Globalization Drives Market Need for Supply Chain Segmentation:
Research & Key Strategies

Sponsored by:

Amber Road
POWERING GLOBAL TRADE

Conducted by:

PRG
PEERLESS RESEARCH GROUP

On behalf of:

SupplyChain
MANAGEMENT REVIEW

Logistics
MANAGEMENT

Introduction

Businesses continue look to their supply chain operations for opportunities to streamline business processes, reduce costs, improve customer service, gain a competitive edge, and face any disruptions caused by global commerce uncertainties.

Particularly among companies with thousands of SKUs and diverse product lines, there is a need for differentiated replenishment and logistics approaches across complex supply chains. For example, an organization may need supply chain processes that are specialized for goods with unpredictable demand, such as the latest fashion. The same organization may also provide goods with more predictable demand that require steady replenishment. Similarly, other goods may have higher import and export compliance requirements that must be carefully managed.
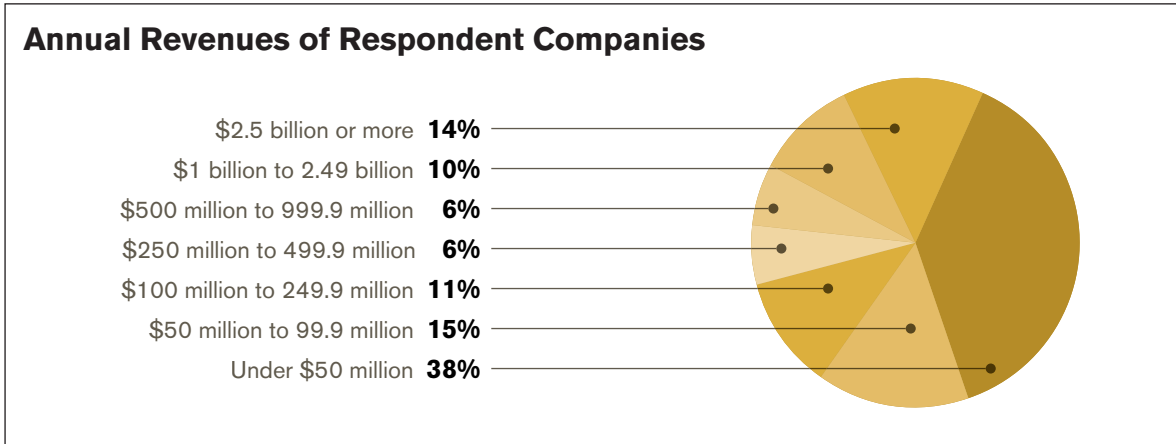
This division of product lines and SKUs based on factors such as criticality, selling cycle and rate of sales, is known as segmentation. To assess how businesses are pursuing supply chain strategies to support that segmentation, Peerless Research Group and Amber Road, recently conducted a study to look at the ways organizations are collecting and analyzing information, addressing supply chain complexities, and collaborating and communicating with sourcing partners and customers, especially within the context of their segmentation strategies.

What we heard from our respondents is that businesses today are looking to gain greater knowledge and control over complex, multidimensional and global supply chains. Related challenges are causing supply chain managers to streamline operations to better manage end-to-end supply chain processes, control costs, and predict and meet customer demand. Supply chain segmentation is one approach that organizations are embracing to help better manage supply chain resources and understand customers' buying behaviors.

Respondent Overview

The findings in this report are based on information collected from 929 top logistics and supply chain managers. Respondents were predominantly Logistics, Distribution or Operations Management (19%), Vice Presidents (15%), Corporate Management (13%) and Supply Chain Management (10%).
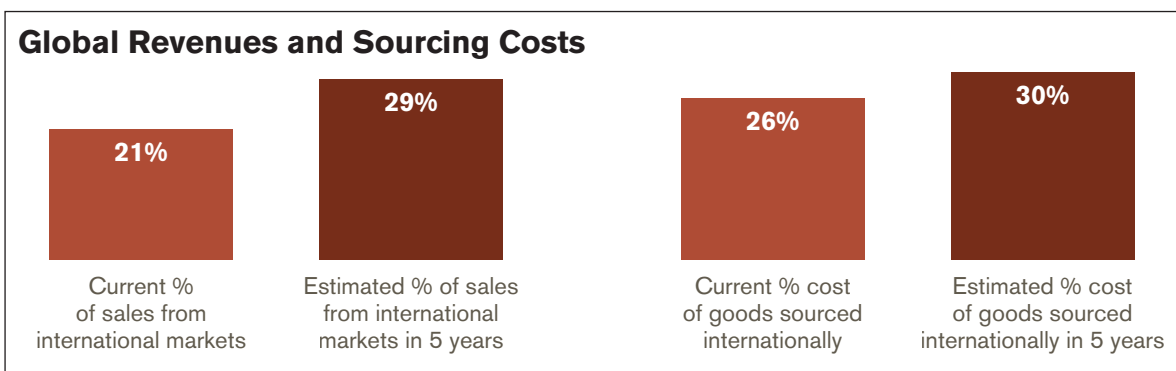
Respondent companies are diverse: one-fourth (24%) work at enterprises reporting revenues of $1 billion or more, over one-third (38%) at companies in the $50 million to $1 billion range, and one-third (38%) with businesses having $50 million or less in revenues.

Annual Revenues of Respondent Companies

$2.5 billion or more	**14%**
$1 billion to 2.49 billion	**10%**
$500 million to 999.9 million	**6%**
$250 million to 499.9 million	**6%**
$100 million to 249.9 million	**11%**
$50 million to 99.9 million	**15%**
Under $50 million	**38%**

A broad range of industries were also accounted for and included manufacturers of chemicals and pharmaceuticals, food and beverage, automotive and transportation equipment, heavy manufacturing, etc. Non-manufacturing businesses such as retailers as well as 3PLs and transportation services were also surveyed.

At the present time, 21% of responding companies' sales comes from international markets, with that figure expected to climb during the next five years to represent an average of 29% of companies' overall earnings.

Correspondingly, the percentage spent on goods sourced globally will also jump, growing from an average of 26% now to 30% in five years.

Global Revenues and Sourcing Costs

21%	29%	26%	30%
Current % of sales from international markets	Estimated % of sales from international markets in 5 years	Current % cost of goods sourced internationally	Estimated % cost of goods sourced internationally in 5 years

Forty percent of companies presently work with at least 20 global suppliers and 12% partner with over 100 providers globally. Global providers comprise about one-third (31%) of all suppliers with whom businesses partner. Logically, as the number of distinct supply chains increases within a company, so does the number of global suppliers with whom they work. Those managing one or two supply chains work with an average of 62 different suppliers while those running more than 10 different networks may average as many as 450 global suppliers.
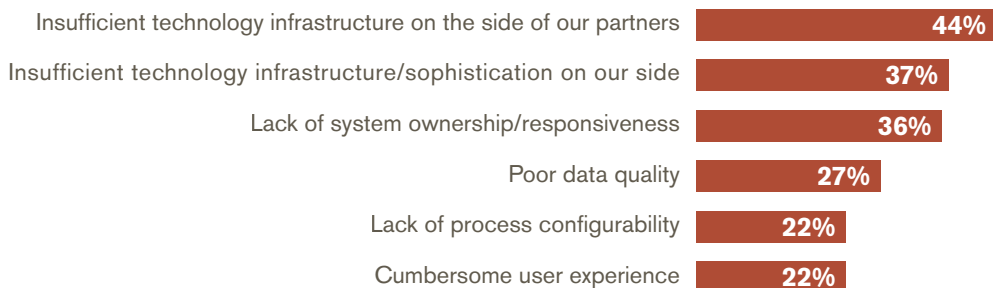
Supply Chain Challenges

Rising transportation rates, fluctuating customer demand, increasing customer expectations, and global economic uncertainties are among the leading challenges and threats businesses encounter in operating their supply chains.

Top Supply Chain Challenges

Challenge	Percentage
Rising transportation rates	50%
Fluctuations in customer demand	50%
Increasing customer expectations	42%
Global economic turmoil and uncertainty	38%
Changing regulatory requirements	35%
Ability to find, train and keep people with the right skills	35%
Access to accurate, time-sensitive information	31%
Ability to form deeper relationships with supply chain partners	30%
Collaboration and integration between supply chain and product development partners	27%
Keeping up with new technology capabilities and investments	26%
Globalization of customers and suppliers	25%

While most respondents feel it's critical to provide access to supply chain information and processes to suppliers and customers, many encounter hurdles in doing so. Incompatibilities attributed to sub-par technology or poor infrastructure on the partners' side, inadequacies with their own internal solutions or a failure in leadership or taking "ownership" of a solution are main obstacles.

Challenges in Extending Business Processes to Supply Chain Partners

Challenge	Percentage
Insufficient technology infrastructure on the side of our partners	44%
Insufficient technology infrastructure/sophistication on our side	37%
Lack of system ownership/responsiveness	36%
Poor data quality	27%
Lack of process configurability	22%
Cumbersome user experience	22%

Organizations typically gain connectivity with their suppliers using various means. While most businesses (88%) work directly with their suppliers via traditional phone and email communication, more than one-fourth (28%) also network with partners through an in-house web-based portal. Twenty-one percent use a third-party solution running on their ERP platform or delivered from another software provider; 14% use a system through their logistics service provider (LSP).
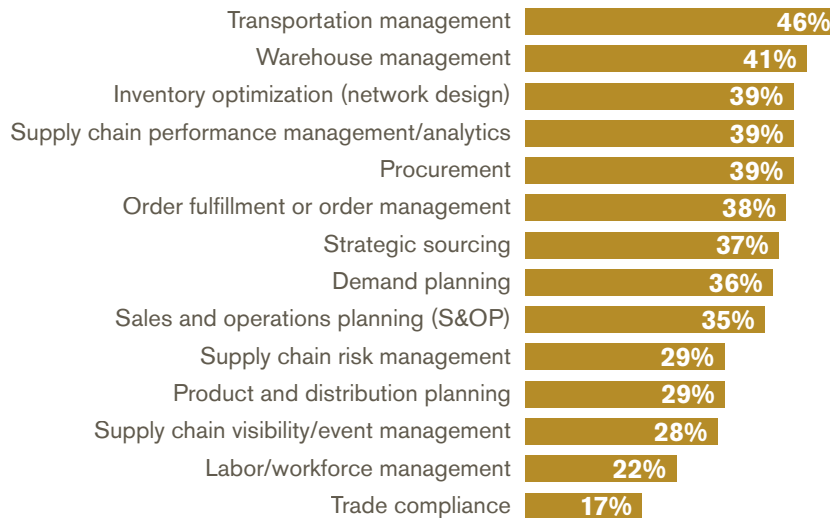
Structuring the Supply Chain to Facilitate Segmentation

As a result of these issues, organizations are making technology investments to facilitate partner communication and build a supply chain segmentation model, particularly in the areas of transportation management, warehouse management and inventory optimization. These types of technologies allow companies greater degrees of control over the business processes that are required for different procurement, replenishment and transportation strategies.

Significant Supply Chain Technology Investments

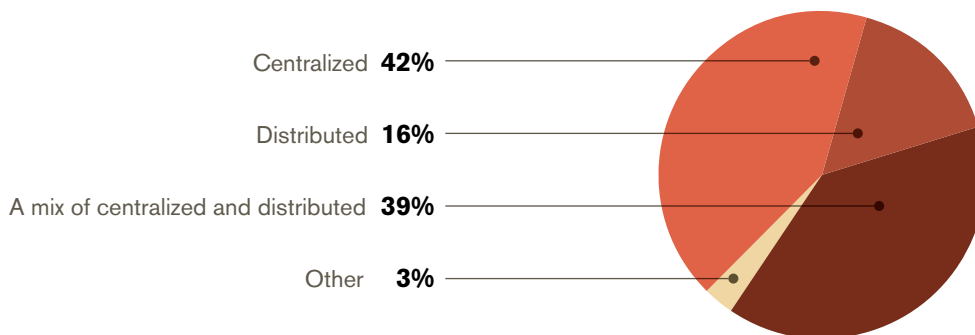|	
Transportation management	46%
Warehouse management	41%
Inventory optimization (network design)	39%
Supply chain performance management/analytics	39%
Procurement	39%
Order fulfillment or order management	38%
Strategic sourcing	37%
Demand planning	36%
Sales and operations planning (S&OP)	35%
Supply chain risk management	29%
Product and distribution planning	29%
Supply chain visibility/event management	28%
Labor/workforce management	22%
Trade compliance	17%

Organizations appear equally split on how they are structuring their supply chains. Results to our study show that companies' supply chain operations are typically centralized or are comprised of an amalgam of a centralized and distributed structure.

Structure of Supply Chains

Centralized	42%
Distributed	16%
A mix of centralized and distributed	39%
Other	3%

"We have four different business units buying products using a lean process."

—Purchasing Management; Electrical Equipment Mfg.; $500M - $999.9M

"We supply our international plants and distribution centers from our centralized manufacturing facility. Many of these branch plants are separate companies structured under a corporate umbrella with centralized purchasing, sourcing and logistics support."
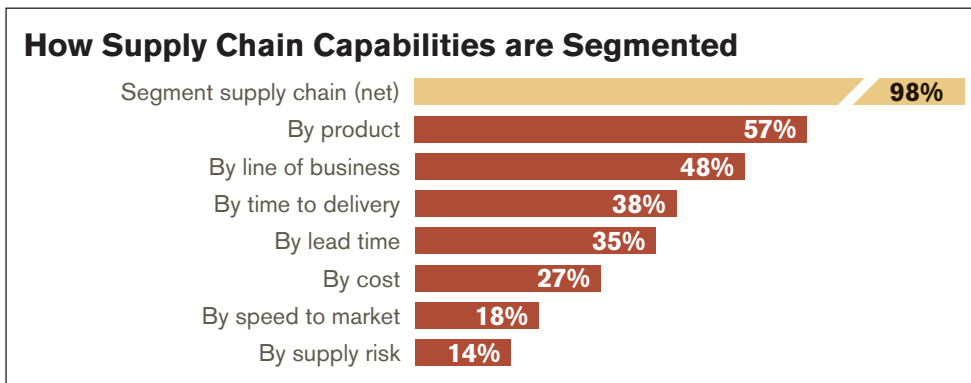
—VP/GM; Industrial Machinery; $250M - $499.9M

Most organizations (68%) maintain between one and five supply chains. Overall, the companies studied are operating, on average, eight distinct supply chains. Those maintaining a greater number of supply chains were more likely to operate a mix of centralized and distributed platforms while those running only one or two systems retain control centrally.

Number of Supply Chains Managed

1-2	**29%**
3-5	**39%**
6-10	**11%**
11-15	**14%**
0	**7%**

Average number of
supply chains managed:
8
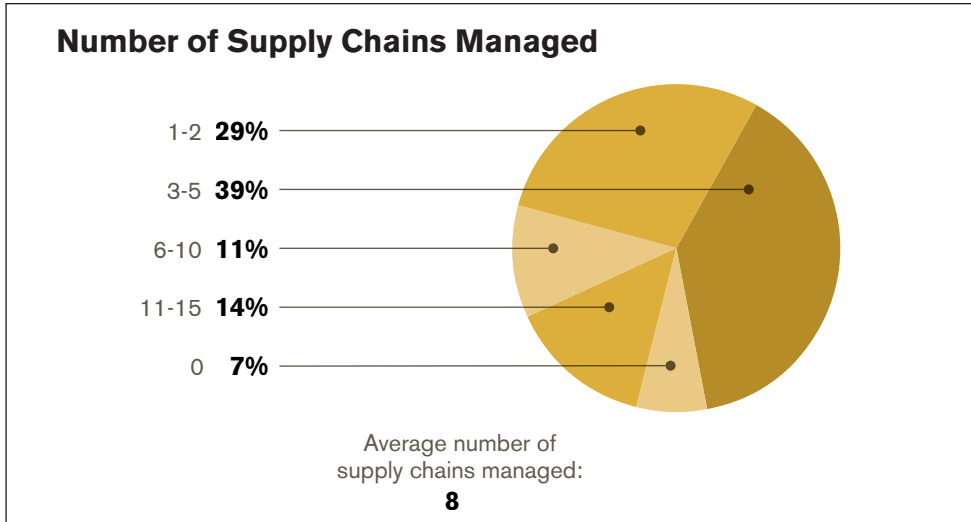
Supply Chain Segmentation Strategies

Nearly all organizations (98%) are mapping supply chain capabilities to meet customer needs. Slightly more than one-half of those surveyed are customizing their operations by classifying delivery capabilities by product, line of business, time to delivery and lead time.

How Supply Chain Capabilities are Segmented

Segment supply chain (net)	**98%**
By product	**57%**
By line of business	**48%**
By time to delivery	**38%**
By lead time	**35%**
By cost	**27%**
By speed to market	**18%**
By supply risk	**14%**

"Our supply chains are set up in this manner: 1) purchase direct from OEMs 2) direct from distributor 3) direct import from China 4) direct supplier import from China ship and not hold safety stock 5) direct supplier import from China hold safety stock with a 3rd party warehouse 6) interplant transfers (same company)"

—**Supply Chain Manager; Appliances; $100M - $249.9M**

"We have four different companies, each supplying a different market segment product. Some utilize many different warehouse facilities; some only use the warehouse at headquarters. Some have hundreds of different products and some have a handful."

—**Logistics/Distribution Manager; Retail; $50M - $99.9M**

"We are able to segment by type of business, e.g., pharmaceutical, medical devices, textiles, automotive parts, etc. The requirements for each business type are greatly different --hence, the need for segregation!"

—**Corporate Management; 3PL; $50M - $99.9M**

Initiatives taken to implement and execute a supply chain segmentation program regularly involve greater optimization of sourcing and distribution, improved planning of fulfillment procedures, better decision-making and demand planning, and greater management over global suppliers and in-transit shipments.

Actions Taken to Implement a Supply Chain Segmentation Strategy

Action	Percentage
Optimize sourcing and distribution decisions (network design)	52%
Plan customer fulfillment	52%
Manage global suppliers	43%
Manage origin logistics	41%
Manage in-transit shipments	41%
Implement supply chain technology	39%

Numerous technology solutions are cited as valuable in structuring a segmentation strategy. Those preparing a supply chain segmentation plan are directing investments toward solutions to help optimize inventory and fulfillment management procedures, improving transportation management systems, advancing demand planning and forecasting, and upgrading sourcing and procurement applications as well as supply chain analytics.
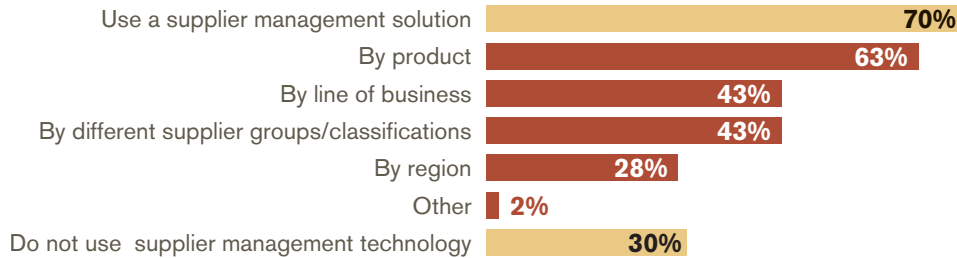
Transportation and warehouse management, inventory and order management, demand planning and S&OP, procurement and strategic sourcing, and supply chain visibility and performance are among the technologies seen as most valuable.

Solutions for Managing a Segmentation Strategy

Solution	Percentage
Transportation management	52%
Order fulfillment or order management	47%
Sales and operations planning (S&OP)	45%
Inventory optimization (network design)	44%
Supply chain performance management/analytics	44%
Demand planning	44%
Strategic sourcing	43%
Warehouse management	41%
Supply chain visibility/event management	40%
Procurement	40%
Supply chain risk management	36%
Product and distribution planning	35%
Trade compliance	22%
Labor/workforce management	20%

Seventy percent of respondents use a supplier management solution. These applications allow users to classify standard supply chain operating procedures by product line, area of business or by various supplier classifications.

Usage of Supplier Management Solutions

Use a supplier management solution	70%
By product	63%
By line of business	43%
By different supplier groups/classifications	43%
By region	28%
Other	2%
Do not use supplier management technology	30%

Interestingly, individuals were mixed on the extent to which their organization's current technology could support a supply chain segmentation strategy. While 60% claim their information systems and processes are robust, 15% say otherwise; and 25% couldn't determine whether their platform has the flexibility to meet the necessary requirements.

For those companies whose IT system is flexible enough to support supply chain segmentation, resources are being directed into areas involving inventory optimization, product and distribution planning, supply chain visibility, risk management, TMS, supply chain performance analytics, demand planning, and sourcing and procurement.

"We maintain a central product warehouse & manufacturing facility along with distribution locations in key market areas."
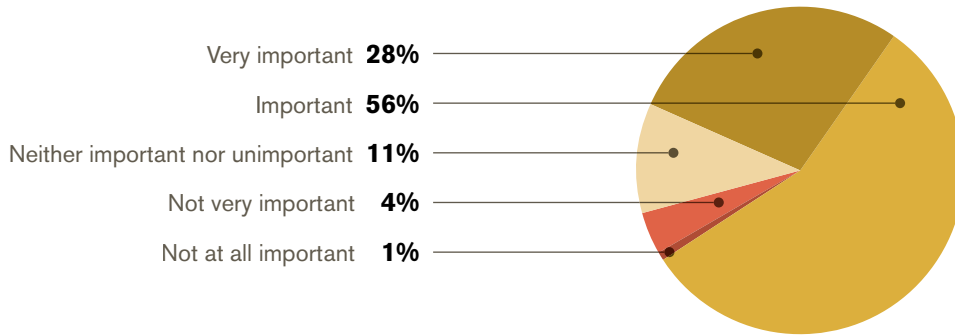
—Purchasing Management; Automotive & Transportation Mfg.; <$50M

Flexibility of Information Systems to Support Supply Chain Segmentation

Very flexible	11%
Flexible	50%
Neither flexible nor inflexible	23%
Inflexible	14%
Very inflexible	2%
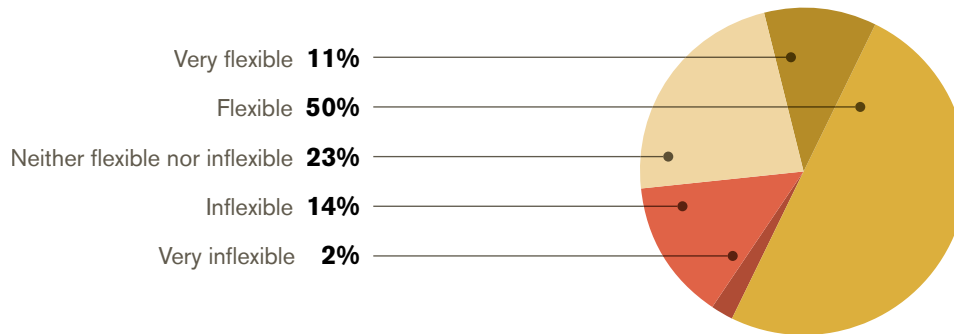
Yet overall, most individuals we surveyed say that an effective supply chain segmentation plan is crucial to their business operations. Specifically, a majority (84%) claim it's important to categorize suppliers and customers.
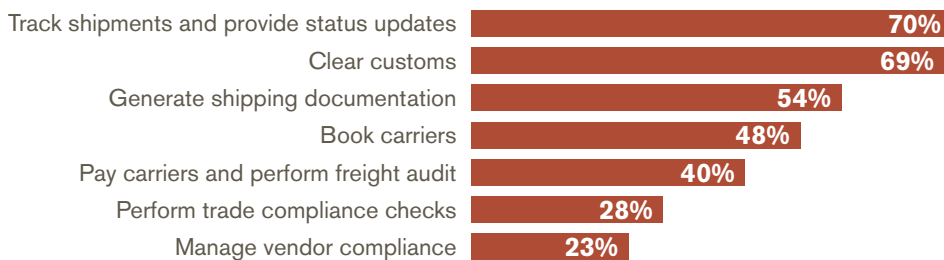
The Importance of Supply Chain Segmentation

Very important **28%**

Important **56%**

Neither important nor unimportant **11%**

Not very important **4%**

Not at all important **1%**

Usage of Logistics Service Providers for Global Shipping Needs

In implementing a segmentation program, the majority of companies rely on only a handful of logistics service providers (LSPs) globally. In fact, three-fourths (74%) use five or fewer LSPs.

The strategy for many of these shippers is to use a hybrid approach in managing their logistics services. One half (49%) outsource as well as rely on their in-house group to handle global logistics tasks. However, over the next few years nearly one-fourth say they will outsource more tasks involving global shipment tracking, customs clearance issues administration, carrier bookings and shipping documentation management.

Tasks Handled by Logistics Service Providers

Track shipments and provide status updates **70%**

Clear customs **69%**

Generate shipping documentation **54%**

Book carriers **48%**

Pay carriers and perform freight audit **40%**

Perform trade compliance checks **28%**

Manage vendor compliance **23%**

As to the extent to which logistics service providers can offer a set of segmented services, just over one-half (56%) of those surveyed say their LSP has the capacity to provide segmented solutions. This may reveal a gap between the growing need for segmentation solutions and LSPs' capabilities in delivering needed services.

In summary . . .

- Globalization, increasing transportation costs, forecasting product demand, working with multiple suppliers and distribution channels, and being responsive to customers' varying requirements are provoking organizations to evaluate strategies to improve supply chain management processes. Supply chain segmentation is seen as an approach to better manage sourcing and procurement processes as well as tailor inventory and delivery of goods to customers.

- Effective operation of supply chain segmentation requires greater optimization of sourcing and distribution, improved order fulfillment procedures, greater accuracy in demand planning, and stronger supplier management practices. Accordingly, organizations are making investments in technologies that facilitate or improve sourcing and procurement, inventory optimization, warehouse management, transportation management and supply chain analytical solutions.

- As managers evaluate and plan supply chain segmentation, users look to providers for systems and software implementation and support, and to LSPs to execute warehousing and logistics procedures.

Methodology

This research was conducted by Peerless Research Group on behalf of *Supply Chain Management Review* and *Logistics Management* magazines for **Amber Road,** a market leader in global trade management solutions.

This study was executed in July 2012, and was administered over the Internet among subscribers to *Supply Chain Management Review* and *Logistics Management.* The sample for this study was selected among readers who are involved in evaluating, specifying or approving the purchase of supply chain software and hold a job function involving logistics management, distribution, international shipping, importing or exporting operations.

About Amber Road, Inc.

Amber Road provides a single, on-demand platform that automates and streamlines global trade. By helping organizations to comply with country-specific trade regulations, as well as plan, execute and track global shipments, Amber Road enables goods to flow unimpeded across international borders in the most efficient, compliant and profitable way.

Contact Information:

Amber Road
One Meadowlands Plaza
East Rutherford, NJ 07073
Phone: +1 201 935 8588
Email: Solutions@AmberRoad.com
www.AmberRoad.com

Amber Road
POWERING GLOBAL TRADE