. Moving from one exercise to the other gave attendees fresh insights

into establishing 3PL relationships, measuring the success of an outsource solution, and identifying the key success factors in implementing the outsource solution.

The day goes by quickly. You learn. You inform others. And you have a good time in a unique environment using a unique process. You also get a binder documenting the day's proceedings, including reproductions of your panel, as well as all of the other participants' panels, plus a summary of the discussions throughout the day. No waiting days, weeks, or even months to receive a record of the day's events.

This is how CGE&Y, Georgia Tech, and Ryder enticed 20 logistics executives, from Fortune 50 companies to small independents, to assist in explaining the results from this year's annual 3PL survey. And we heartily thank those executives and their companies who assisted us: Agilent Technologies, Arris, Cisco, GlaxoSmithKline, Home Depot, Honda Motor Alabama, and Interface Americas, Inc.

The sections that follow attempt to capture the key learnings and experiences from the ASE session. Armed with survey results from the 2002 3PL study, the participating industry executives provided a great deal of fresh insight and interpretation.

The Strategic Role of 3PL Information Technology

The use of IT in relation to 3PL operations was the focus of one of the sessions at CGE&Y's ASE. It began with a discussion about the concept of LLM. While the precise meaning of logistics terminology is often elusive, the IT ASE participants defined LLM as a "logistics service provider who designs, builds, and manages its customers' supply chain assets, processes, people, and technology." Such supply chain management involves developing the strategy, building or implementing changes to the network, planning operations, executing and managing daily activities, monitoring events and correcting problems, measuring performance against plans, adjusting and re-planning, and administering back-office activities.

Defining the role of LLM led to the biggest issue discussed at the IT session: control of IT. The ensuing discussion focused on a common theme; it reflected the difficult decisions customers must make as they search for new ways to benefit from outsourcing. We use the word "control" here to stay true to the actual ASE session dialogue. The usage can be interpreted two ways. First, 3PL customers realize that to take advantage of more advanced 3PL capabilities, or to enter into an LLM agreement, they will need to share sensitive and historically confidential information. Second, involving a 3PL in actual management activities, again potentially as an LLM or as a 4PL, does transfer ownership of strategic responsibility. Both of these situations require 3PL customers to trade some "control" for improved financial and operational performance.

The ASE participants recognize the importance of developing strong partnerships with 3PL IT service providers; however, they are finding it difficult to define exactly how closely they should be linked. Some customers do not want to release too much control because it links them with a 3PL provider too tightly. And yet, linkages that are too loose may result in reduced performance. The challenge is finding the right balance.

Moreover, the ASE participants generally agree that 3PLs have made (and are making) substantial investments in IT to respond to perceived demand. However, some feel that many 3PL customers are not necessarily taking advantage of these capabilities. As a result, some 3PL customers, or companies that have unique requirements, are bearing large costs by continuing to maintain their own IT applications. Incidentally, respondents to the 3PL survey noted that many 3PL solutions are generally not "systems" intensive, yet those same respondents indicated that "systems expertise" is a key requirement for 3PLs.

“We noticed that where the service level was low, so was the collaborative relationship with the 3PL. If you don't invest in the relationship, you don't reap the benefits.”

The ASE participants identified a number of requirements that must be in place before a 3PL user can benefit from a 3PL's IT. For starters, a 3PL's ability to implement solid, consistent processes and operate the technology is fundamental. Data integrity is also critical. Likewise, avoiding complexity at the outset is key. Other critical success factors are:

- ▶ *In the area of deployment*
 - ▶ *Clearly defined requirements*
 - ▶ *Effective integration*
 - ▶ *Avoiding customization*
 - ▶ *Avoiding complexity*
 - ▶ *Solid design tools*
- ▶ *In the area of functionality*
 - ▶ *Leading applications*
 - ▶ *Adaptive/modular technology*
 - ▶ *Real-time focus*
 - ▶ *Visibility/supply chain event management*
 - ▶ *Performance scorecard*
(customer metrics/3PL metrics)
 - ▶ *Web enabled*

Some of the common challenges noted revolved around companies with multiple legacy systems across divisions, companies using various unintegrated planning tools, and companies operating across multiple infrastructures. Session participants felt that 3PL companies planning to provide LLM services will need superior systems integration capabilities, a comprehensive suite of world-class technology components, and supply chain thought leaders who can provide strategic guidance to customers, as well as manage operations.

Moreover, logistics functions such as transportation management, distribution management, inventory management, procurement, import/export, and order fulfillment all need to be integrated. Toward that goal are enterprise application integration (EAI) tools, such as SeeBeyond, webMethods, and IBM's WebSphere software platform, which are also needed to achieve real-time information exchange between supply chain trading partners. Electronic data interchange (EDI), while not viewed as a cutting-edge integration capability, is still an enabler and will continue to be widely used for batch-type information exchange until a replacement, such as XML-based communications, is universally accepted. (XML technology is still maturing as standards and industry groups debate formatting standards and content definitions.)

Integration efforts are benefiting from the Internet and, as Web services and Microsoft .NET initiatives grow, it will become even easier for supply chain partners to collaborate. These integration tools will also aid 3PLs with efforts to reduce inventory, manage daily operations, and improve end-to-end supply chain performance. The challenge now is to integrate all functions and parties in the supply chain—and to do so as simply, cheaply, and quickly as possible.

The Strategic Role of 3PL Relationships

As in previous years of this survey, a gap between customer expectations and what providers deliver still exists. In some areas, this gap has widened. Users expect providers to continually advance their service offerings and capabilities, but at the same time users view these providers merely as “resource providers” versus “strategists.” There is a great deal of discussion and interest around advanced relationship structures, such as logistics outsourcing joint ventures, but there are far fewer examples of successful implementation.

The ASE participants agree that both users and providers of 3PL services are aggressively searching for innovative ways to manage outsourcing relationships in an effort to close this gap. In the meantime, users and providers should consider these three fundamentals in any outsourcing arrangement:

1. *Properly align customer expectations with service level agreements and associated relationship models.*

2. *Jointly map out the long-term relationship between user and provider.*
3. *Implement a relationship structure that facilitates ongoing improvement and mutual incentives for both parties.*

The ASE participants agree that the market is starting to address some of these fundamentals, but the complexities associated with technology changes, globalization, acquisitions, measurement processes, and advanced business models is making outsourcing challenging.

One of the common themes in the ASE sessions focused on how service offerings are linked to relationship structure and pricing models. The more basic services, like transportation and warehousing, were likened to commodity-based relationships. Value-added services, like sequencing and light manufacturing, were likened to contract-based relationships. Advanced services, such as technology hosting, supply chain integration, and consulting, were viewed as being more similar to partner-based relationships. As the service offerings are expanded, the relationship model becomes more complex while value or benefits increase. Exhibit 22 shows this service offering migration as it relates to the relationship structure and pricing models.

The key challenge for service providers is to keep up with ongoing advancements while satisfying the shifts in customer expectations. In the ASE sessions, participants mapped these relationship shifts against logistics outsourcing industry models, plus they identified the key attributes of each model. (See Exhibit 23.)

For each of the service offering categories, the team discussed pricing, governance, and measurement models, as well as associated pros and cons. The results are shown in Exhibit 24.

No matter which relationship model is selected, companies must consider their current organizational constraints and clearly determine the overall objectives and expectations of a logistics outsourcing arrangement.

Critical Success Factors

As part of every new and ongoing outsourcing relationship, companies should evaluate their current situation, related business drivers, service expectations, and overall objectives behind outsourcing. Here are the critical success factors to consider:

- ▶ *Scope and service definition*
- ▶ *Cost and service baseline development*
- ▶ *Common scorecard and data management strategy*
- ▶ *Defined communication channels*
- ▶ *Management support structure*
- ▶ *Cultural alignment*
- ▶ *Clearly communicating scope of service and capabilities*

Exhibit 22

The Migration of 3PL Service Offerings

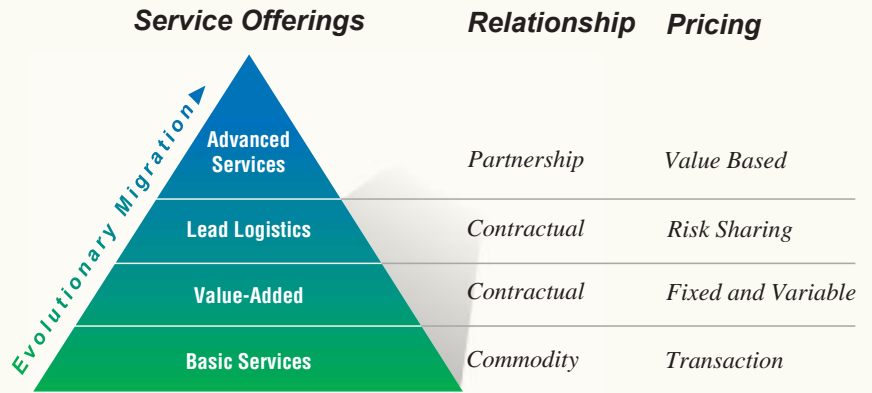
- ▶ Flexible financial structure with a rigorous measurement process
- ▶ Migration plan towards advanced services
- ▶ Mutual expectation setting process
- ▶ Organization change management requirements
- ▶ Defined standard operating procedures
- ▶ Clear exit strategy

High-Level Road Map

The ASE participants mapped out some key implementation steps for current users of 3PL services, as well as those customers who are considering outsourcing:

1. Assess current situation, both capabilities and needs.
2. Understand future market and business strategy, including organization readiness and business drivers.
3. Select or adjust business models, noting service, pricing, governance, and measurement issues.
4. Address critical success factors and develop comprehensive risk mitigation plans.
5. Assess partner fit or selection, including assessing current relationship or evaluating new providers.
6. Implement and iterate; that is, implement new or advance the existing relationships, while re-evaluating all relationships on an ongoing basis.

As service providers continue to enhance and improve their capabilities, more companies will continue to outsource key logistics functions. At the same time, these customers are becoming more advanced in their capabilities and purchasing decisions. They are also becoming much more



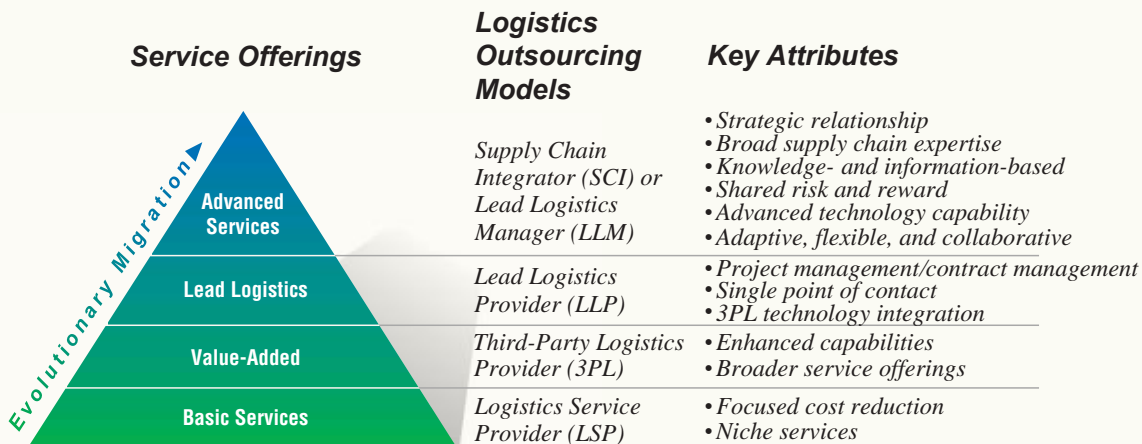
aware of the benefits and pitfalls of outsourcing. These two factors will continue to advance the 3PL relationship models toward more complex and creative structures—ultimately improving the value propositions for both users and providers.

The Strategic Role of 3PL Customer Value

According to the ASE participants, their companies are relentlessly searching for innovative ways to reduce cost and improve service. Not only did they suggest these objectives may be achieved through more efficient and effective logistics and supply chain practices, they recognize that outsourcing logistics services is a key strategy to meeting those objectives.

Exhibit 23

The Change in Key Attributes as 3PL Service Offerings Migrate



| 3PL Service Offering Categories | | | | | |
|---------------------------------|-------------------------------|--|---|--|---|
| Service Category | Pricing | Governance | Metrics | ASE Evaluation | |
| <i>Basic Services</i> | | | | <i>Pros</i> | <i>Cons</i> |
| | <i>Cost plus</i> | <i>Fee for service</i> | <i>Cost reduction</i> | <i>Flexible and simple</i> | <i>Tactical</i> |
| | <i>Transaction</i> | <i>Contractual</i> | <i>Equal service levels</i> | <i>Lower cost</i> | <i>Lacks incentive</i> |
| | <i>Fixed fee</i> | <i>Tactical</i> | <i>Responsiveness</i> | <i>Speed to implement</i> | <i>Less upside potential</i> |
| <i>Value-Added Services</i> | | | | <i>Pros</i> | <i>Cons</i> |
| | <i>Cost plus</i> | <i>Fee for service</i> | <i>Cost reduction</i> | <i>Continuous improvement</i> | <i>Span of control</i> |
| | <i>Transaction</i> | <i>Service level agreements</i> | <i>Throughput</i> | <i>Service level improvements</i> | <i>Difficult to measure</i> |
| | <i>Fixed and variable</i> | <i>Longer term agreements and basic incentives</i> | <i>Fixed capital efficiency</i> | <i>Larger upside</i> | <i>Competing incentives between client and provider</i> |
| <i>Lead Logistics</i> | | | | <i>Pros</i> | <i>Cons</i> |
| | <i>Fixed and variable</i> | <i>Multi-tiered provider structure</i> | <i>Total cost reduction and improved throughput</i> | <i>Advanced upside potential</i> | <i>Difficult to implement and measure</i> |
| | <i>Shared risk and reward</i> | <i>Advanced service and incentive agreements</i> | <i>Cash flow and working capital</i> | <i>Advanced continuous improvement</i> | <i>Increased risk and span of control</i> |
| <i>Advanced Services</i> | | | | <i>Pros</i> | <i>Cons</i> |
| | <i>Value based</i> | <i>Multi-tiered partnership structure</i> | <i>Shareholder value/EVA</i> | <i>Aligned incentives</i> | <i>Complex structure and onboarding process</i> |
| | <i>Equal risk and reward</i> | <i>Advanced service and incentive agreements</i> | <i>Revenue improvements</i> | <i>Eliminates need for complex measurement processes</i> | <i>Equity structure could influence decisions</i> |
| | <i>Shareholder value</i> | <i>Joint venture</i> | <i>Tax reductions</i> | <i>Speed to implement and defined exit strategy</i> | <i>Broad support requirements</i> |

While the participants agree with the 2002 study result that most 3PL users feel that their relationships with 3PLs are successful, they clearly believe that there is major room for improvement in areas such as service, cost reduction, and IT capabilities. In short, as mentioned in the previous section about 3PL relationships, the participants feel that a significant gap exists between the expectations from 3PL services and the realization of their value.

There are several reasons for this gap. The first is that user expectations have risen faster than the 3PLs' ability to respond. ASE participants say they are becoming better informed and skilled as buyers of 3PL services, so this explanation is understandable. A second possibility is that 3PL performance has suffered, given all the pressures facing 3PLs today. Third, the 3PL user-customer relationship, and the operating imperatives of that relationship, may have become sufficiently more complex.

The gap may be—we hope—a short-term phenomenon. It may simply be “growing pains.” Certainly, there are additional explanations that could be considered, but in any case, it is likely that multiple causes may be at play.

More important, the ASE participants questioned the “value proposition” of using a 3PL. The participants agree with the survey finding that the “value was there” from using 3PL services. Their explanation of this was that “the (use of) 3PL started as a very tactical thing, and now as companies are going global, 3PLs are trying to keep up.” That is, the participants are suggesting customer expectations have been increasing faster than the track record of the 3PLs.

Common Themes

To highlight some of these ideas, one of the ASE breakout sessions focused specifically on the components of value that contributed to successful 3PL relationships. The objective was to identify the common themes that characterized relationships where measurable value was created by the 3PL for the customer. These factors, along with their implications, are as follows:

- ▶ **Partnering Approach.** *The ASE participants speak positively about the relationships between 3PLs and customers. A number of key elements made those relationships positive, including long-term commitment (by both parties), selective partnering strategies by both parties, open/honest communication, dedication to continuous improvement, and the balance between price versus service. Also, the participants stressed the need for all parties to differentiate terms such as RFP (request for proposals), RFQ (request for quotation), and RFI (request for information), and to know which of these bidding mechanisms is appropriate at various stages in the 3PL relationship.*
- ▶ **Collaboration.** *The ASE participants agree that collaborative relationships with their 3PLs is essential in the value-creation process. The following are some of the collaborations they suggest: operational improvements by outsourcing non-core competencies; improving market and asset usage through collaborative relationships; identifying risk-mitigating strategies that decrease the need for capital outlays for entering new markets; jointly developing products to go to market; off-loading assets to other parties that may be able to achieve a more acceptable return on investment; and assisting 3PLs to improve their operational performance through, for instance, better utilization of capacity.*
- ▶ **Technology.** *Although ASE participants acknowledge that the role of technology is critical, they agree that technological innovation is occurring at a faster rate than the 3PLs can successfully implement. The participants urge simplicity, recommending a continual focus not on the technology itself, but on the results and improvements to be achieved through technology. They also feel that technology should be flexible and adaptable, fully integrated with client IT capabilities.*
- ▶ **Service Offerings.** *The ASE participants debated about how deep the 3PLs should go into other services. They feel it is important to recognize the hierarchy of service types from the more basic, commodity services (e.g., international, freight forwarding, transportation, and warehousing) to those that are more strategic and that could potentially yield greater profits.*
- ▶ **Flawless Execution.** *ASE participants suggest 3PLs could dominate on service and differentiate around experience. Aside from an overall concern for meeting agreed-upon performance metrics, users agree that the 3PLs need to do a better job of ensuring consistency of service across geographically diverse regions and locations.*
- ▶ **People.** *Selecting and retaining skilled, qualified people is of great importance to any 3PL operation. High among the people priorities are cultural fit, needed skill sets, and flexibility to respond to sometimes rapidly changing customer needs.*
- ▶ **Financially Acceptable Results.** *Increasingly, 3PL users are asking for financial justifications to outsource logistics services and to regularly evaluate their continuing acceptability. This has created significant interest in developing responsive return on investment calculations. It has also boosted the need to communicate financial results to other corporate executives in terms they understand (e.g., economic profit, economic value added, and return on assets).*

No one at the ASE was surprised that more and more companies are choosing to outsource key elements of their logistics process. Provider firms are enhancing and improving their capabilities; user firms are becoming far more knowledgeable and adept at effectively using these capabilities. User firms are experiencing a number of strategic benefits: profitable growth, cost and risk minimization, tax minimization, working capital efficiency, and fixed capital efficiency. Both 3PL buyers and 3PL sellers now know more about the goals and objectives of their respective businesses. The end result is that the overall sophistication of the buyer-seller relationship in the 3PL business is improving.

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The Georgia Institute of Technology, located in Atlanta, is a leader in logistics and supply chain education. Through its School of Industrial and Systems Engineering (ISyE) and The Logistics Institute (TLI), Georgia Tech is committed to serving logistics educational needs through its degree programs and its comprehensive professional education program. Included are two short course series—the Logistics Professional Series and the Logistics Management series—and a fully-accredited Executive Master’s in International Logistics (EMIL) program. Also, TLI sponsors a Global Logistics Program, a TLI Asia-Pacific program in partnership with the National University of Singapore, a partnership with the National Science Foundation and more than 20 corporations and government agencies, and a Leaders in Logistics Program. Georgia Tech and The Logistics Institute impact logistics and supply chain direction setting and strategy formulation through its Supply Chain Executive Forum, founded in 2002. Information about The Logistics Institute may be located on the web at www.tli.gatech.edu while information about Georgia Tech’s ISyE programs may be found at www.isye.gatech.edu.



Ryder is a leading Fortune 500 global provider of supply chain management solutions, including integrated transportation and logistics services, which enable customers to improve the flow of goods, information, and funds throughout their supply chains. Ryder integrates world-class people, business processes, and enabling technologies in order to deliver improved shareholder value, as well as assist customers in meeting their business objectives. The Ryder value framework incorporates cost and operating efficiencies and profitable growth through customer satisfaction.

Ryder has been recognized in *Fortune* Most Admired Companies, *Forbes* “Magnetic 40” as “Best in Transportation and Logistics,” *Inbound Logistics* Top Third-Party Logistics Provider (3PL) for five consecutive years, and is the 2002 recipient of the National Safety Council’s Green Cross for Safety medal. Ryder serves 14,000 customers, employs 30,000 people, and has 2001 revenue of \$5-billion. Ryder’s stock is a component of the Dow Jones Transportation Average and the Standard & Poor’s 500 Index. For more information on Ryder, visit www.ryder.com.



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