**KEWILL**®

White Paper

**2010 Best Practices Survey for Parcel Shipping & Global Trade Management**

2010 Industry Survey Findings
and Best Practices Recommendations

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# *Executive Overview*

This, the fourth annual Kewill benchmark survey of logistics professionals, continues our look at the current state of shipping and global trade management. As in previous years, a wide cross-section of over 500 logistics professionals, executives, and managers shared their experiences and opinions with us. Professionals from manufacturing and distribution companies; in industries ranging from aerospace and electronics to healthcare, agriculture and retail; and from companies doing less than $50 million in business to many over $1 billion (35%) in revenue; told us about their challenges and strategies in parcel shipping and their concerns and considerations in export and global trade management. Statistics on survey respondents are included in appendix A.

In last year's (2009) survey, the global economic downturn was not a major issue – yet. Thirty-six percent of respondents said it was too early to tell what the impact would be and only thirty-four percent reported a limited negative effect on their business. In the 2010 survey, ninety-six percent of survey respondents noted that they had made changes to their business in response to the challenges, especially headcount reductions, use of lower cost shipping options, and changes to the carrier mix.

Despite a heavier emphasis on carrier and mode selection, there is surprisingly little evidence of any increase in the use of technology to achieve an optimum cost/service mix. The percentage of companies claiming to be semi-automated or fully automated in shipping documentation and trade documentation preparation is essentially unchanged from previous years. Similarly, the move to automated denied party screening is also stalled at previous year levels.

That is not to say that progress has not been made. Industry leaders are taking advantage of increased productivity, reduced errors, and greater visibility and control as a result of previous moves to automation and integration. And laggards are falling further behind as they reduce staffing and try to do more with less.

Global trade data shows similar indications. Despite headcount reductions, employees are spending considerable time and effort processing import and export documents and have reported a measurable level of errors that cause delays and rework. International shippers also tend to rely quite heavily on customs brokers, freight forwarders and other outside resources to handle much of the burden. A relatively low adoption rate of completely automated processes corroborates these findings. There is great potential here, as well as great risk. Hiring and training new people to handle import/export matters is one alternative, but further automation promises to relieve the manual workload while at the same time reducing errors and adding control and visibility by relying less on outside resources.
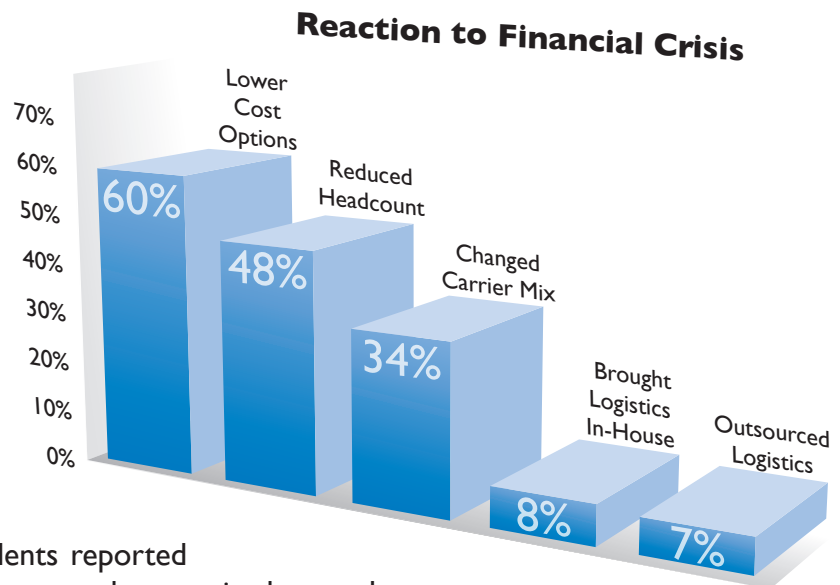
# *Parcel & LTL Shipping* ◅

## Dealing with the slowdown

2009-2010 was a very challenging time for most companies. In fact, it would be hard to identify a company not affected by the economic slowdown and that certainly includes the shippers who responded to the survey. Companies react differently to business changes and the survey revealed several notable trends.

Almost half (48%) of the responding companies reported a reduction in headcount in the areas of shipping and/or trade compliance. While some of this headcount reduction can be justified as appropriate to reduced shipping volume, it is apparent, and no surprise, that shipping personnel are being asked to do more with less. Despite this increased workload, however, companies are not turning to automation as a way to leverage the resources they have managed to retain in the shipping department. Respondents reported virtually the same percentages of shipments that required manual entry of data for processing, as well as the same amount of data, as compared to the 2009 survey results. For example, an amazing 59% of the respondents stated it took 10 minutes or more per shipment to prepare their export documents.
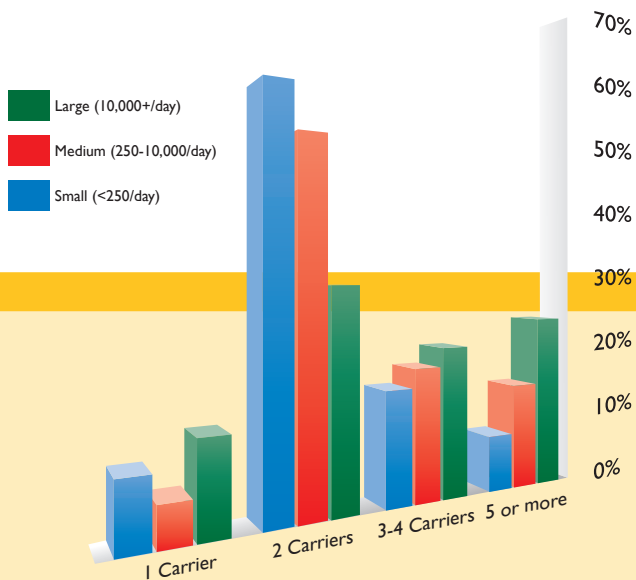
**Reaction to Financial Crisis**

- Lower Cost Options: 60%
- Reduced Headcount: 48%
- Changed Carrier Mix: 34%
- Brought Logistics In-House: 8%
- Outsourced Logistics: 7%

> **Recommendation:** ▷ Nearly half of the shippers require some data entry for 100% of their shipments and only 5% are fully automated. Laggards should take steps to automate basic shipment processing in order to leverage existing shipping resources as volumes increase. Shippers that still need manual intervention or data entry should analyze manual entry requirements and identify and install technologies to more fully automate so as not to fall further behind industry leaders.

Sixty percent of survey respondents said that they are using lower cost shipping options. One-third changed the carrier mix to include regional carriers and/or consolidation. Interestingly, almost an equal number of respondents reported that they outsourced logistics to reduce costs as reported that they brought logistics in-house for the same reason. It appears that there is no clear consensus as to which is the more economical alternative.

While 52% said that their parcel/freight mix remained unchanged, about half of the remainder (23%) cited lower costs as the reason for shifts they made in the mix. Others noted customer requests, which likely is due to mandated routing guides and/or to lower costs as well.

It is clear that shippers favor having a choice of carriers and see this as a tool for reducing cost. Our 2010 survey indicates that almost all shippers (95%) use two or more carriers. It is not a surprise that

Large (10,000+/day)

Medium (250-10,000/day)

Small (<250/day)

70%

60%

50%

40%

30%

20%

10%

0%

I Carrier   2 Carriers   3-4 Carriers   5 or more

the largest shippers are more likely to use 5 or more carriers (28% vs. 9% for small shippers) but it is interesting that 14% of the largest shippers rely on a single carrier. The more carriers there are to choose from, the more complicated it is to make the selection for each shipment.

**Recommendation:** Shippers that currently use one or two carriers should explore the potential savings available with more choices. All shippers should consider the use of optimization software to make intelligent carrier choices for each shipment considering destination, modes, delivery time, and daily shipment volume and mix to yield the lowest overall cost – coupled with automation for efficient labeling and routing.

Just over one third (35%) of respondents said that they have increased freight volumes with FedEx and/or UPS while nearly one-quarter (23%) reduced them. Another 36% said their FedEx / UPS volume remained the same. It seems somewhat counterintuitive that parcel business is up (more shippers increased their use of FedEx / UPS than reduced it) while the parcel/freight mix changed in response to cost pressures. One would expect that freight would increase and parcel decrease to yield a lower cost mix. We suspect that the increase in FedEx/UPS is likely due to an increase in the number of smaller shipments and a reduction in larger shipments due to the business slowdown.

## LTL Flexibility

As outlined above, the economic squeeze has led companies to reduce headcount and at the same time to complicate the shipping process by expanding carrier selection options and putting more pressure on cost. On the LTL side, 95% of respondents used more than one carrier's services while a surprising 20% used more than 10. As the recession eases and business recovers, will these already overworked employees be able to keep up with increasing volumes?

As expected, lower volume shippers used fewer carriers. Those shipping less than 10 packages per day were much more likely to use 5 or fewer carriers (83%). On the high end, companies that average more than 100 LTL shipments per day exhibited two distinct approaches. Thirty-eight percent used more than 10 carriers for LTL shipments while 35% used 5 or less.   Surprisingly, those using 10 or more carriers were no more likely to be using optimization software than those using fewer than 5 – both groups reported about 35% not using optimization. There was also no correlation between these results and the number of parcel shipments by the small LTL shippers using optimization – refuting the idea that optimization might be in use primarily to support parcel shipments.

Our conclusion is that there are two distinct best practice approaches for managing LTL shipping. Some leading companies engage a large number of LTL alternatives and use optimization to get the best cost/ service mix. Others negotiate favorable engagements with one or a few carriers thereby simplifying LTL carrier selection.

**Recommendation:** ⟩ High volume LTL shippers using more than 5 carriers (65%) need optimization to get the best cost/service mix for their shipments. Those not using optimization are at a distinct disadvantage versus competitors that do. High volume shippers using few carriers to simplify selection should periodically revisit that policy to insure that they are getting the best rates and service.

Forty percent of LTL shippers of all sizes use 5 or more carriers. Assuming the same rates of automation reported for parcel shipping, there is considerable room for efficiencies in this area as well. Most companies participating in this survey reported that shipping operations require manual entry of some information and 21% rely on manual scan, verify and ship. Add carrier selection and it paints a picture of an opportunity ripe for productivity gains through automation.

**Recommendation:** ⟩ Laggards should take steps to automate LTL shipment processing in conjunction with automated carrier selection / optimization. Shippers that still need manual intervention or data entry should analyze manual entry requirements and identify and install technologies to more fully automate so as not to fall further behind industry leaders.

Further automation can not only reduce the workload for the reduced staff, but also add a level of intelligence to carrier selection that would likely result in better service at lower cost through optimization. While 34% of respondents said that they use optimization for freight (11%) or for both freight and parcel (23%), the other two-thirds of companies do not benefit from optimization. Of the ones that do have optimization capabilities, sixty-two percent of them have home-grown system. One has to question whether the home-grown solutions are true optimization in the sense that advanced mathematical techniques like linear programming or heuristics are applied to the problem. Likely, most of these home grown systems are relatively simplistic models that are not capable of the kind of true optimization found in the commercial products. Whether they are delivering the true least cost / best alternative is open to debate.
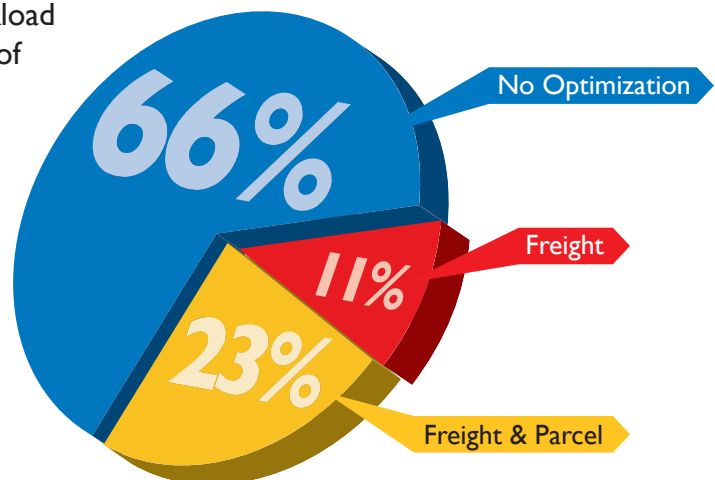


**Recommendation:** ⟩ Shippers relying on home-grown carrier selection and "optimization" systems should benchmark their systems against commercially available optimization systems to validate their effectiveness. If the homegrown systems do not embody true optimization, they will likely yield suboptimum results. Moving to a commercial system will also reduce support costs and likely offer additional features and opportunities beyond what the home-grown system can deliver.

Industry-leading shipping solutions automate the shipping process for parcel carriers and LTLs, produce export documentation and perform denied party screening. Market leading solutions support mission critical operations and enable shippers to:

  • Streamline fulfillment and shipping processes through best practices and automation
  • Improve customer service with end-to-end visibility and shipment notification
  • Maintain control of the shipping strategy across a global enterprise
  • Accelerate international shipping through integration of export compliance and documentation

An enterprise solution will optimize global trade including domestic and international parcel and LTL shipment manifesting, automation of document generation and regulatory compliance screening (export/import). In addition to reducing or eliminating manual processes and thereby saving labor costs and reducing delays, shipping automation provides a whole new level of control and visibility. Fewer errors eliminate delays and rework after the shipment leaves the dock.

## Metrics

While most respondents stated that they measure carrier performance and gather summary statistics, it doesn't seem to be a comprehensive or continuous process for most. Only one-quarter of respondents rely on integrated Business Intelligence software to do the job. One-third conduct internal review of customer comments and nearly half perform periodic tests to measure on-time performance across carriers in key shipping lanes. Reviewing customer comments is a worthwhile activity, it but does not measure carrier performance per se – only complaints, when the customer is upset enough to report the problems. Periodic tests are helpful, but not comprehensive or continuous enough to capture evolving problem situations early and address major problems that are developing on routes or with carriers that don't happen to be on the test plan.

Metrics should be an essential part of everyday operations with appropriate alarms and summarized results readily available to responsible executives. Without these tools, management is limited in its ability to effectively monitor and manage the shipping and fulfillment processes for early problem detection and resolution, and for process improvement efforts.

**Recommendation:** ❯ Laggards must implement comprehensive and timely measurement and reporting systems to avoid unpleasant surprises and provide the basis for continuous improvement activities.
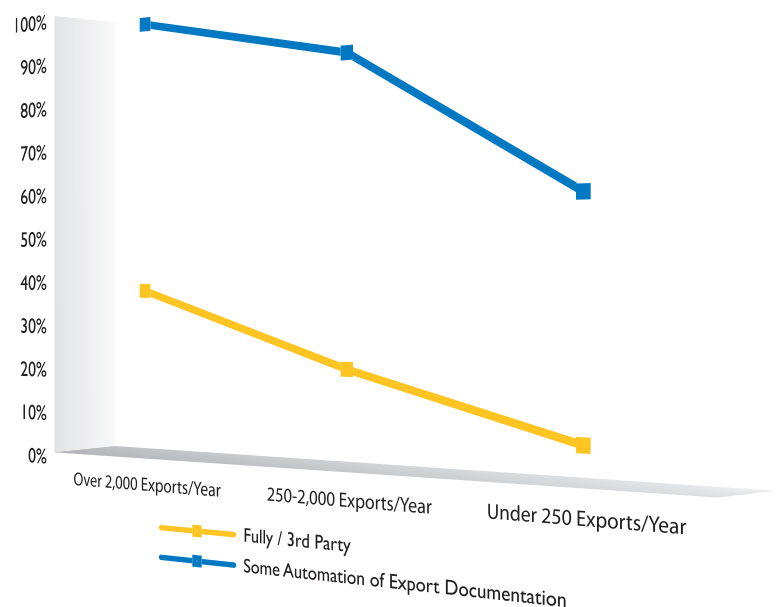
# *Global Trade*
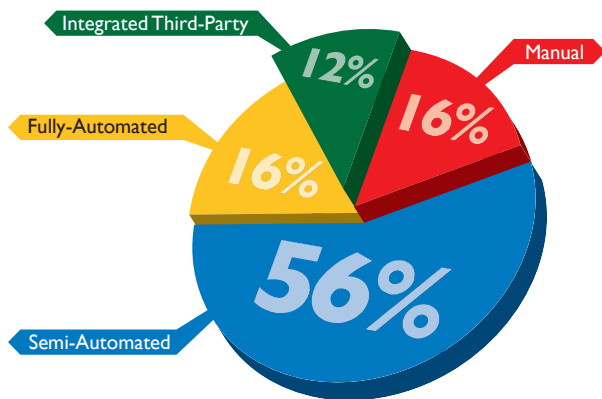
Almost half of the exporters that participated in our survey process between 500 and 10,000 export shipments each year. Most exporters are shipping to North America, Europe and the Asia/Pacific regions.

Among exporters, most (56%) report semi-automated export document preparation. An equal number (16%) prepare all export documentation manually or have fully automated systems. Twelve percent have integrated third-party solutions for export documentation. Not surprisingly, there is a higher level of automation in larger shippers: 96% of exporters processing more than 2,000 export shipments per year reported some automation (semi automated, fully automated, or integrated third-party solution) while only 37% of large shippers are either fully automated or have integrated third-party solutions. Those numbers drop to 86% and 21%, respectively, for those shippers processing 250 to 2,000 export shipments per year and 56% / 8% for smaller exporters handling less than 250 shipments per year.

Despite the reduced headcount in shipping, the majority of companies (59%) report that it takes more than 10 minutes, on average, to produce and distribute export documentation – 42% in the 10 to 30 minute range per shipment. In addition, half of the respondents admit that more than 1% of shipments have errors with documents that result in delays at customs and require further rework.
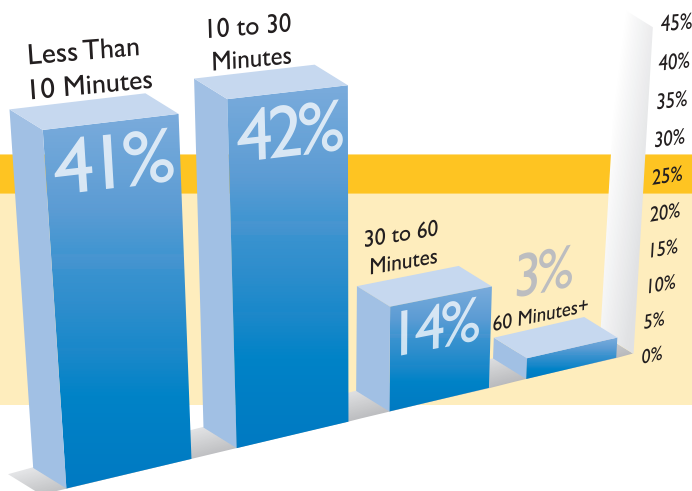
Survey statistics indicate that a large shipper processing 20,000 exports per year uses approximately 3.6 full-time equivalents (FTEs) for handling export documentation. Fully automating the process cuts that to 2.25 FTEs for a savings of 1.35 FTEs. For a medium sized shipper handling 6,000 exports per year, a manual process with an average of 22 minutes per package means 2,400 hours of effort compared to 700 hours in a fully automated operation. A smaller shipper can cut their labor requirements in half, according to survey statistics.

In addition, automated document preparation is likely to greatly reduce the incidence of missing or incorrect documents that can delay delivery and necessitate rework for the shipper. Our sample shows that 53% of companies manually preparing export documentation experience an error rate of less than one percent. For fully automated companies, that number increases to 63%. Further, while 14% of manual companies report relatively high error rates (above 5%), less than one half-percent of fully automated

## Average Time Per Export Shipment

**Less Than 10 Minutes** 41%

**10 to 30 Minutes** 42%

**30 to 60 Minutes** 14%

**60 Minutes+** 3%

45%
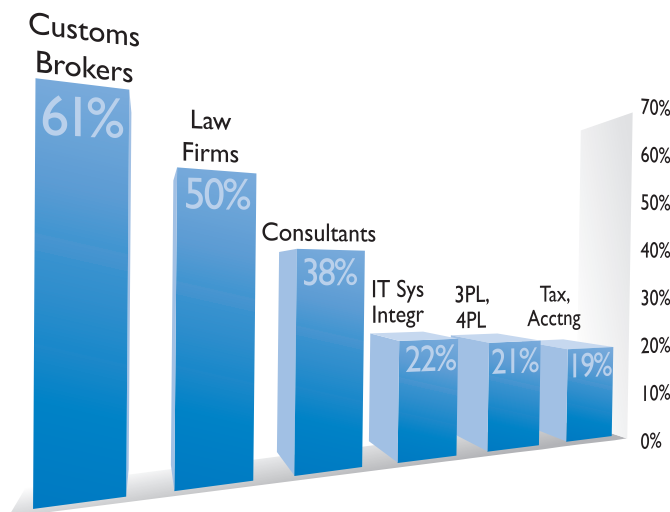40%
35%
30%
25%
20%
15%
10%
5%
0%

export shippers had those results. 5% of 6,000 shipments per year is 300 delays and reworks. That amounts to at least several hundred hours of labor for the shipper and a lot of unhappy customers.

> **Recommendation:** Laggards should revisit the ROI potential of fully automated export documentation considering both internal time and labor savings along with customer service improvements from fewer errors and delays.

## Trade Compliance

Professionals involved in the trade compliance aspects of the shipping industry are struggling with an increasing burden of regulations, mandates, rules, and reporting requirements. Since shippers survive using a combination of outside help and a cadre of dedicated and hard-working shipping/import/export professionals, the benefits and trade-offs of automated systems have a substantial impact on people and processes.

For those that handle trade compliance in-house, 32% of 2010 survey respondents put that task in the hands of one dedicated employee, 23% had two employees full-time on the task, and 45% committed 3 or more people. Almost identical numbers were reported for dedicated staffing for import compliance.

**Customs Brokers** 61%

**Law Firms** 50%

**Consultants** 38%

**IT Sys Integr** 22%

**3PL, 4PL** 21%

**Tax, Acctng** 19%

70%
60%
50%
40%
30%
20%
10%
0%

While 61% of respondents use customs brokers to help manage trade compliance, half also used law firms, and 38% employed consultants. Other resources employed include 3PL/4PL (21%), IT systems integrators (22%), and tax/accounting/corporate governance firms (19%).

A full seventy percent of respondents reported that they outsource customs brokerage, and fifty-eight percent rely on freight forwarders. Fewer, less than 10% for each of the following, outsource classification, license management, denied party screening tasks, or managing trade agreements.

The majority (67%) of exporters in our survey file AES reports using AESDirect (32%), through a 3RD party system (17%) or using an in-house system (18%). Most, however, (58%) rely in whole or in part

on the carrier or freight forwarder to take care of AES filings. While this may be expedient, leading exporters should take control of AES compliance rather than rely on logistics partners to file on their behalf.

Given the amount of time required to process export documentation and the number of employees dedicated to the task, combined with a measurable level of errors that cause delays and rework, this area of business can benefit greatly from increased automation. While 81% of respondents said that they have the tools available to manage trade compliance, the statistics indicate that these must be mostly manual tools. Increased automation would also allow companies to take more control of these critical functions that they now rely on outside resources (brokers, forwarders) to complete on their behalf.
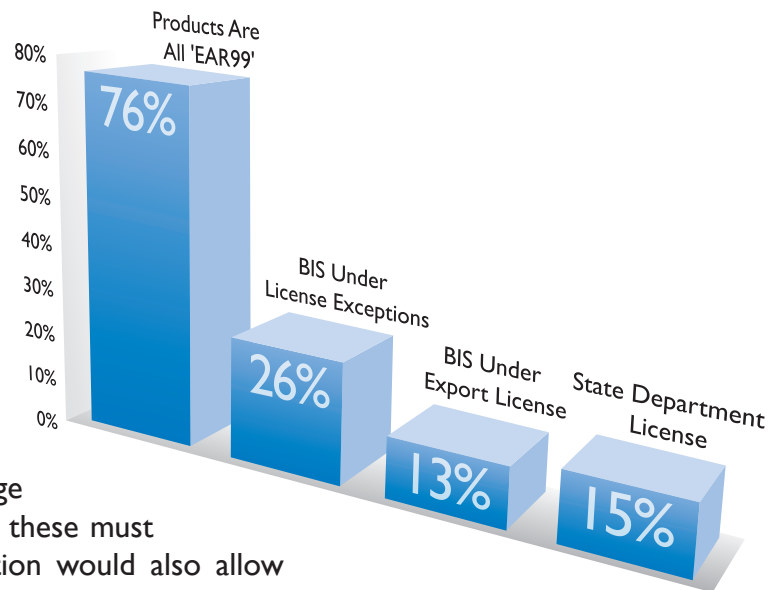


**Recommendation:** While reliance on outside parties for handling customs, trade agreements and licensing may be expedient and cost-effective for many shippers, industry leaders are taking more control of import/export activities with automated systems that also provide increased visibility and control. Laggards would do well to take greater control of import/export activities.

## Denied Party Screening

As with other areas of shipping logistics operations, denied party screening was an interesting mix of automated systems and manual processes in the 2010 benchmarking survey. It makes intuitive sense to automate the screening process. You can easily identify controlled goods and materials and let the system check each order and shipment against restrictions for that customer, region, or type of product. Automation allows this to happen automatically, every time, without worrying about missing anything in the rush of everyday business. Integrated systems also collect statistics and provide complete visibility. Eighty-six percent of this year's survey respondents screen for restricted/denied parties and embargoed countries. Of those, nearly half (49%) use integrated third-party solutions. The rest use a manual process (41%) or rely on batch screening (9%). Seventy percent reported increasing pressure to perform end-user screening for all potential uses of a product.
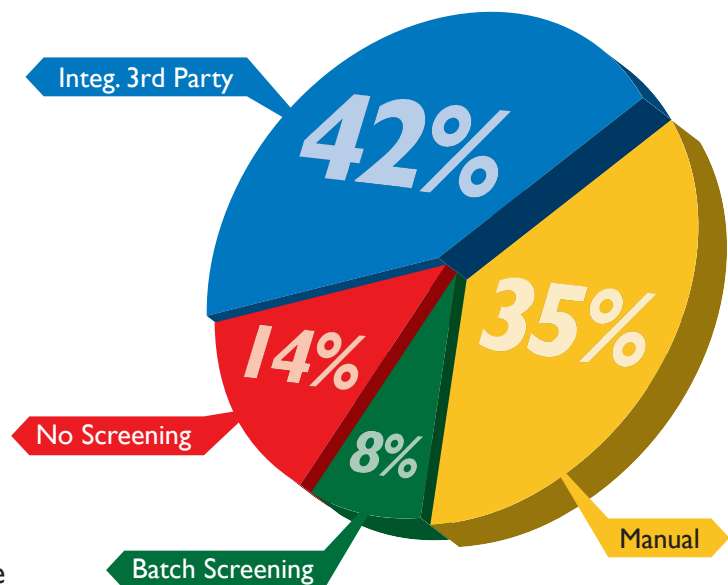
More than half (53%) use a manual process to determine licensing requirements for exports and destination country import regulations. Of those that export licensed products, one-third handle those licenses manually while 17% rely on Excel/Access or homegrown tracking systems. A small minority (26%) actively manage more than 10 licenses. With increased enforcement and penalties, companies operating in a global environment should exploit automation to increase control and visibility while decreasing risk of fine or other penalties for inadvertent license violations.

There is considerable uncertainty about the effect of proposed BIS rules for inter-company transfer (ICT) license exceptions. Eighteen percent of exporters thought that the rules would reduce their compliance burden, if implemented. Thirty-seven percent report that their export volume is low enough that the new rules would have little or no impact. Forty-five percent, however, were unsure about the effect of these new proposed rules and plan to further evaluate the situation in light of the costs and regulatory burden of the required internal controls, record-keeping, and ongoing reporting requirements.

We were at first surprised at the small number of organizations (23%) that said they had made specific changes to their business process due to the increases in penalties and fines for non-compliance with US trade regulations – until we revisited the 2009 response and discovered that 73% answered in the affirmative last year. Presumably, most companies took appropriate actions in 2009 so fewer were still left to address that issue in 2010.

Thirty-one percent of respondents reported that they have a need to impose corporate restrictions on shipments over and above regulatory requirements for specific parties. Forty percent have the same need for specific countries and thirty-eight percent for specific products to specified countries.

**Recommendation:** An integrated, automated systems approach to denied party screening adds a level of control not possible with manual or outsourced approaches. Any shipper dealing with denied party screening requirements should automate to gain control and visibility.

# Summary of Recommendations for Shipping Best Practices

The following recommended best practices can be derived from the 2010 survey results:

1. Laggards should take steps to automate basic shipment processing in order to leverage existing shipping resources as volumes increase.

2. Shippers that still need manual intervention or data entry should analyze manual entry requirements and identify and install technologies to more fully automate so as not to fall further behind industry leaders.

3. Shippers that currently use one or two carriers should explore the potential savings available with more choices.

4. All shippers should consider the use of optimization software to make intelligent carrier choices for each shipment considering cost, delivery time, and daily shipment volume and mix to yield the lowest overall cost.

5. High volume LTL shippers using more than 5 carriers need optimization to get the best cost/ service mix for their shipments. Those not using optimization are at a distinct disadvantage versus competitors that do. High volume shippers using few carriers to simplify selection should periodically revisit that policy to insure that they are getting the best rates and service.

6. Shippers should take steps to automate LTL shipment processing in conjunction with automated carrier selection / optimization. Shippers that still need manual intervention or data entry should analyze manual entry requirements and identify and install technologies to more fully automate so as not to fall further behind industry leaders.

7. Shippers relying on home-grown carrier selection and "optimization" systems should benchmark their systems against commercially available optimization systems to validate their effectiveness. If the homegrown systems do not embody true optimization, they will likely yield suboptimum results. Moving to a commercial system will also reduce support costs and likely offer additional features and opportunities beyond what the home-grown system can deliver.

8. Laggards must implement comprehensive and timely measurement and reporting systems to avoid unpleasant surprises and provide the basis for continuous improvement activities.

9. Laggards should revisit the ROI potential of fully automated export documentation considering both internal time and labor savings along with customer service improvements from fewer errors and delays.

10. While reliance on outside parties for handling customs, trade agreements and licensing may be expedient and cost-effective for many shippers, industry leaders are taking more control of import/ export activities with automated systems that also provide increased visibility and control. Laggards would do well to take greater control of import/export activities.

11. An integrated, automated systems approach to denied party screening adds a level of control not possible with manual or outsourced approaches. Any shipper dealing with denied party screening requirements should automate to gain control and visibility.

# About Kewill

Kewill delivers solutions that simplify global trade and logistics.

Global businesses face ever increasing complexity across their supply chains including decisions on sourcing, customs, compliance, transportation, storage, finance, visibility and connectivity. Inefficiency in any of these areas will lead to supply chain delays and result in increased costs. Kewill has a suite of software solutions that significantly simplify the management of the most complex global supply chains for enterprises and logistics service providers.

With over 35 years experience in global trade management and logistics, and over 600 employees worldwide, Kewill is a long-time innovator of solutions for manufacturers, distributors, retailers, freight forwarders, transport companies, customs brokers, 3PLs and 4PLs, as well as other related institutions involved in financing and underwriting global trade such as banks and insurance providers.

Kewill's solutions are in daily use by more than 40,000 users worldwide and our global customer base which entrusts us with the management of their supply networks includes divisions of 3M, Bayer, Caterpillar, DHL, FedEx, Ford, General Electric, General Motors, H.J. Heinz, Kimberley-Clark, Kraft, Levi Strauss, Mazda, Nestlé, Nike, Palm, Procter & Gamble, Smith & Nephew, Sony, TNT, Unilever, UPS, Vodafone, Yamaha, Xerox.

Kewill's solutions include:

> **Kewill Flagship™** optimizes global trade including domestic and international parcel (and LTL) shipment manifesting, automation of document generation and regulatory compliance screening (export/import).

> **Kewill Clippership**© manages multi-carrier requirements, supports flexible data integration and performs extensive rate shopping to determine optimal shipment rates and routing.

> **Kewill Export Compliance Solutions** (ECS) is a real-time, exception-based screening service that performs mandated government compliance screening for Restricted Parties, Embargoed Countries, and Export License Determination. ECS also checks for "red flag" indicators to screen "end use", as well as "end users". To facilitate internal management and communication, ECS provides an optional notification service and audit trail.
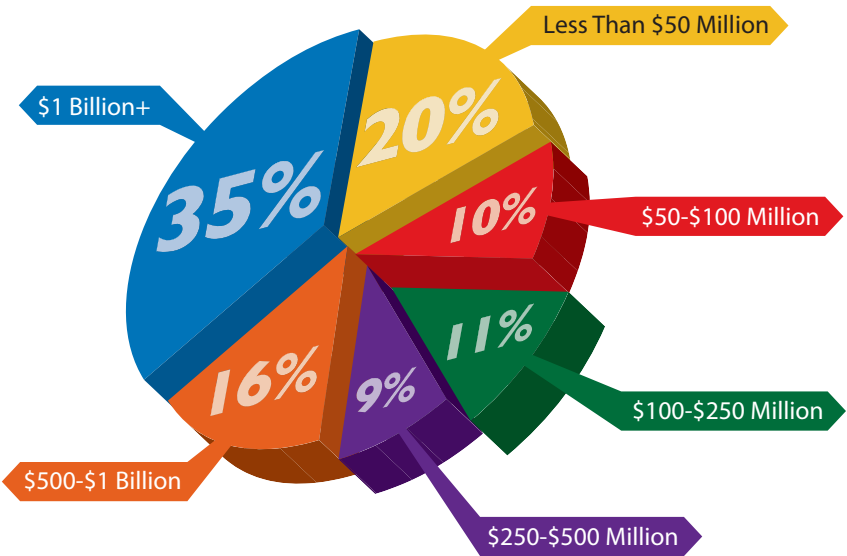
> **SPEX** is an automated export document production and management system. SPEX collates, manipulates and produces all standard export documentation sets for auto distribution via print, fax and email to designated recipients at any number of locations. When integrated with a host system, SPEX automatically populates data on export documents as needed, resulting in a streamlined "hands free" document preparation process.

**Kewill ISF** is a web application that efficiently captures and electronically files compulsory and optional data elements to comply with the Importer Security Filing and Additional Carrier Requirements (ISF) rule.
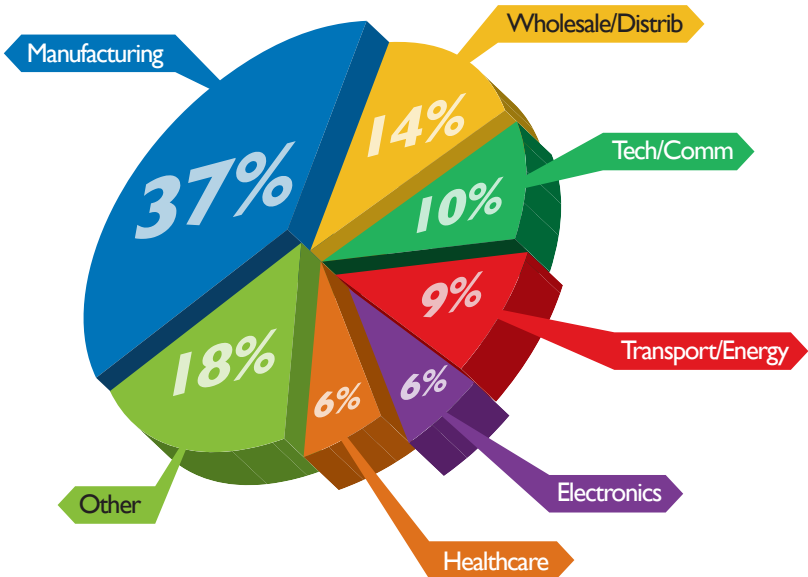
# *Appendix: Survey Respondent Profiles*

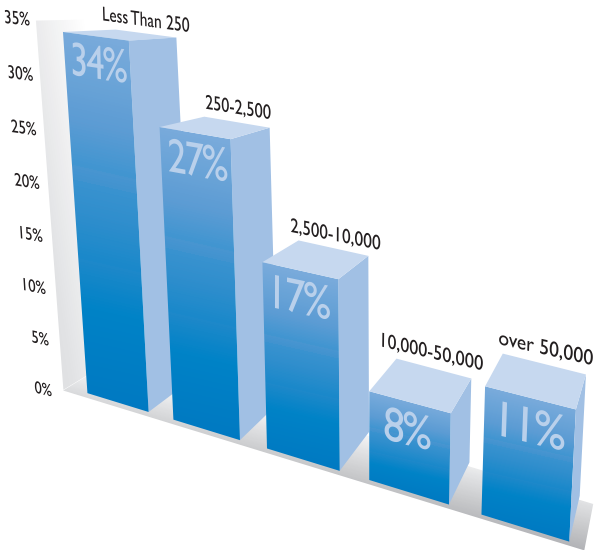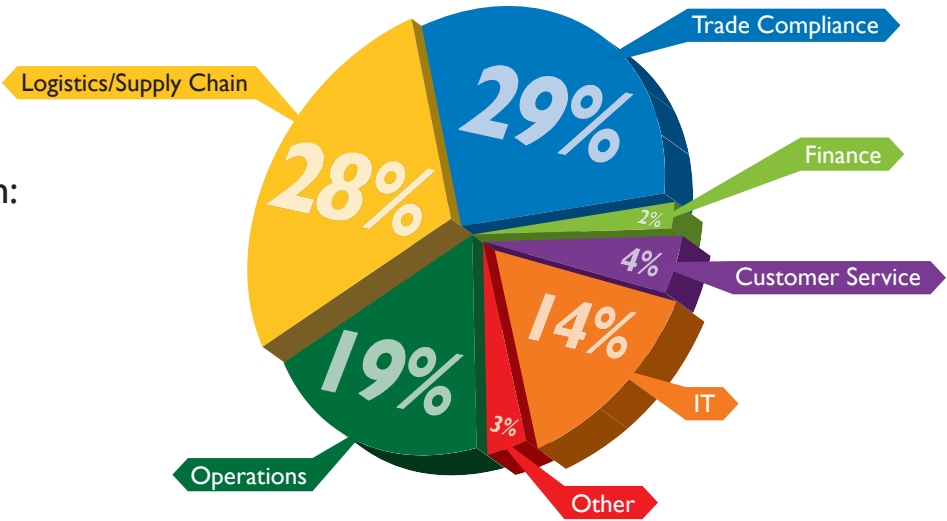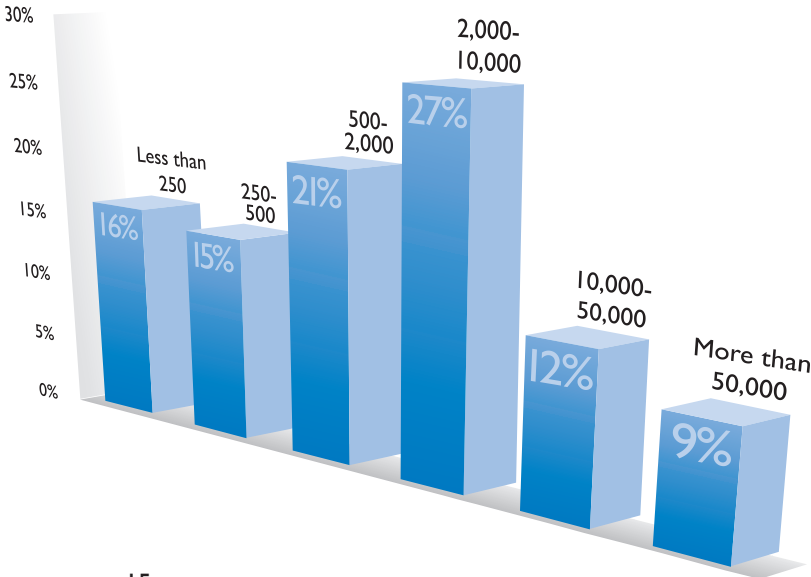Company size and industry

Annual Revenue:

- $1 Billion+ — 35%
- Less Than $50 Million — 20%
- $50-$100 Million — 10%
- $100-$250 Million — 11%
- $250-$500 Million — 9%
- $500-$1 Billion — 16%

Industry:

- Manufacturing — 37%
- Wholesale/Distrib — 14%
- Tech/Comm — 10%
- Transport/Energy — 9%
- Electronics — 6%
- Healthcare — 6%
- Other — 18%

Parcels Shipped Per Day:



Respondent Job Function:



Export Shipments/Year:



15

Exports Regions*:



Middle East/Africa 24%
North America 74%
Asia/Pacific 49%
Europe 48%
South/Central America 27%
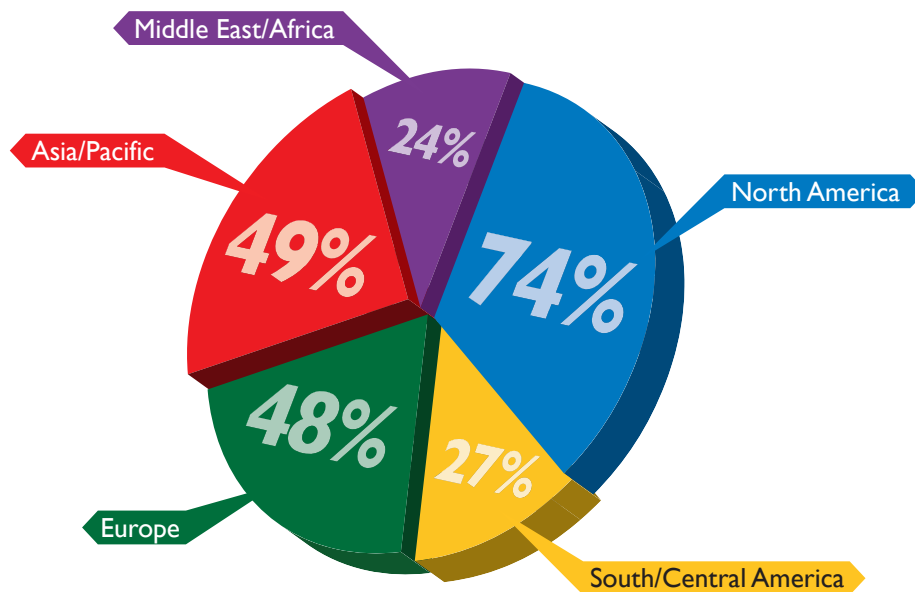
*Percentage of total respondents indicating they shipped to a region.