Logistyx TECHNOLOGIES

RESEARCH BRIEF

USING TMS TO REIMAGINE LAST-MILE FULFILLMENT

A new report from Logistyx and Logistics Management highlights e-commerce's significant impact on the supply chain, current parcel shipping trends, and how technology is helping companies formulate their last-mile fulfillment strategies.

Introduction

With just a few mouse clicks or screen taps, a growing number of people are buying just about anything they want, and from anywhere around the globe. On the front end, the art of shopping has been distilled down to a very easy, tech-enabled process. On the back end, the science of getting those orders fulfilled and shipped within ever-shrinking timeframes is anything but easy.

For shippers, the challenges include the race to whittle delivery windows down to next-day and same-day options; a persistent national labor shortage; the need to upgrade older facilities to accommodate the rigors of e-commerce; and increasing shipping costs. Companies are also dealing with a high volume of returns and myriad last-mile delivery challenges that they haven't faced in the past. Those that cut their teeth on pallet- and case-centric orders, for example, now have to figure out the fastest, most efficient way to ship an item as small as a single pair of earrings directly to a customer's home.

Without their own parcel transportation management systems (TMS), these companies simply hand off the visibility, control, and accountability to their carriers—a dangerous approach in today's "want it now" online sales environment. With global e-commerce sales hitting the $3.5-trillion-mark last year (up from $2.93 trillion in 2018), and expected to grow by 18% annually, smart B2C and B2B sellers are rethinking their fulfillment, logistics, and transportation strategies to offset these and other challenges associated with online selling.

As more companies adopt this mindset, the conversation turns to using technology as a great enabler of parcel shipping—something that many companies are beginning to think about and deploy. With the supply chain presenting a plethora of cost-reduction opportunities, and with many companies automating related processes, the need for a platform to handle parcel shipping increases exponentially.

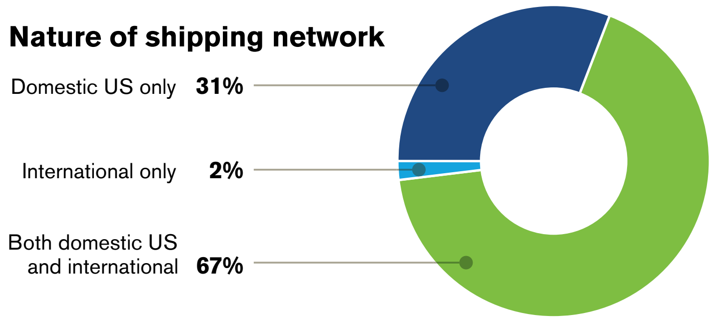
To learn more about shippers' e-commerce strategies, the obstacles that they're dealing with in this area, and the solutions that they're using to overcome these challenges, Peerless Research Group conducted an online survey on behalf of Logistics Management for Logistyx Technologies. All respondents were Logistics Management magazine subscribers and were prequalified for being involved in decisions regarding domestic and/or global parcel shipping operations for their company.

For the survey, Peerless Research gathered feedback and insights from 143 executives, mostly top logistics or distribution managers, corporate executives, purchasing managers, and warehouse/DC managers. Roughly one-half of respondents are employed in manufacturing, while others work in wholesale, e-commerce, wholesale and consulting, and retail. This research encompasses businesses of all sizes. Here's what we learned.

The "Want it Now" Fulfillment and Shipping Landscape

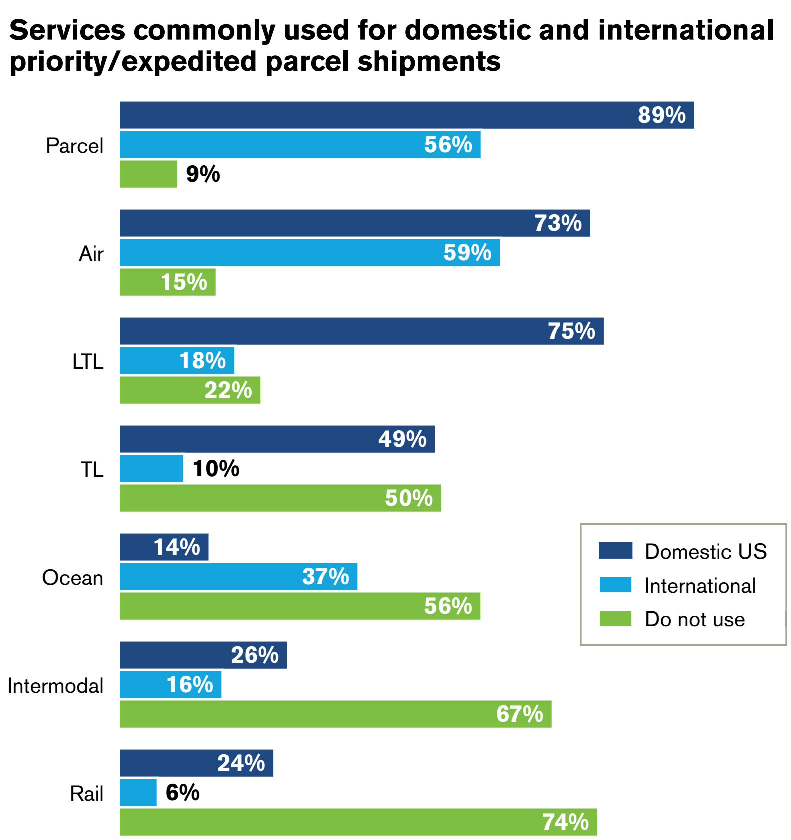
To get the widest possible view of e-commerce's impact on the parcel shipping environment, Peerless Research included a good mix of both domestic and international shippers in the survey. Sixty-seven percent of the companies surveyed are shipping both domestically and internationally, while 31% are only working in the U.S. Two percent only ship internationally. This mix of international and domestic shippers helped to create a global representation for the Logistyx survey. (Figure 1)

FIGURE 1



Asked about the services that they use for their priority and expedited parcel shipments—the options most likely to be used for e-commerce shipments—89% of respondents shipping domestically said parcel services, while 73% are using air, 75% rely on less-than-truckload (LTL), and 49% utilize truckload (TL). Internationally, 59% are using air, 56% rely on parcel, 37% use ocean carriers, and 18% utilize LTL. These results align with industry trends towards using parcel and air to get domestic shipments across the country and into customers' hands as quickly as possible. (Figure 2)

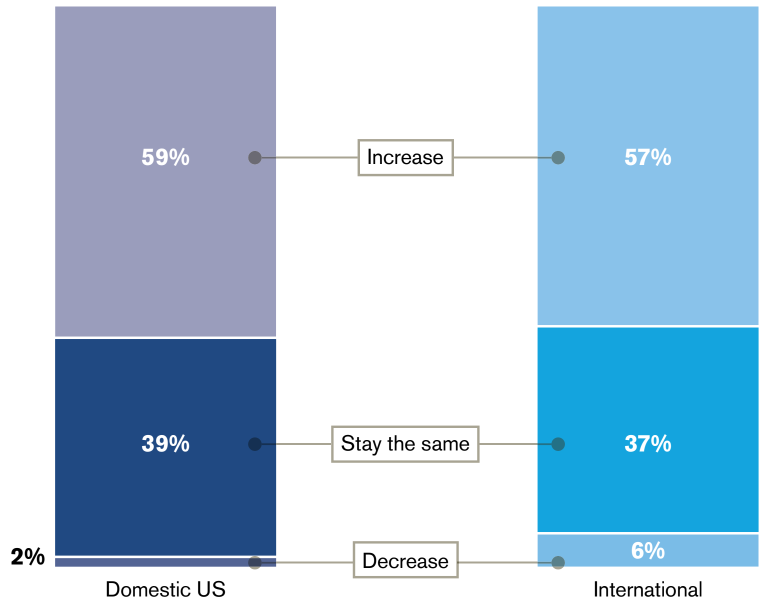
FIGURE 2



The use of parcel shipment is on the rise. Over the last two years, both domestic and international shippers have seen increases in their parcel shipment volumes, with 59% of domestic shippers reporting a definite increase and 39% saying that volume levels have remained constant. International shippers saw similar patterns, with 57% reporting an increase in shipments, 37% seeing no change, and 6% noticing a decrease. (Figure 3)

FIGURE 3

Change in domestic/international parcel shipments during the last two years



In the U.S., companies shipped about 62,115 parcel deliveries during the last 12 months, while those working internationally shipped about 33,345 orders. Seventy percent of international shippers sent out less than 10,000 shipments in the last year, while 30% shipped 10,000 or more parcels. Domestically, 48% of shippers sent out fewer than 10,000 parcels, and 52% shipped 10,000 or more. These numbers prove that domestic shippers are fulfilling a much higher volume of parcel shipments than their international counterparts. (Figure 4)

FIGURE 4

Estimated number of domestic and international parcel shipments in the last 12 months

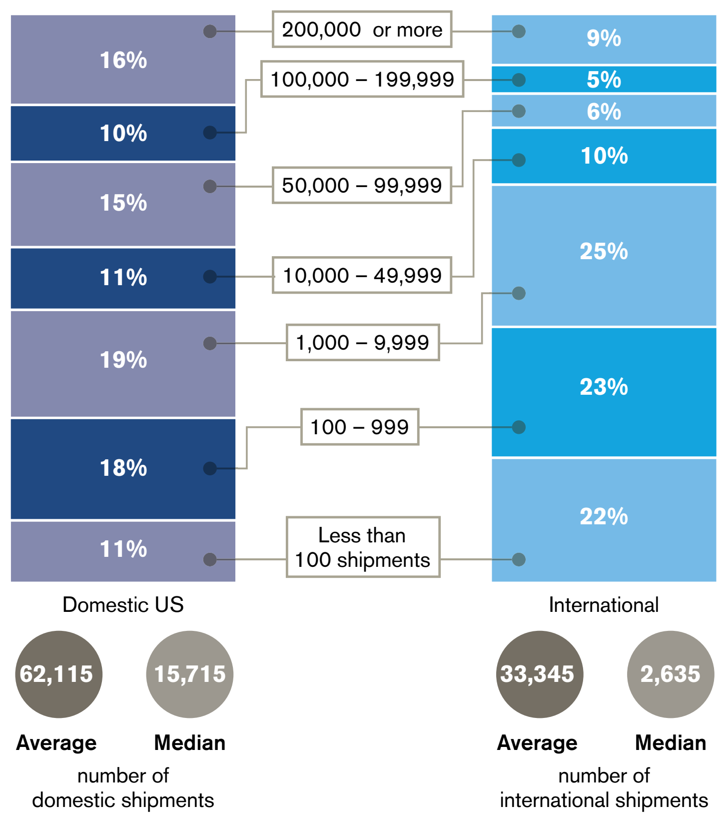


FIGURE 5

The Good, the Bad, and the Ugly

There's no doubt that e-commerce has changed the way both B2C and B2B companies get their products to market. According to the survey, 69% of organizations feel that e-commerce has either had a "great impact" or "some impact" on their organizations and that it has led to an increase in their use of parcel shipping. Just 18% said that e-commerce has had little or no impact, while 13% aren't involved with e-commerce sales. (Figure 5)

The impact e-commerce has on parcel shipment usage

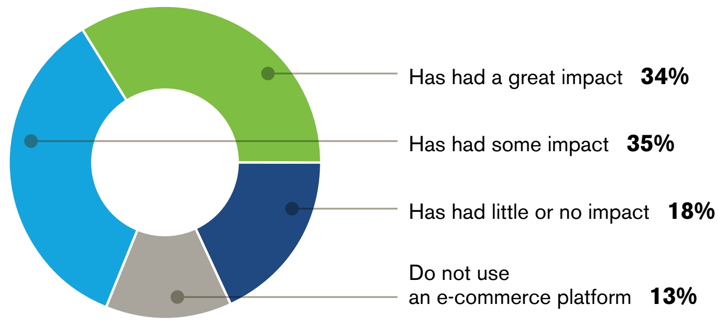
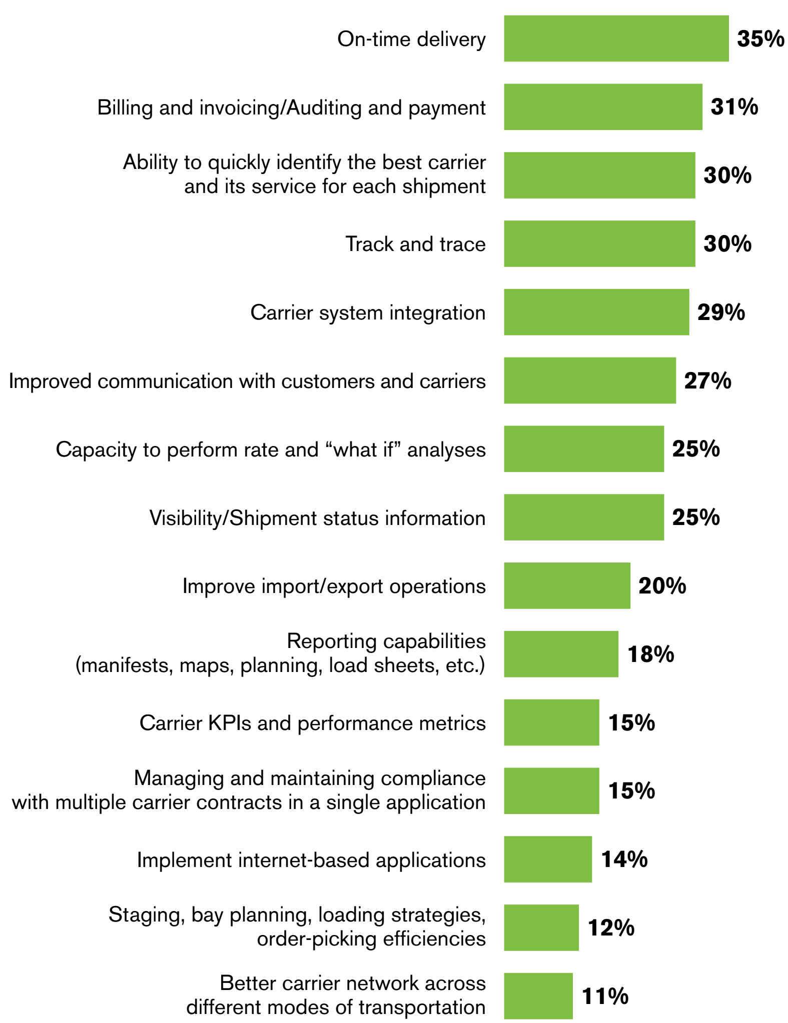


FIGURE 6

Aspects of parcel shipment operations needing improvement

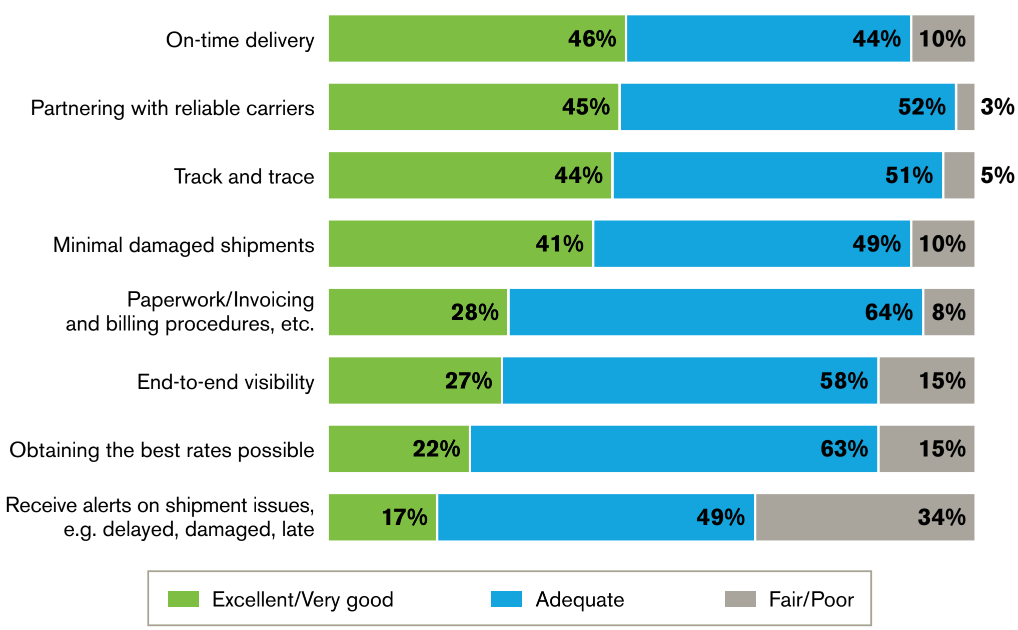


When asked which areas of parcel shipping need improving, shippers point to on-time delivery; billing and invoicing; identifying the best carrier and service; and track-and-trace as their top pain points right now. Other key areas of concern involve carrier system integration; communication with customers and carriers; and the ability to perform rate and "what if" analyses. These results are consistent with broader industry trends, which find that companies are dealing with a host of parcel-related challenges in the current shipping environment. (Figure 6)

In rating their parcel shipping operations, 90% of companies said on-time delivery rates are excellent, very good, or adequate. Just 10% describe delivery performance as fair or poor. This shows that companies are doing everything they can to ensure on-time deliveries to customers. When it comes to receiving alerts regarding delayed or damaged shipments, however, just 17% rate their operations as excellent or good (34% see themselves as poor and 49% as adequate in this area). The fact that such a high percentage of companies are falling short in this area is a problem in the fast-paced e-commerce environment, where customers expect to receive tracking and status information in real-time. Other areas in need of improvement include getting the best shipping rates, end-to-end supply chain visibility, and managing paperwork and invoicing processes. (Figure 7)

FIGURE 7

Rating organization's parcel shipping on key processes



Shippers are tackling rising parcel costs on several fronts. Fifty-two percent of respondents are working with fewer carrier partners, while 39% are consolidating shipments. Thirty-eight percent are optimizing their internal resources (i.e., labor or equipment) or improving their decision-making and planning in order to reduce shipping costs. Other solutions include adopting key performance metrics for carriers (26%), working with more carrier partners (21%), and implementing Internet-based transportation management applications (16%). These results reveal a shipper community that's leveraging internal resources, implementing technology, and working more closely with its carriers to help drive down transportation costs. (Figure 8)

FIGURE 8

How organizations are managing and containing parcel freight costs

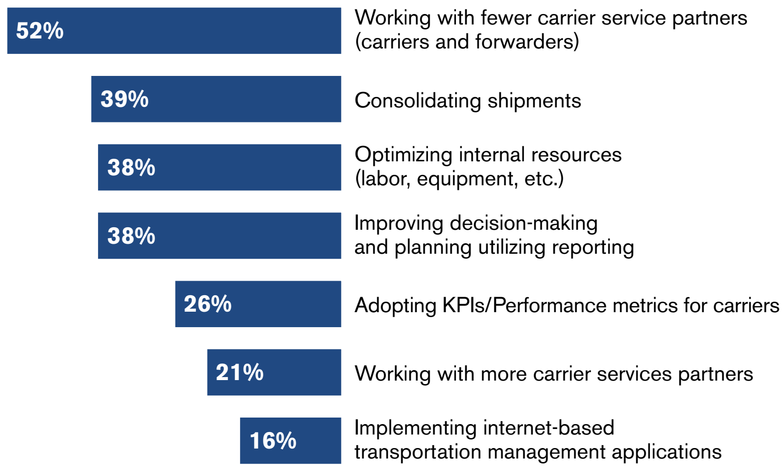
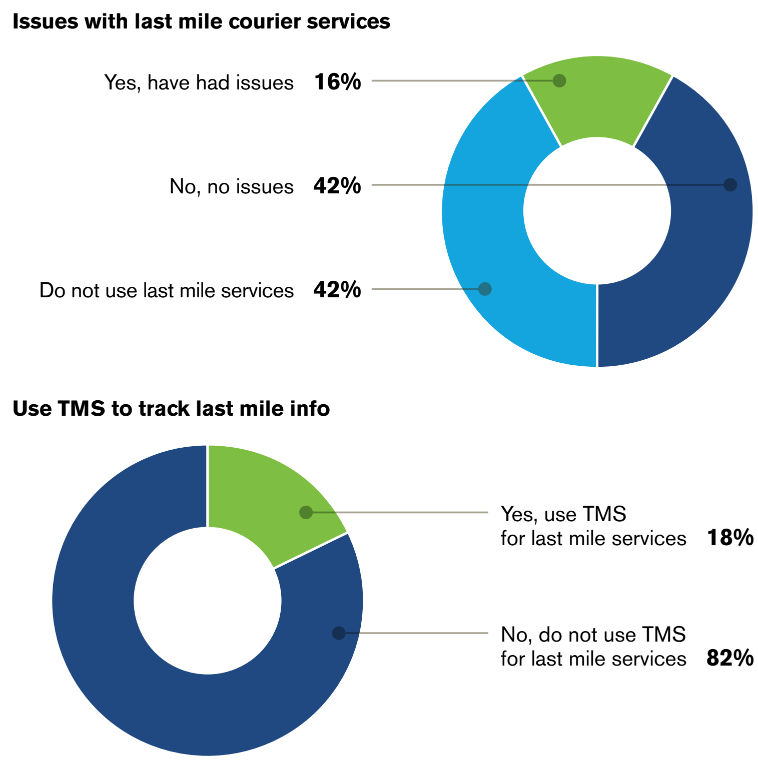


FIGURE 9

Usage of last-mile courier services



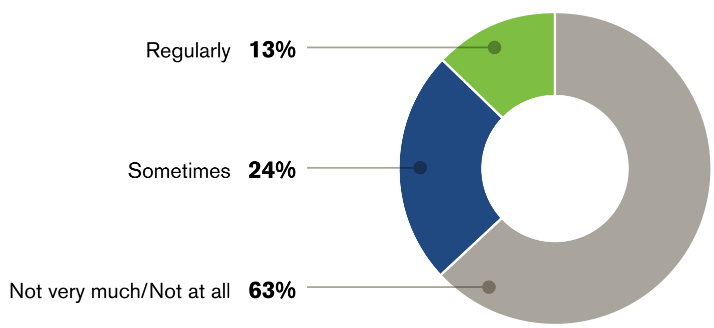
Closing the Last-Mile Gap

A link in the supply chain that's received a lot of attention lately, the last mile appears to be a problem for some companies and less of an issue for others. Asked about their last-mile services and experience with same-day courier services, 42% of respondents said that they haven't experienced any issues in this area. On the other hand, 16% said that they did have issues with these services, while 42% do not utilize last-mile or same-day courier services at the present time. Finally, only 18% of respondents are using a TMS to track their last-mile data and activities, while 82% aren't using this tool. (Figure 9)

Of the companies surveyed, 13% regularly utilize last-mile or same-day services for their parcel shipments, while 24% use these services occasionally. The fact that 63% of companies don't have these services as part of their larger supply chain strategies presents real opportunity for service providers that want to expand their customer portfolios. (Figure 10)

FIGURE 10

Extent to which organizations are using last mile/same day/courier services for parcel shipments



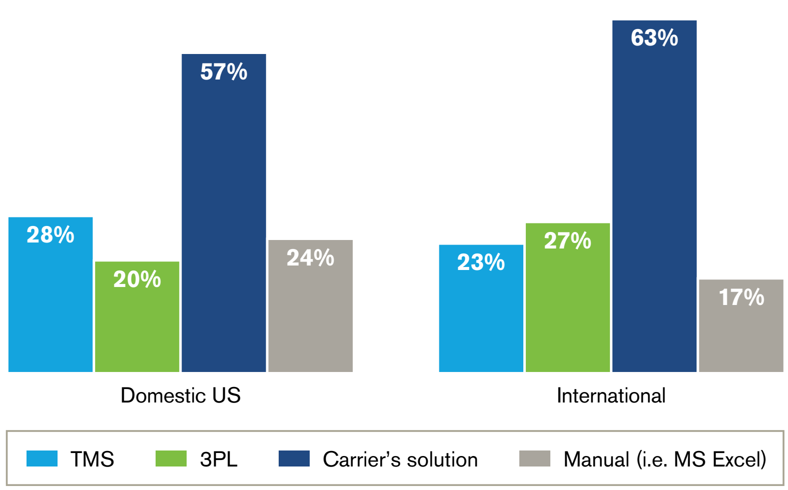
Technology Solves Parcel and Last-Mile Challenges

To manage parcel shipments, 57% of domestic shippers (and 63% of international shippers) rely on their carrier's application as opposed to using their own manual system, TMS, or third-party logistics provider's (3PL's) solution. Just 28% of domestic shippers are using a TMS to manage parcel shipments, while 20% rely on their 3PLs to handle this for them (24% are still using manual methods).

Twenty-three percent of international shippers use a TMS, 27% use their 3PLs' solutions, and 17% use manual processes to manage their shipments. These TMS adoption rates align with Modern Material Handling's 2019 Materials Handling Technology Study, which found that 26% of companies are currently using the software to manage their transportation activities. (Figure 11)

FIGURE 11

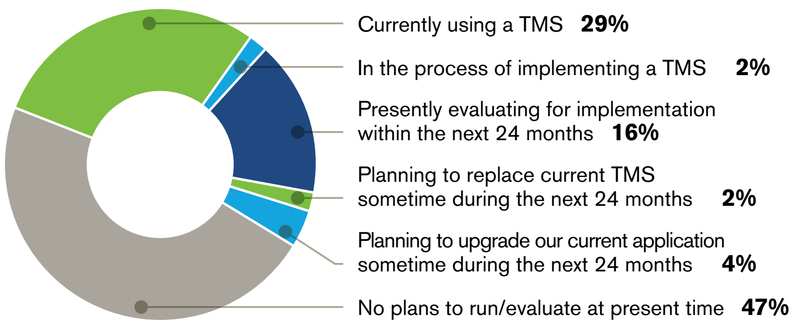
Services used to manage domestic and international parcel shipments



Across both domestic and international shipments, 29% of companies are using TMS while 2% are currently in the process of implementing one. Another 16% are evaluating TMS with the intention of implementing such a system during the next two years, while 4% want to upgrade their current application over the next 24 months. Forty-seven percent of shippers have no plans to evaluate or adopt a TMS at this time. Again, these results align with those from MMH's 2019 Materials Handling Technology Study. (Figure 12)

FIGURE 12

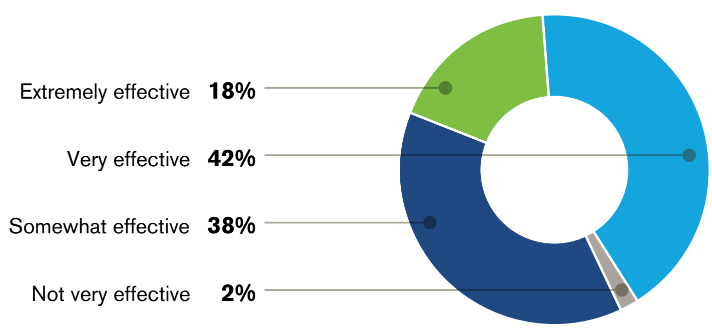
TMS usage, implementation, and adoption rates



Of those companies that do have a TMS in place, 60% find the system to be either "extremely" or "very" effective at helping them streamline their parcel shipping operations. Another 38% called their TMS "somewhat effective" and just 2% of respondents felt that their application wasn't very useful when it comes to improving shipping efficiencies. (Figure 13)

FIGURE 13

Value of TMS in making shipping operations more effective



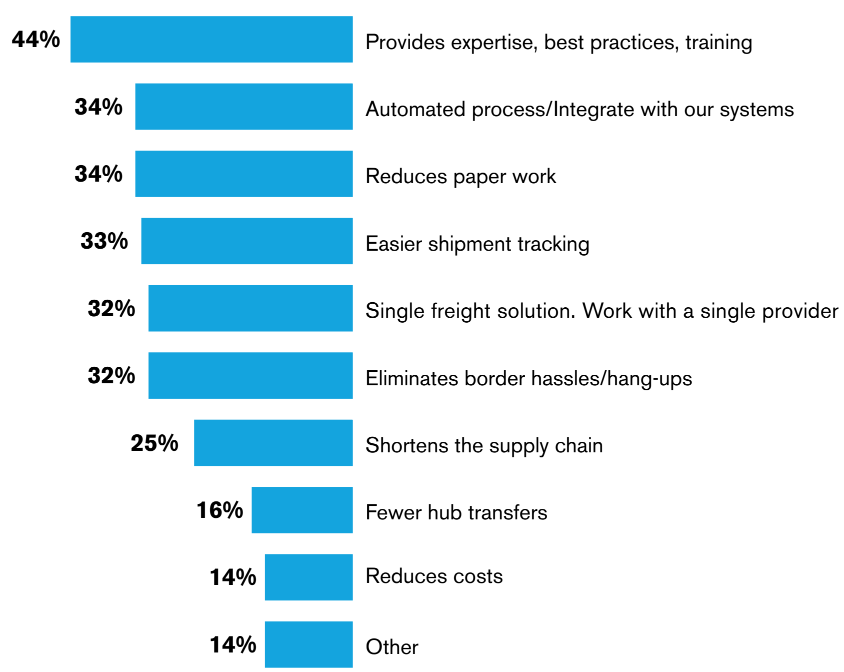
Enlisting Help

Among those companies that do work with 3PLs to manage their parcel shipments, 44% said the 3PLs provide expertise, best practices, and training. Thirty-four percent said their 3PLs provide support with automating their processes and integrating with existing systems, and 34% of respondents said that their 3PLs help them reduce paperwork.

Shippers also appreciate their 3PLs' ability to provide a single freight solution (32%) and eliminate hang-ups at the border (32%). These results make sense in a business world where companies are striving to streamline the number of partners they have to work with across the hundreds of parcel shipments that they're managing on a daily basis. (Figure 14)

FIGURE 14

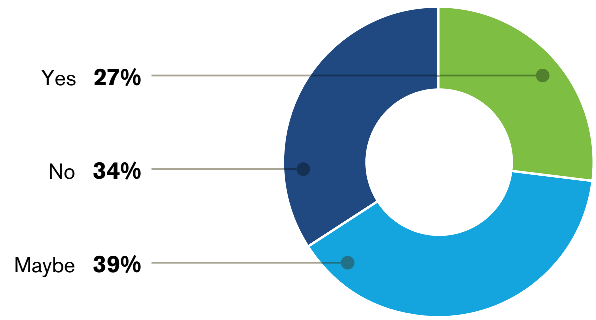
How 3PLs support the parcel shipment process



More specifically, shippers were also asked about their use of 3PLs to help meet customs compliance requirements. More than one-third (39%) said they would consider partnering with a 3PL for this reason while 27% are already doing so. (Figure 15)

FIGURE 15

Organizations using/considering a 3PL to meet customs compliance



When shipping goods outside of the domestic U.S., 61% of shippers look for a parcel shipping service that can manage electronic and manual filing processes for export. More than one-half (57%) want a provider that has strong capabilities in North American import/export processes and 50% are looking for support with the electronic and manual filing of import documentation. Other key "must haves" for shippers include the management of complex parcel shipment data and hazardous/dangerous goods shipping processes. The fact that shippers are looking to reputable third parties to help manage these tasks highlights the increased complexity of global shipping in the modern trade environment. (Figure 16)

FIGURE 16

Features considered most important when evaluating a provider of parcel shipping services for international parcel shipments

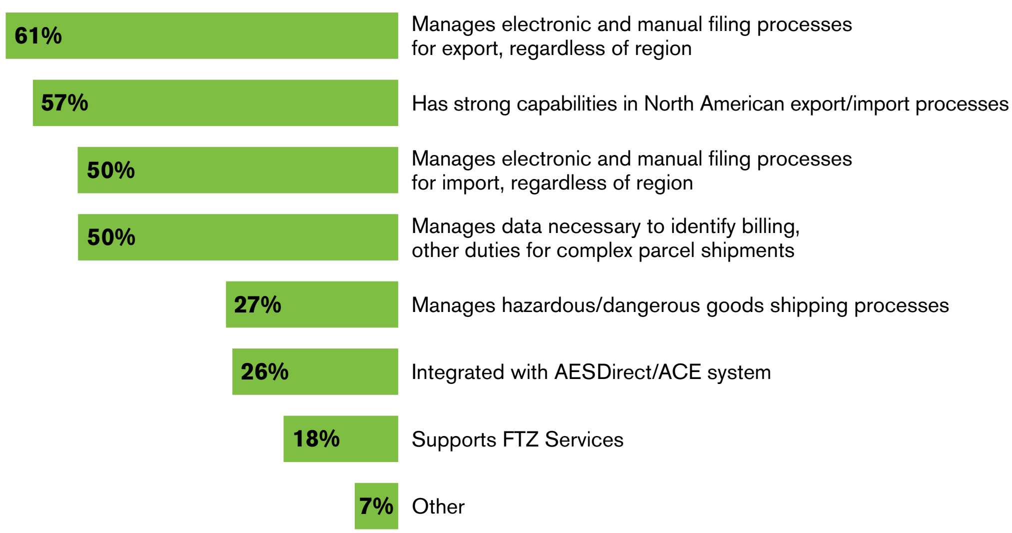
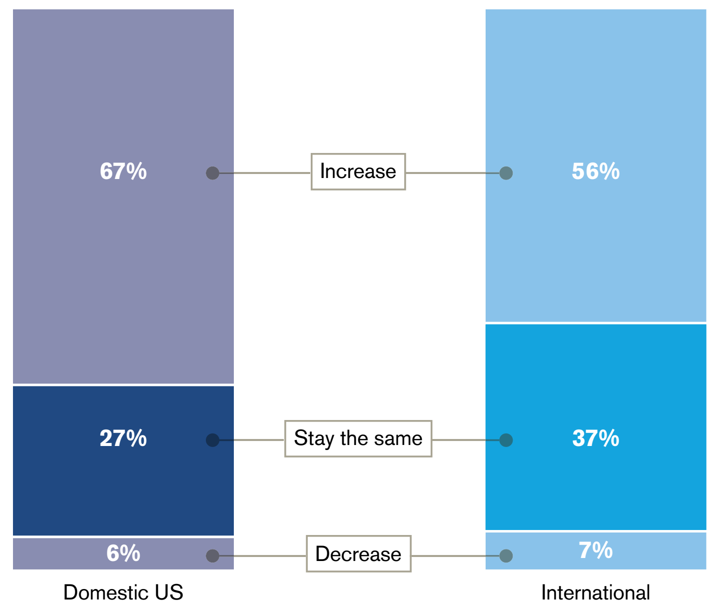


FIGURE 17

Expected changes with the volume of parcel shipments during the next two years

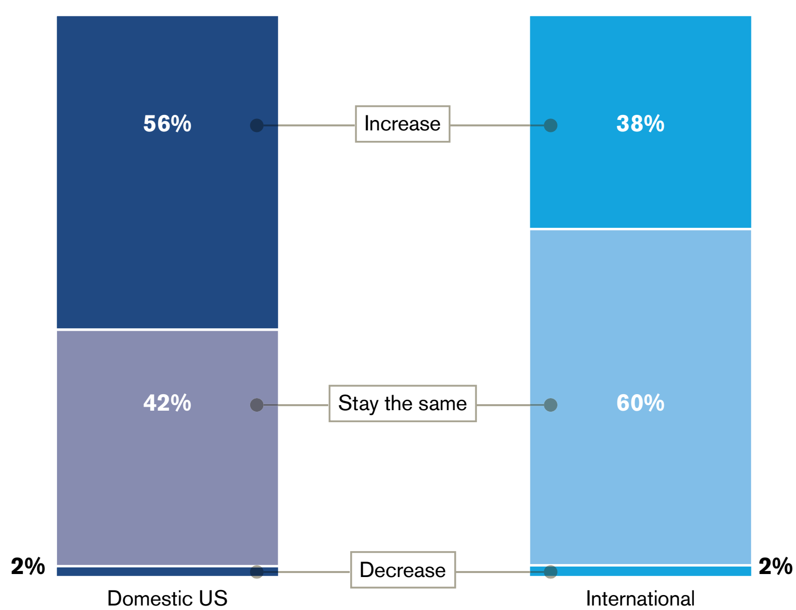


Full Speed Ahead

The e-commerce train isn't slowing down, which means shippers must brace for higher volumes of parcel shipments in both the near- and far-term. Right now, 67% of domestic shippers anticipate an increase in parcel shipments in the next two years, while 27% expect their amount of shipments to stay the same. Just 6% are expecting a decrease in these types of shipments. On the international front, 56% expect an increase in parcel shipments over the next two years, 37% said shipments will likely stay the same, and 7% expect a decrease. (Figure 17)

FIGURE 18

Expectations of e-commerce shipments during the next two years



For e-commerce shipments, 56% of domestic shippers expect an increase in the next year, while 42% expect their number of shipments to stay the same. International e-commerce are expected to rise during the next two years for more than one out of three (38%) respondent companies; 60% expect their e-commerce shipment volume will remain constant over this period. Regardless of which of these buckets a shipper falls into, it's clear that companies across the board will need the right combination of technology and outside partners to support these e-commerce and parcel growth expectations. (Figure 18)

Conclusion

As e-commerce's growth continues to skyrocket, the volume of parcel shipments will increase exponentially. This will present new, daily challenges for shippers that lack the human resources, technology, and automation needed to keep the e-commerce machine running smoothly.

With the expansion of both domestic and international parcel shipping expected to continue over the coming years, companies will also be working to meet the "want it now" delivery expectations of their customers. For many, this will require some supply chain reinvention and the addition of TMS and other technology to help streamline the fulfillment and delivery process.

In a business world where manual methods are quickly giving way to automated, digitized approaches, smart shippers are focused on finding the right tools and strategies to optimize their end-to-end delivery approach. In return, companies are cutting their freight costs, speeding up their delivery processes, improving their bottom lines, and keeping their customers happy (and coming back for more).

About Logistyx

Logistyx Technologies simplifies the complexity of cross-border, multi-carrier parcel shipping so manufacturers, retailers, and 3PLs can quickly scale and ship high volumes of products profitably to customers worldwide.

Our cloud Transportation Management System (TMS) for parcel shipping features more than 8,500 carrier services integrations, and Logistyx customers leverage state-of-the-art rate shopping and simulation tools to determine the ideal combination of contracted carriers in real time, based on factors such as price, capacity, service requirements, and performance. Control tower visibility and user-friendly dashboard reporting enable proactive exception management and carrier performance monitoring. From fulfillment managers to customer service representatives, teams monitor and manage all carriers in one solution.

Best suited for shippers seeking a quick implementation and an accelerated ROI, Logistyx specializes in integration with e-commerce, WMS, OMS, TMS, and ERP systems to maximize the value of the supply chain technology stack, and our current client roster spans multiple industry verticals worldwide.

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