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3Gtms
Powering Transportation Innovation

SUPPLY CHAIN HOT TRENDS

Q1 & Q2 2018

Background: The Power of a TMS

The complexities of eCommerce require a host of technology solutions. Through optimization, visibility and integration, a transportation management system (TMS) is a critical – but often overlooked – solution that bridges the gap between disparate order management and warehouse systems.

The TMS can help consolidate customer orders and find the best mode and carriers to keep costs as low as possible while giving route planners the opportunity to dynamically optimize right up until the freight leaves the warehouse. This includes choosing the best cost/service option for all transportation modes, from parcel to LTL, along with multi-stop TL, pool distribution, FTL and intermodal –while using real rates and services times for all modes.

A TMS is also a visibility tool that monitors freight in transit: It knows which orders are on which shipments, along with service times for all modes. It can use logic and workflow to proactively monitor freight and automatically get status and location information from carriers – as well as alert and respond automatically.

In eCommerce scenarios, a TMS is only as good as its integrations. It should integrate easily with a company's omni-channel distribution plan to deliver a 360-degree view of fulfillment operations; the ability to attain accurate order visibility and status from carriers in real time; and the ability to tightly integrate with an ERP. Key to integration is also the ability on-board partners and customers in weeks (not months) so you both start reaping the benefits of your partnership faster.

TMS Technology for Today's Realities

Most of the TMS systems on the market today were built 15-20 years ago with a rigid design that inhibits your ability to adapt to changing industry or customer demands.

3Gtms is a Tier 1 global TMS provider with a uniquely designed TMS architecture that manages all activity, from planning and optimization through rate management, integration, execution and payment.

It is the only TMS in the world powerful enough to handle the most complicated projects, yet intuitive enough to be used by all transportation professionals.

Don't Ignore your TMS

eCommerce demands that you remain flexible to customers' needs while optimizing your transportation operations. Lean on the power of a Tier 1 TMS that operates dynamically to help you maximize routes and deliveries, while never losing sight of the customer experience.

Mitch Weseley, CEO, 3Gtms

Introduction

Undoubtedly, supply chain is in the midst of unprecedented change. Technology and consumer behaviour have been prime culprits driving this evolution. However, because of the pace and scale of change, for every advancement that can be truly classified as a disruption, there is a buzzword or trend grabbing headline. This report aims to tackle both the headlines and the disruption in order to better understand where supply chain practitioners are really paying attention, where investments are flowing and what trends need to be kept in sight. This quarter, eft is exploring cross border eCommerce, supply chain automation and blockchain.

As eCommerce booms, cross border commerce has grown in step. One of the driving forces for this has been consumer eagerness for seamless shopping. Effectively, consumers are looking for an online shopping experience with as little friction as possible. This is a challenge that has fallen on the shoulders of retailers and service providers to achieve.

Automation has certainly affected almost every facet of supply chain, or so we have been told. But to what degree has automation taken place? And what type of automation? Effectively, the closer you look at automation, the more complex it becomes.

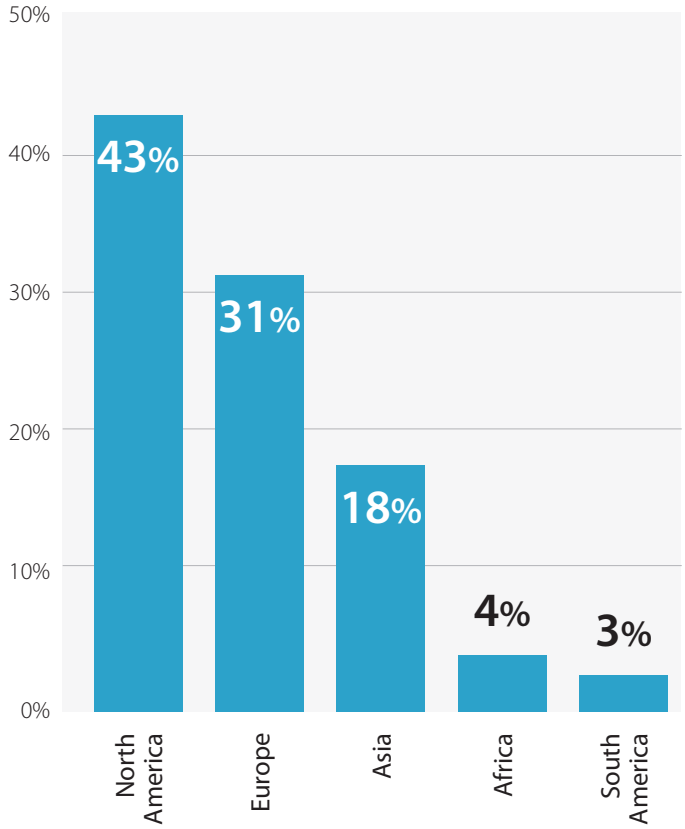
Blockchain has been the technology set to disrupt supply chain for years now. As we wait patiently for that to happen, we look for some of the signs that might suggest any real progress.

Finally, the report ends with some of the trends the wider supply chain community is following into 2018.

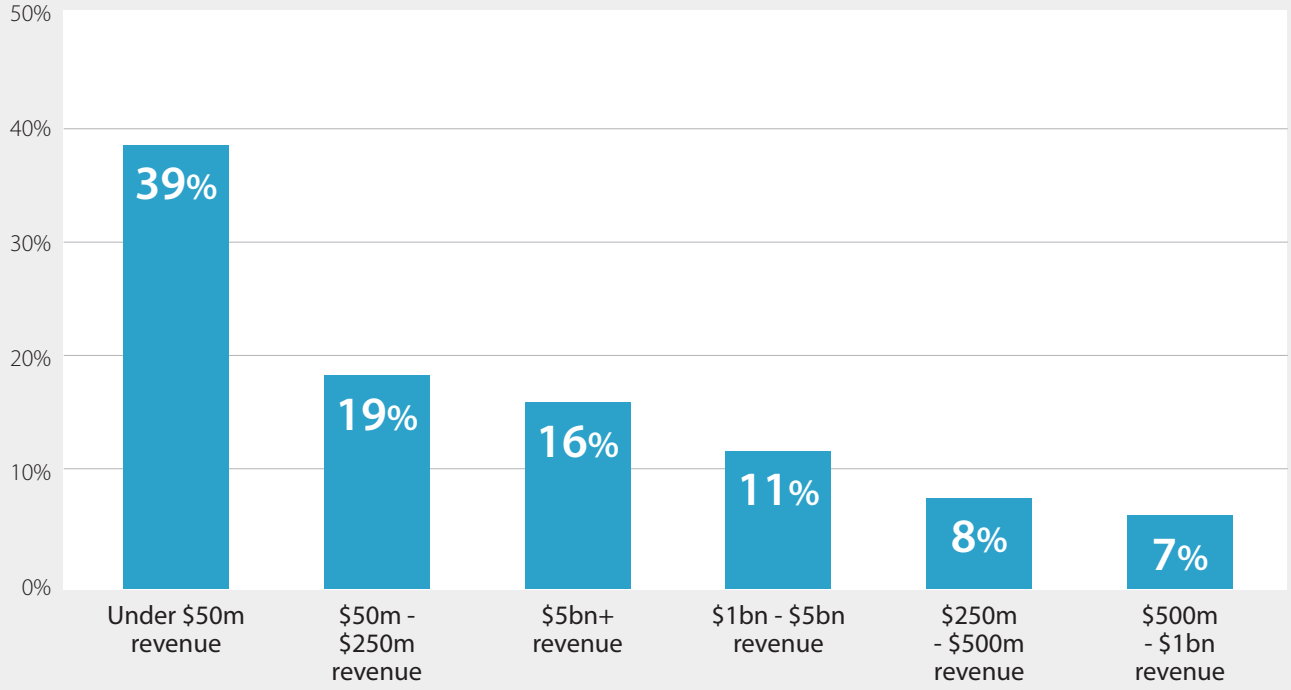
Number of responses analysed

195

In which region is your role based?

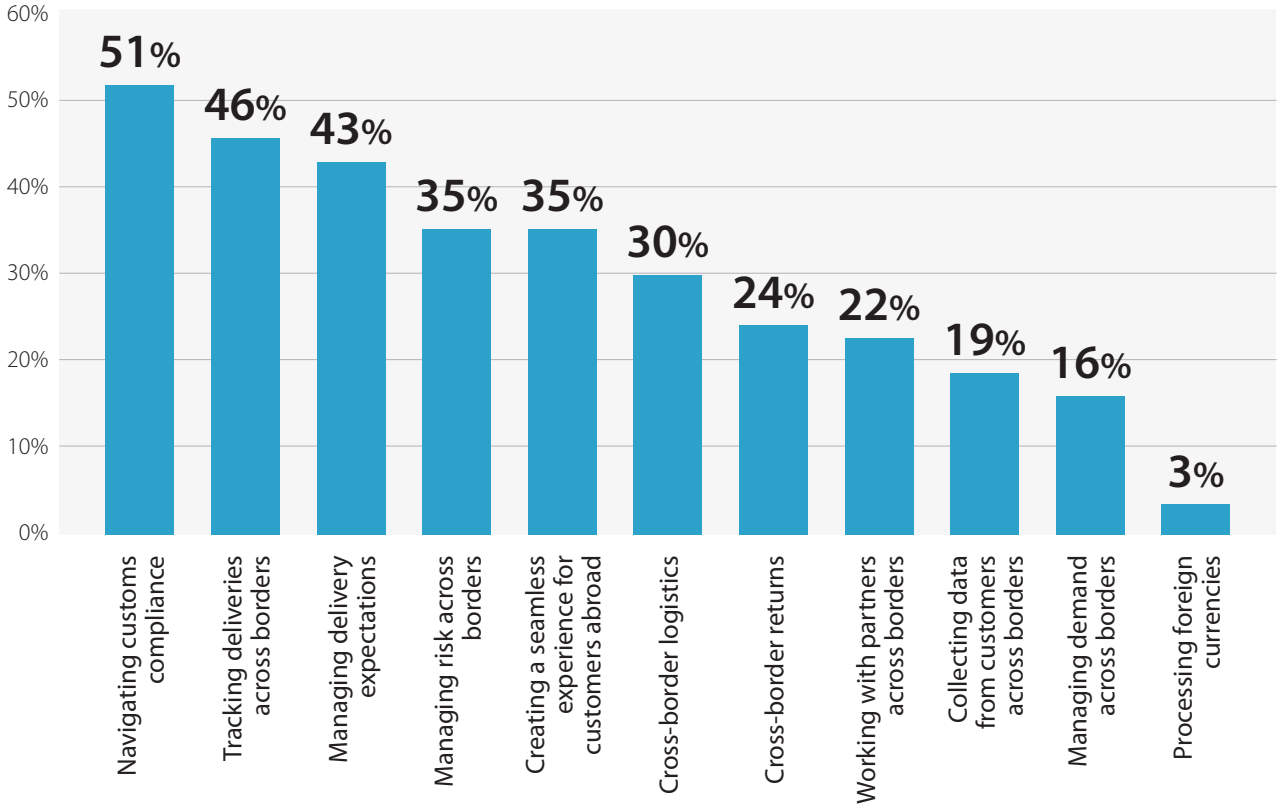


How big is the company you work for?



Cross border eCommerce

What challenges do you face with your cross-border eCommerce (other than cost)?



Consumers are the central driving force of eCommerce. Without any sympathy for the work necessary to accomplish it, consumers want what they want where they want it and when they want it. This includes consumers in other countries.

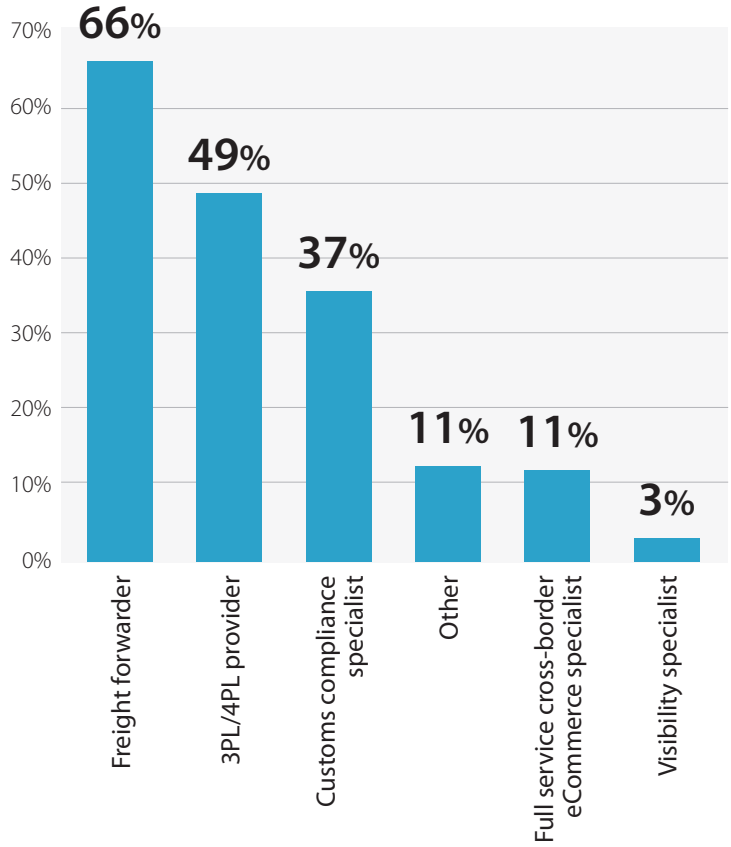
For retailers and manufacturers, the biggest challenge in terms of cross border commerce was navigating customs compliance. The intricacies of customs are challenging enough between two countries given the dynamic nature of customs regulations, the lack of visibility that can exist in this process and the need to manage customer expectations throughout. To make this challenge even more complex, respondents indicated that they were shipping on average to 31 different countries.

On average how many countries do you ship to?

31

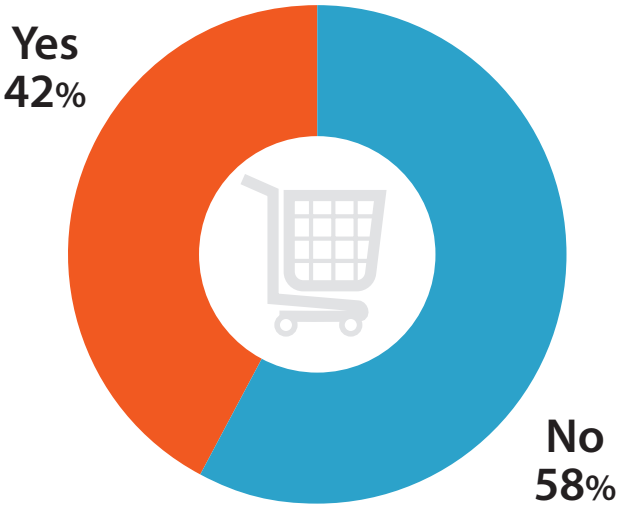
Interestingly, the other two major challenges associated with cross border commerce are challenges retailers and manufacturers face domestically: tracking and managing delivery expectations. Cross border is only adding further complexity to these areas given added timing uncertainties of customs and the need to work with partners across borders.

What services do you utilize to help guide you through your cross-border eCommerce?

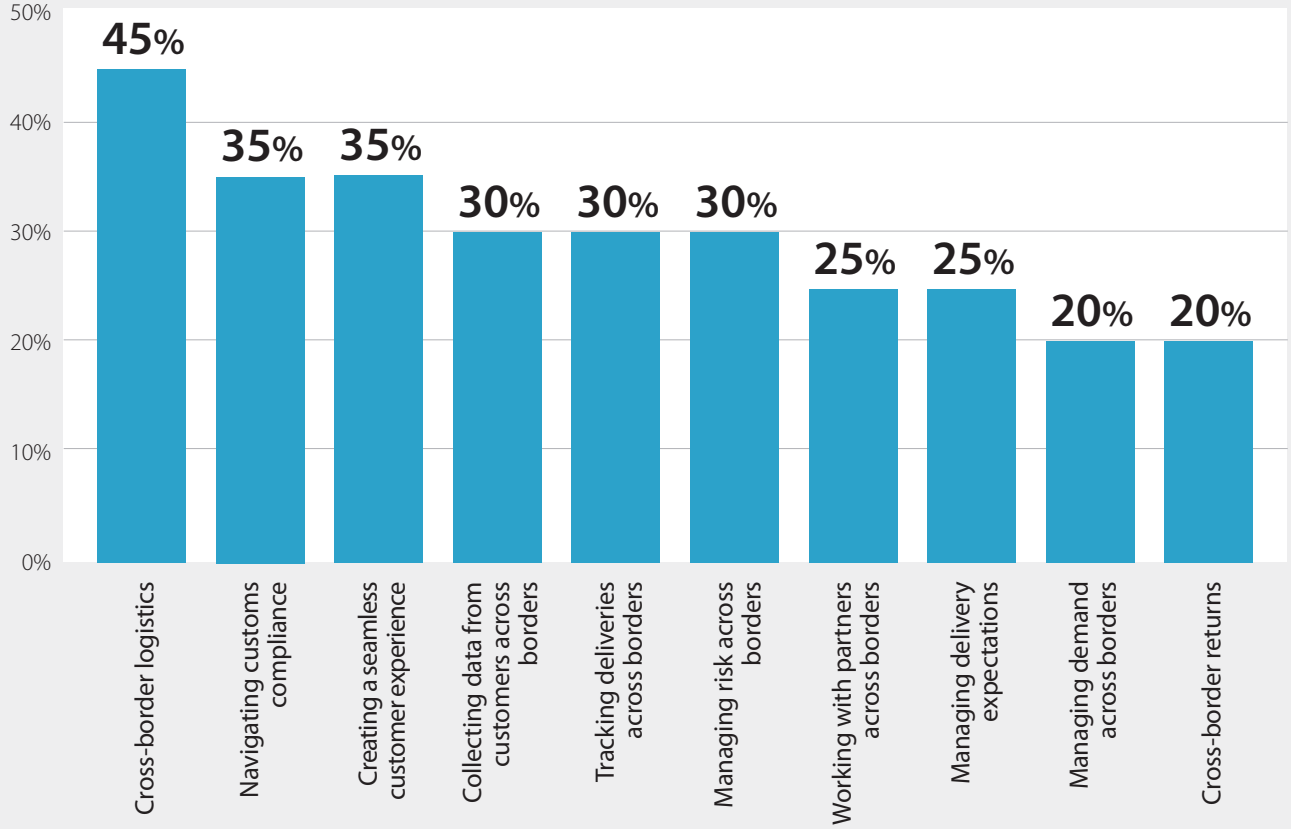


To overcome these challenges, manufacturers and retailers are primarily using freight forwarders. This could help explain the number of challenges being faced: increasingly, we are seeing regional cross border specialists crop-up to help guide manufacturers and retailers through customs, but also through regional partnerships and manage expectations. Look for freight forwarders to start specializing in cross border challenges and for more cross border specialists to begin appearing. At the moment, 58% of logistics providers with retail customers do not offer cross border expertise. Local providers will be skewing this number to some degree, however, it does underline the opportunities available in this space for providers.

Do you offer cross-border eCommerce expertise to your retail customers?

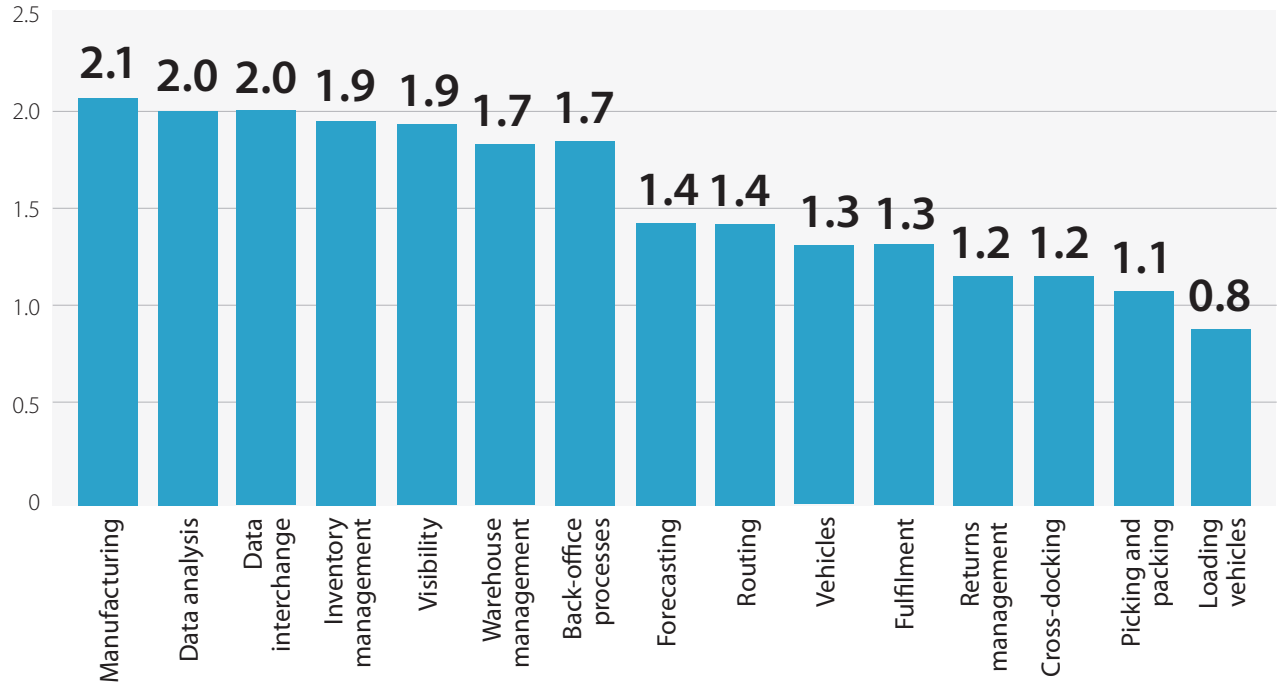


What challenges do you face helping your retailer customers with cross-border eCommerce?



Supply chain automation

What level of automation does your supply chain have? (rankings inspired by Alex Lyashok)



1. Attended automation (ie. Automation that is fully human monitored/managed.)
2. Semi-attended automation (ie. Automation where exceptions to processes are handled manually and interrupt the automation.)
3. Unattended automation (ie. Automation with no human monitoring or intervention and exceptions are handled by humans without interrupting the process. Humans still manage the whole automation process.)
4. Smart automation (ie. Automation with no human monitoring or intervention and the system is able to incorporate subjective tasks such as quality control. This level involves machine learning elements.)
5. Full automation (no humans involved! Ie. Automation manages the automation.)

Most supply chains will have some degree of automation. Talk of AI has really changed this conversation, though. Where eliminating some manual processes can certainly constitute automation, the conversation has now evolved to looking at supervised, unsupervised and truly fully automated processes.

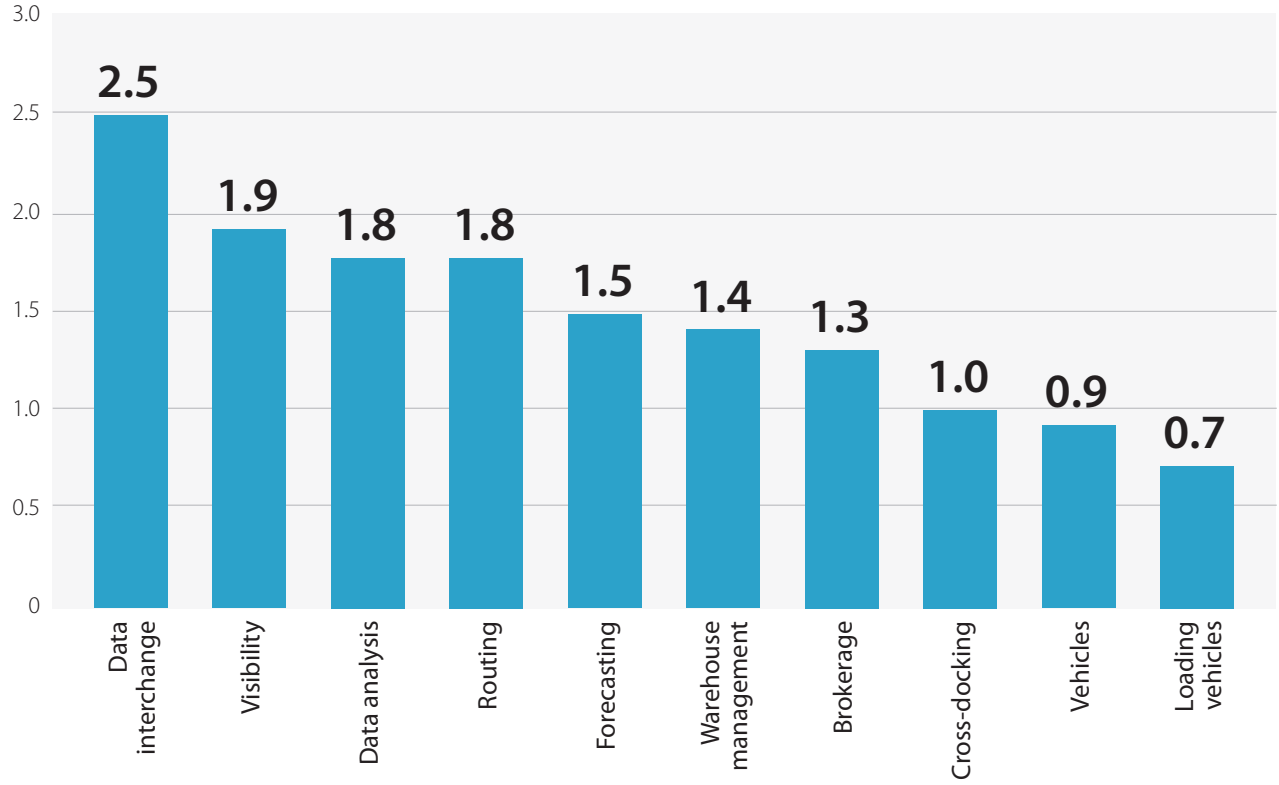
On the whole, manufacturers and retailers were dabbling with semi-attended automation for many processes. Some of the least automated processes were highly complex, manual work: loading vehicles, the vehicles themselves, cross docking, etc. Semi-attended automation has mostly been implemented on data-heavy processes: data interchange, analysis and visibility.

There are two major exceptions to this trend, though: manufacturing and inventory. The main driver for this has been the strategic nature of both of these elements in supply chain. As such, despite not necessarily being naturally digitalizable processes, they have been automated significantly. (Inventory,

arguably, is easier to digitalize and automate than manufacturing.) As costs and strategic aspects of supply chain shift, we can see some of the automation laggards experience some significant advances. For example, capacity challenges in the U.S. have meant that retailers and manufacturers are having to pay higher costs for services they have historically paid less for. This type of pressure could have an automating impact on areas such as vehicle loading to ensure space is maximized, and of course in the area of automated vehicles. This last area, though, also faces significant barriers in terms of regulation, which could be one of the significant barriers to its ability to be automated.

For logistics providers, data interchange is the area that has the most advanced automation. To some degree, this is not surprising given how logistics providers effectively serve as data conduits for supply chains. What is surprising, though, is the number of logistics providers that continue to use primitive versions of data interchange such as EDI.

What degree of automation does your organization have? (rankings inspired by Alex Lyashok)



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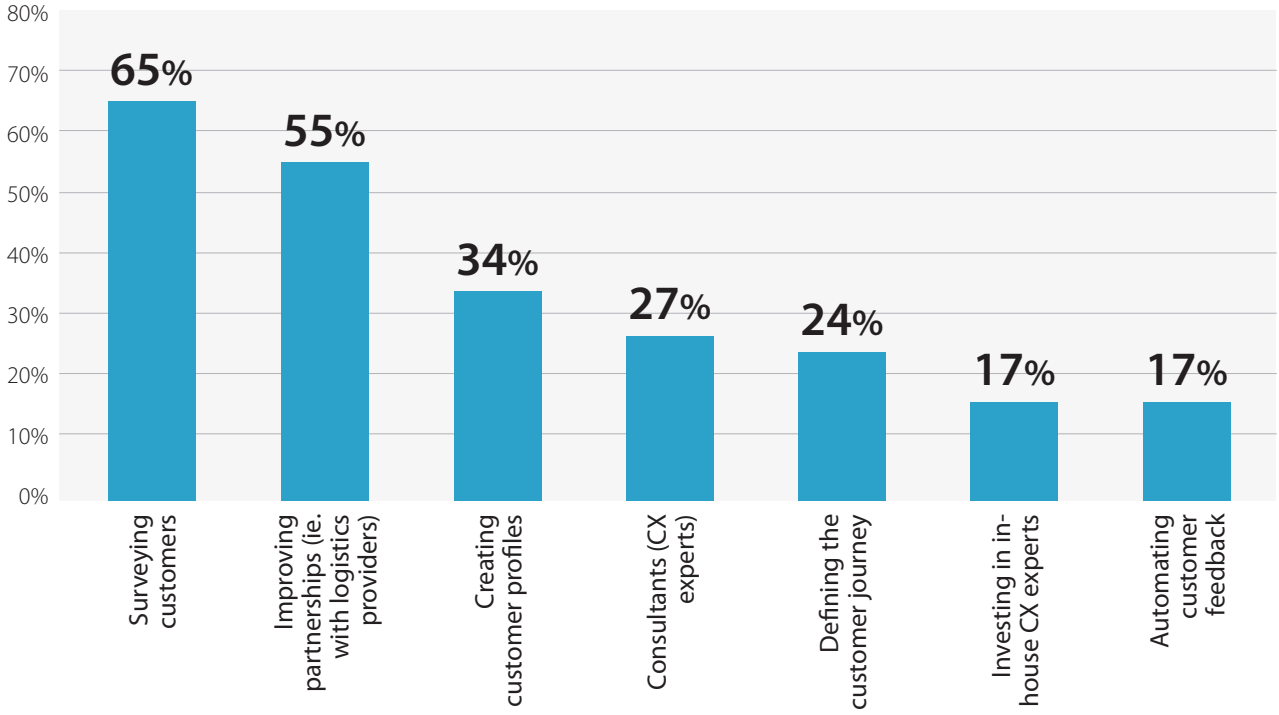
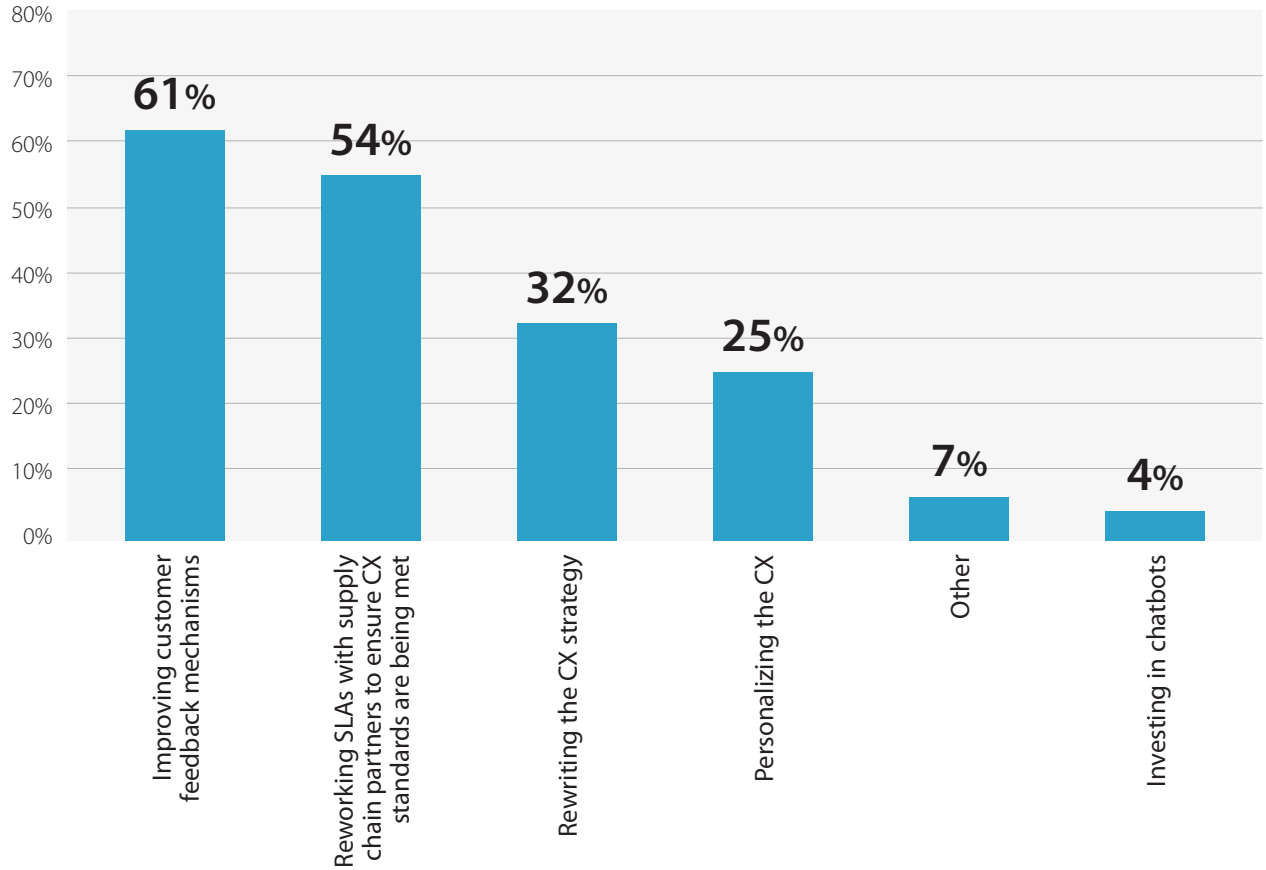
Customer Experience

What are you using to keep pace with customer experience?



Technology is changing the way businesses interact with customers. It is changing the nature of customer touchpoints: physical touchpoints are moving from stores to doorsteps while most other touchpoints are now digital. Manufacturers and retailers are working hard to keep pace with the changing nature of the customer experience. Naturally, surveying customers was the most popular mechanism for organizations to keep pace with the customer experience. However, manufacturers and retailers were making significant strides in less traditional customer experience mechanisms. That is, over 50% were looking to use improved partnerships such as with logistics providers to help manage the customer experience. In addition, some 36% of respondents were even using customer profiles to help them keep pace with customer experience. In fact, what is clear from respondents is that more and more modern customer experience specialist methods are making their way into supply chain.

How are you improving the customer experience?



Interestingly, logistics providers have identified the current trend of personalization in how they approach customer experience. Logistics providers have become the face of eCommerce. As a customer, you're much more likely to interact with the logistics provider delivering a product than with the retailer you actually bought said product from. In order to help their retailer and manufacturer customers differentiate, LSPs have clearly latched onto the idea of personalization - whether through communication or service - as a value add.

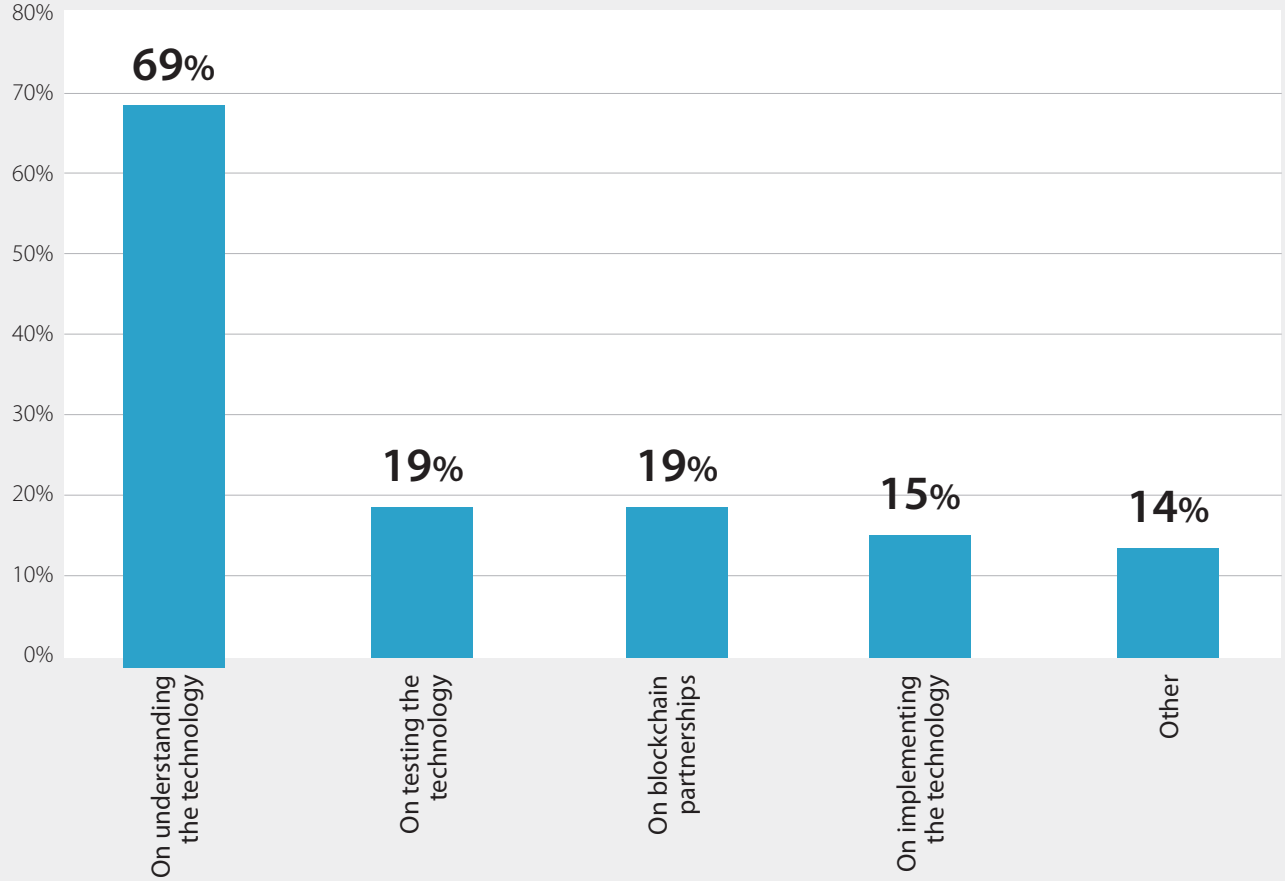
Blockchain

Blockchain continues to be everywhere. Is anyone in supply chain actually taking it seriously?

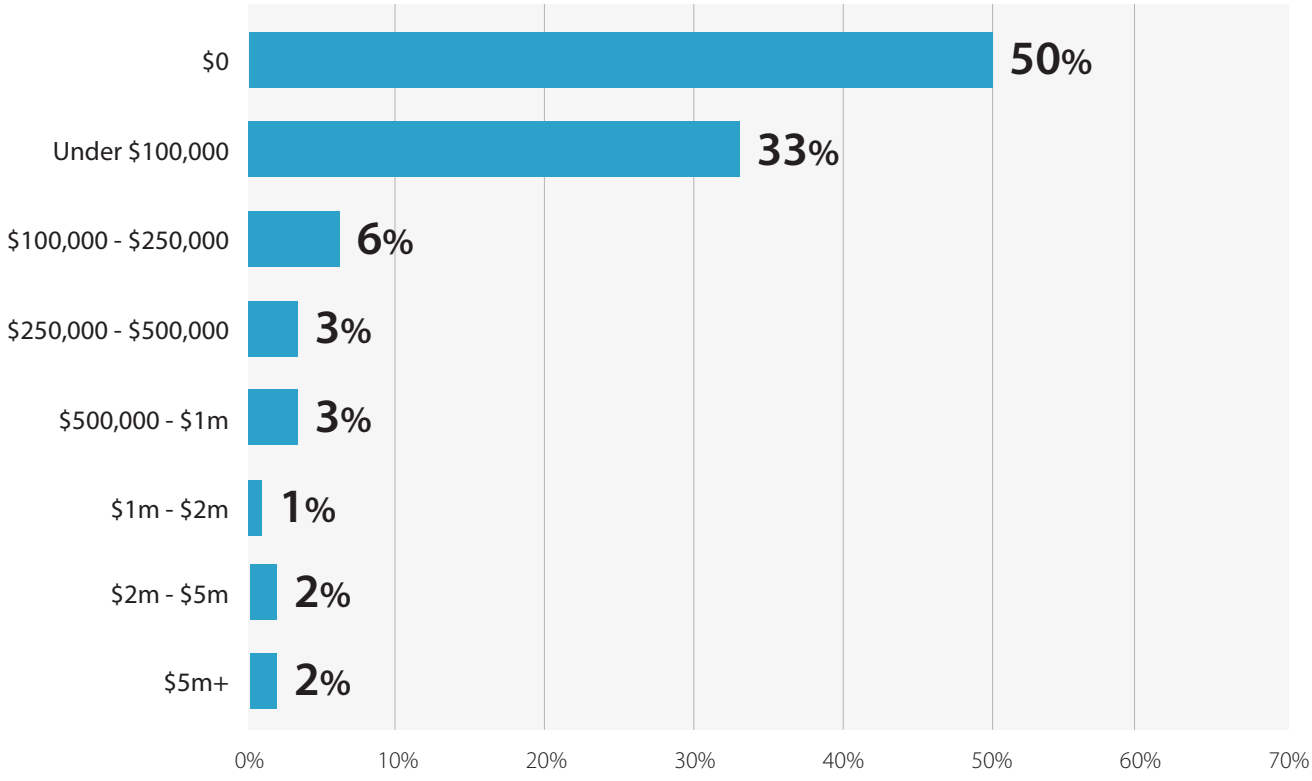
In a word, yes. One of the best ways to determine this is through the investments being made in the area. 20% of supply chain respondents were spending on testing the technology with a further 15% spending on implementing the technology. In addition, just under 50% of respondents were spending on the technology, and not insignificantly. 10% of respondents that were spending on the technology, were spending more than $1m.

It must be said that this type of spending is not indicative of any major implementations of the technology, especially given the types of organizations responding to this study. (17% had revenues of over $5bn). In fact, it will take many more years of such spending for the technology's potential to be realized. As such, 2018 likely will not be the year we see blockchain transform the supply chain, but perhaps just another step on the road.

How is your organization spending on blockchain?



How much has your organization spent on blockchain? (USD)



Conclusion: Did we choose the right trends?

In asking the respondents for the topics they have their eye on most as we enter 2018, we got some right and some wrong. Unsurprisingly, blockchain was one of the most mentioned trends respondents said they had their eye on. However, some other interesting trends came out of this study. Digitalization and its variants (IoT especially) were heavily mentioned as well. eCommerce continues to cause headaches for all aspects of supply chain, as are many of its associated challenges: customer experience and customer demands in particular. We did miss out on some topics though that were on the minds of supply chain executives. Here is a quick round-up:

Brexit

Brexit was weighing on the minds of many of the European respondents. Continued uncertainty revolving around this issue and with significant impact on many markets dealing with Europe and the UK, we will continue to see this topic on European respondents' radars until more clarity is shed on the topic.

Capacity

Capacity was brought up by a significant number of respondents. This is become a major problem, especially in the United States. eCommerce growth in combination with a driver shortage have certainly helped contribute to this problem. It is also a challenge affecting all sides of the supply chain. Logistics providers are having to increase prices of their capacity, find customers that do not use reserved capacity and spend resources seeking new capacity for existing customers to just maintain the status quo. Retailers and manufacturers are also struggling as capacity related delays and restrictions hit their operations. Shippers are also taking on the brunt of the costs associated with the challenge. With eCommerce set to continue growing, and no end in sight to a driver shortage, it might come down to some type of automation or sharing economy business model to ease this challenge.

Climate Change

One of the most surprising topics that came up in this year's study was the impact of climate change on supply chains. Clearly, unexpected climate events and extreme climate events are having a significant impact on the bottom line. Hurricanes, for example, were a major disruptive force to the U.S. this year. Wildfires and mudslides in California were also heavily impactful. But, it looks like these are trends we are going to continue to experience and have to predict with very short notice. For example, the alps have experienced unprecedented levels of snow this year - a boon for skiiers, but a disaster awaiting low-lying Europe come spring. Is your supply chain ready?

3Gtms: Design Makes all the Difference

Most of the TMS systems on the market today were built 15-20 years ago with a rigid design that inhibits your ability to adapt to changing industry or customer demands.

TMS software vendors have attempted to fix these designs by adding new features and functionality to their legacy product, but that's only caused complicated implementations. And once implemented, the designs require extra time and money in order to be adapted to new processes or needs. In the long run, any savings you're achieving with the TMS may go right back to the vendor for support services or costly code changes.

You can't avoid the inevitable gaps between what you need and what your TMS software provides out-of-the-box, but you can ensure an easier, faster way of filling the gaps by choosing a TMS that doesn't force you to change your business process and lose your competitive advantage. 3Gtms allows you to easily add new functionality and self-configure the system to fill in those gaps.

Knowing the features you want in a TMS is important; understanding how different TMS systems execute on those features is a game-changer. Functional gaps can always be filled with the right system design, but a bad design will impact you for the life of your solution.

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