

Hype or Reality?

*How Supply Chain Convergence and Cloud
Impact Global Trade Management Usage*

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Executive Summary

Introduction

Managing customs and compliance processes is a complex task, even for the most well-run of supply chains. From product development through to import or export, today's managers have to account for so many variables, both inside and outside of their organizations.

There are, of course, global trade management (GTM) tools to help manage this complexity. But the landscape of systems designed to integrate customs and compliance tasks into the broader supply chain can add yet another layer of complexity. Deciding which system is best suited to a particular organization can be daunting, especially in light of emergent delivery methods for software solutions, such as cloud-based applications.

Another crucial aspect to consider is the extent to which a global trade management solution integrates with a shipper's existing systems. There is a prevalent notion in the market that shippers want to merge supply chain functions into fewer systems. This report is designed to delve deeper into these key areas, particularly how shippers and third party logistics providers see supply chain convergence and cloud affecting their GTM strategies and technology buying decisions.

Data contained in this survey was drawn from the responses of 170 global trade practitioners between May 19, 2014 and June 27, 2014. Respondents were asked up to 31 questions about their GTM strategies, technology usage, and investment plans, as well as their attitudes toward cloud-based solutions and supply chain convergence.

GTM Technology Usage

There is deep fragmentation in the pricing and delivery models of systems used by trade practitioners to manage compliance and other aspects that GTM systems touch, like product development.

Roughly a quarter of respondents use cloud-based solutions, while another quarter use on-premise solutions. Eighteen percent say they use a subscription-based model, while more than double that number use a licensed-based model. About one in five respondents outsource their GTM activities to a third party, while nearly 30 percent say they either don't have a GTM platform, or are uncertain.



**Supply Chain
Convergence**

One-third of respondents plan to actively migrate more processes to their GTM solution, while one in 10 respondents is satisfied with their platform with no plans to migrate more processes to it.

Half of respondents are trying to merge their systems and processes on an enterprise level, while nearly another quarter is satisfied with the way their processes and systems currently function. Only 3 percent say they are trying to uncouple currently merged systems or processes. It seems clear that businesses see value in using fewer systems.

In data more directly related to GTM convergence with other supply chain functions, around two-thirds of respondents said it was important to very important that their GTM system is integrated with their company's supply chain function.

Cloud Perspective

Cloud as a delivery model is as widely used as on-premise solutions. But it's also important to state that the buzz around the cloud has yet to match its true usage. Fewer than a quarter of respondents say they plan to move to a cloud-based GTM solution in the next two years, and a larger percentage of respondents said they are not moving to a cloud-based GTM solution than said they are moving to one. The market, in many cases, remains to be convinced about the cloud model.

More than half of respondents expect cloud-based solutions to be very accessible, easy to use, with low implementation costs and frequent upgrades. These are areas where cloud-based solution vendors press home their perceived advantages.

The drivers for cloud-based GTM systems are clear – shippers large and small see the mixture of the pricing and delivery model of cloud-based systems (which are usually priced on a pay-as-you-go basis) as their most attractive characteristic.

The other side of the coin is the elements of cloud that make people wary. Roughly three-quarters of respondents cite data security as their biggest concern in the cloud.

Retailers also cite concerns over a perceived lack of customization and performance, while manufacturer respondents say lack of customization and loss of control are barriers. 3PL respondents, almost across the board, say they are less likely to be concerned about cloud-based solutions as shippers.



Hype or Reality?

Respondents were asked whether they saw supply chain convergence as hype or reality. Given that respondents predominantly say they are aiming to integrate and merge systems and processes, it's little surprise that few see supply chain convergence as pure hype.

However, nearly half of respondents see it as somewhere between hype and reality—that is, supply chain convergence may be great in theory, but less obtainable in practical terms.

Meanwhile, around two-thirds of respondents lacking a GTM system are yet to be entirely convinced of the efficacy of cloud-based solutions. Forty-three percent of systems-based respondents see it as reality, more than double the number of manual respondents who see it the same way. Less than 10 percent see cloud as pure hype.

The market clearly has its focus on how supply chain convergence and cloud impact global trade management, and vice versa. The decision about whether convergence or cloud is more integral to a company's business is an either/or decision. In many ways, the concept of convergence is at odds with cloud. Wanting more centralized control through tight integration across all the people and systems and people global trade touches might lead a company to choose an on-premise system.

Alternatively, an application delivered via the cloud yields benefits in upfront cost and implementation time, but reduces a company's ability to integrate across all the departments global trade touches.

Based on the perspective from respondents in this survey, global trade practitioners see convergence and cloud as more reality than hype, but large proportions are yet to be completely convinced.



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Section I: Introduction

Managing customs and compliance processes is a complex task, even for the most well-run of supply chains. From product development through to import or export, today's managers have to account for so many variables, both inside and outside of their organizations.

There are, of course, global trade management (GTM) tools to help manage this complexity. But the landscape of systems designed to integrate customs and compliance tasks into the broader supply chain can add yet another layer of complexity. Deciding which system is best suited to a particular organization can be daunting, especially in light of emergent delivery methods for software solutions, such as cloud-based applications.

Another crucial aspect to consider is the extent to which a global trade management solution integrates with a shipper's existing systems. There is a prevalent notion in the market that shippers want to merge supply chain functions into fewer systems. This report is designed to delve deeper into these key areas, particularly how shippers and third party logistics providers see supply chain convergence and cloud affecting their GTM strategies and technology buying decisions.

Data contained in this survey was drawn from the responses of 170 global trade practitioners between May 19, 2014 and June 27, 2014. Respondents were asked up to 31 questions about their GTM strategies, technology usage, and investment plans, as well as their attitudes toward cloud-based solutions and supply chain convergence.

This report makes frequent use of the term GTM, which we define as the practice of streamlining the entire life-cycle of global trade across order, logistics, compliance, and settlement activities to significantly improve operating efficiencies and cash flow, while reducing risk.

GTM includes, but is not limited to, trade compliance, visibility to shipments, total landed cost, trade security, and trade finance. In some more rudimentary references, GTM can refer only to a company's trade compliance management process.



Many of the data points represented in this report show the differences between companies that use a systems-based approach for import or export management versus those that manually handle this process. For this report, “systems-based” and “automated” designate companies that use at least one application to facilitate their customs and compliance functions. These do not mean that human interactions have been entirely or even mostly eliminated. Likewise, “manual” does not mean these firms do not use e-mail, fax and other technologies outside of import functions. There is an assumption that basic computing is ubiquitous in the trade compliance and logistics management field.

This report also makes frequent comparisons between large and small/medium shippers – that is shippers with annual revenue of \$1 billion or more, and those with less than \$1 billion. Another frequent comparison made is between the GTM perspectives of retailers, manufacturers, and logistics services providers (LSPs).



Section II: Supply Chain Convergence

There’s an almost utopian ideal that all processes and systems within an organization should function seamlessly and without borders. That sort of end-state is a nice target at which to aim, but doesn’t often mesh with the reality of most shippers and 3PLs face with regard to systems. Most companies find themselves in an ever-present state of technology transition, shedding creaky or obsolete legacy systems in favor of modern, more nimble versions. But nimble and state-of-the-art doesn’t always translate to better integration.

Shippers surely want their systems to speak the same language to one other, a critical step toward harmonizing data. Nowhere is this more critical than in global trade management, something that has the capacity to touch virtually every corner of an importer or exporter’s business. The question is, to what extent do shippers and LSPs require that convergence to occur, and what’s the reality in today’s market?

A first important step is to examine what platforms the market uses to tackle global trade management. As Fig. 1 shows, there is deep fragmentation in the pricing and delivery models of systems used by trade practitioners to manage compliance and other aspects that GTM systems touch, like product development.

Roughly a quarter of respondents use cloud-based solutions, while another quarter use on-premise solutions. Eighteen percent say they use a subscription-based model, while more than double that number use a licensed-based model. About one in five respondents outsource their GTM activities to a third party, while nearly 30 percent say they either don't have a GTM platform, or are uncertain.

28% of respondents are using a licensed or subscription-based cloud hosted solution.

Figure 1: Current Global Trade Management Platform

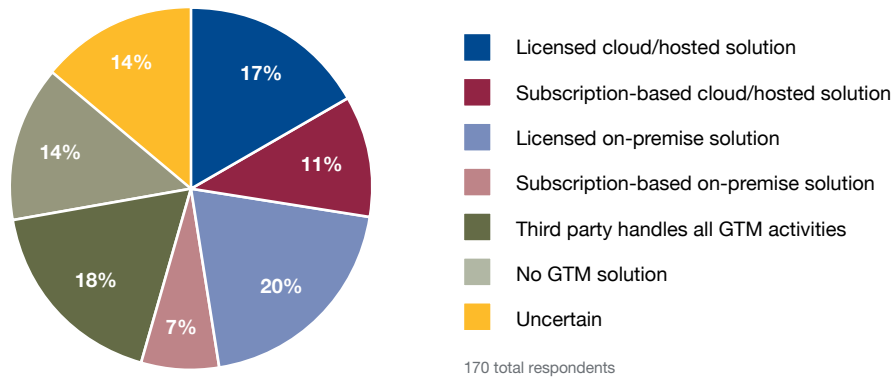


Fig. 2 shows that about one-third of respondents plan to actively migrate more processes to their GTM solution, while one in 10 respondents is satisfied with their platform with no plans to migrate more processes to it. One in five respondents say they don't currently have a GTM solution, but only 30 percent of that group has plans to implement one. Another quarter of respondents expressed some dissatisfaction with their existing platform, but only about 20 percent of that group said they are prioritizing the search for a new platform.

Figure 2: Current GTM Technology Strategy

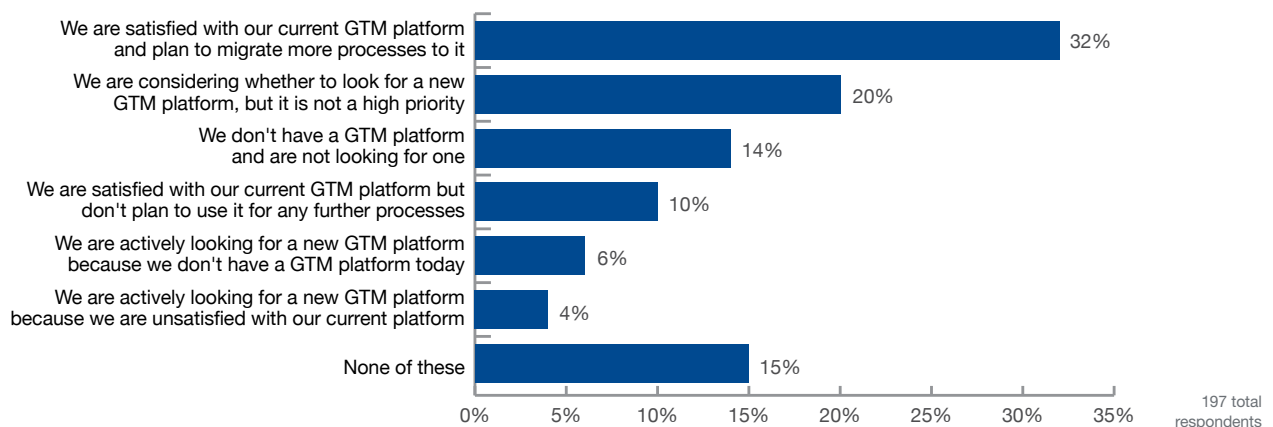
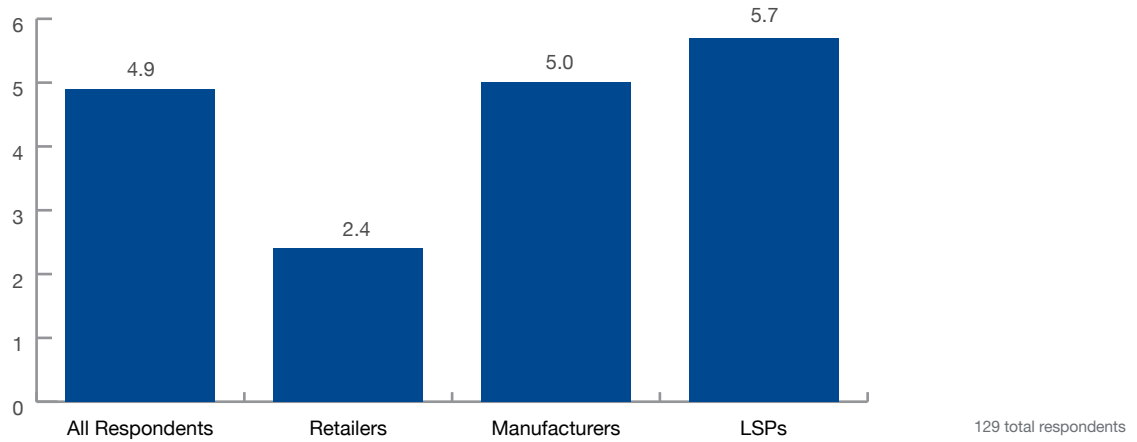


Fig. 3 speaks to the juggling act that most global trade practitioners undertake in terms of managing data across multiple systems. It's understandable that 3PLs, in their role as providers of technology and services to a broad portfolio of shippers, might be managing a plethora of systems, but it's notable here that manufacturer respondents said they use twice the number of systems as retailers to handle GTM.

Figure 3: How Many Systems Are Used to Handle GTM

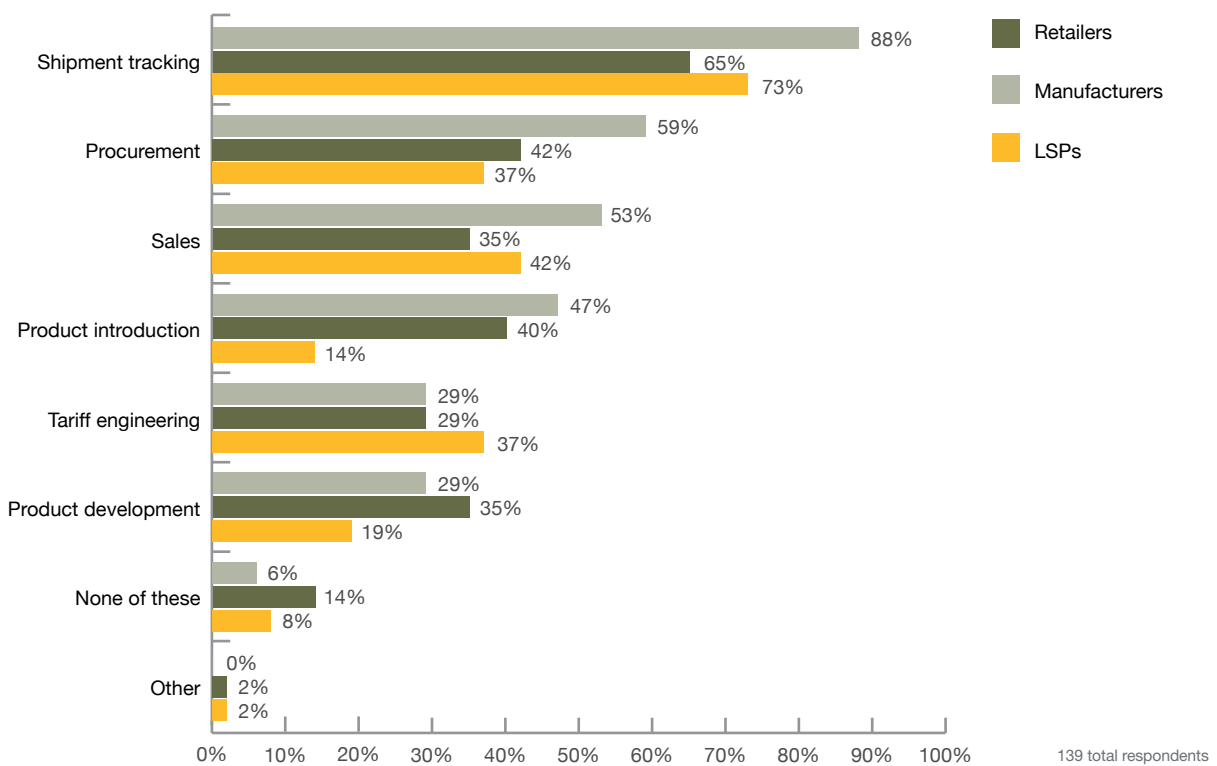


The ideal for which many importers and exporters aim is to reach a point where processes that touch a number of different departments of their business are managed jointly by those different departments. That may sound cumbersome in theory, but in practice, business solutions are designed to make that cross-functional management fairly seamless.

In Fig. 4, we see that the processes most often managed cross-functionally among respondents are shipment tracking, procurement, and sales.

That shipment tracking is managed across departments makes sense—a single shipment is likely to touch transportation, compliance, and finance at a minimum. Note that of the three segments compared in Fig. 4, manufacturer respondents said they tend to manage these processes cross-functionally less often than their retailer and 3PL peers.

Figure 4: Which Processes are Managed Cross-functionally





Supply chain convergence, more than anything else, is a strategy. It takes a company making an active decision to integrate its disparate supply chain departments—from product development to compliance to transportation to distribution. The next logical step is to marry the systems within those departments, or choose to invest in new systems that better harmonize data, workflow, and visibility between processes.

In Fig. 5, we see that half of respondents are trying to merge their systems and processes on an enterprise level, while nearly another quarter is satisfied with the way their processes and systems currently function. Only 3 percent say they are trying to uncouple currently merged systems or processes. It seems clear that businesses see value in using fewer systems.

In data more directly related to GTM convergence with other supply chain functions, around two-thirds of respondents said it was important to very important that their GTM system is integrated with their company's supply chain function. With another 31 percent either uncertain or neutral, only a few respondents see it as unimportant that their GTM platform connects on a broader basis.

This may seem obvious, but in reality, previous American Shipper research on system integration reveals that only about a quarter of shippers and 3PLs have already integrated global trade management with transportation management. The numbers for GTM integration with other departments or systems is likely to be much lower. So the importance companies seemingly place on integration has not yet impacted them in practice.

Figure 5: Supply Chain Systems and Process Convergence Strategy

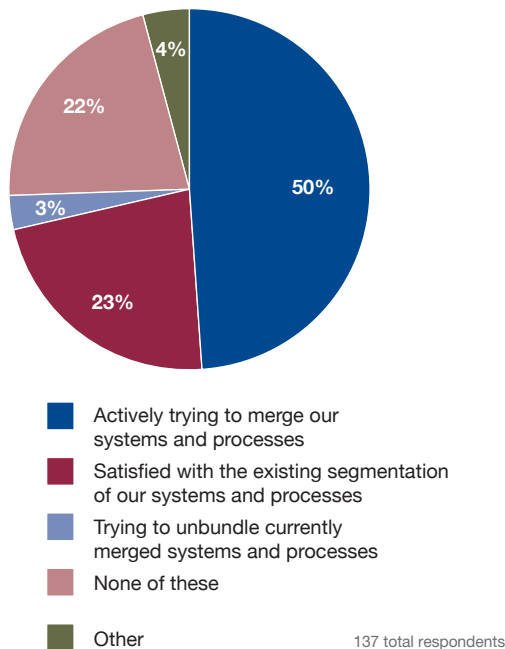
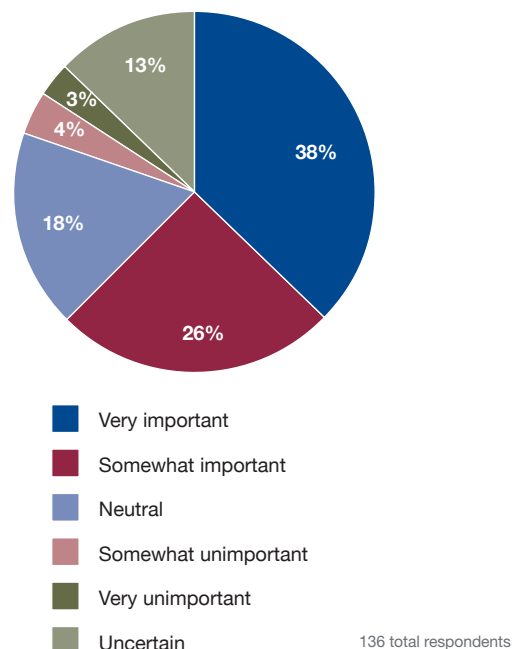
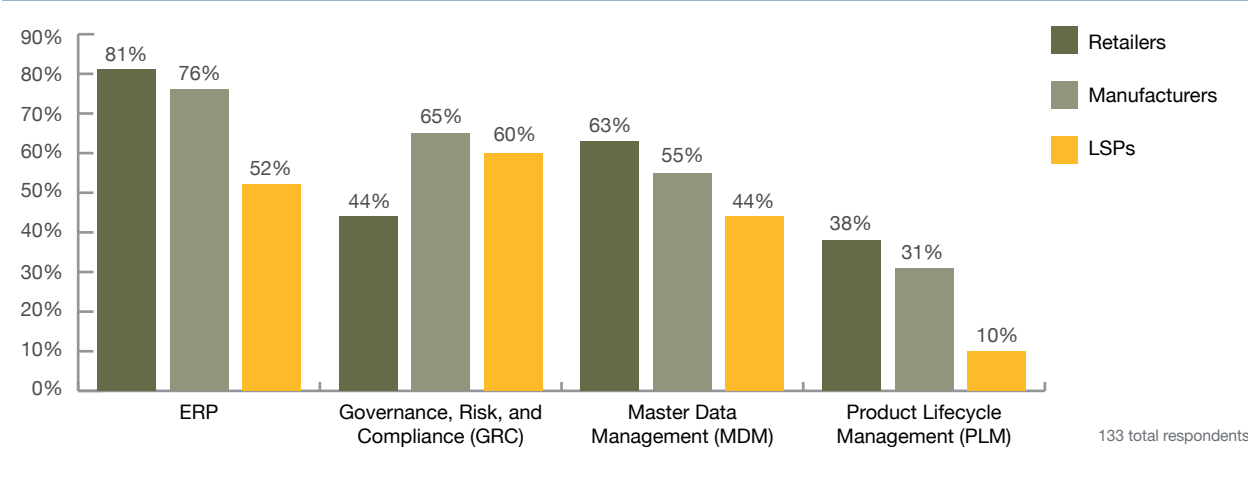


Figure 6: Importance of Integrating GTM with Supply Chain Functions



So where is this cross-functional orchestration taking place already? Fig. 7 shows that most respondents are using data cross-functionally in their ERP. But at the other end of the spectrum, fewer than one in three is doing so when it comes to product lifecycle management.

Figure 7: Which Cross-Functional Decision-makers Rely on Same Data





The number of dynamics that confront supply chain managers—whether they have compliance responsibilities or otherwise—can be overwhelming. There are regulatory, administrative, and technical burdens cropping up on a regular basis.

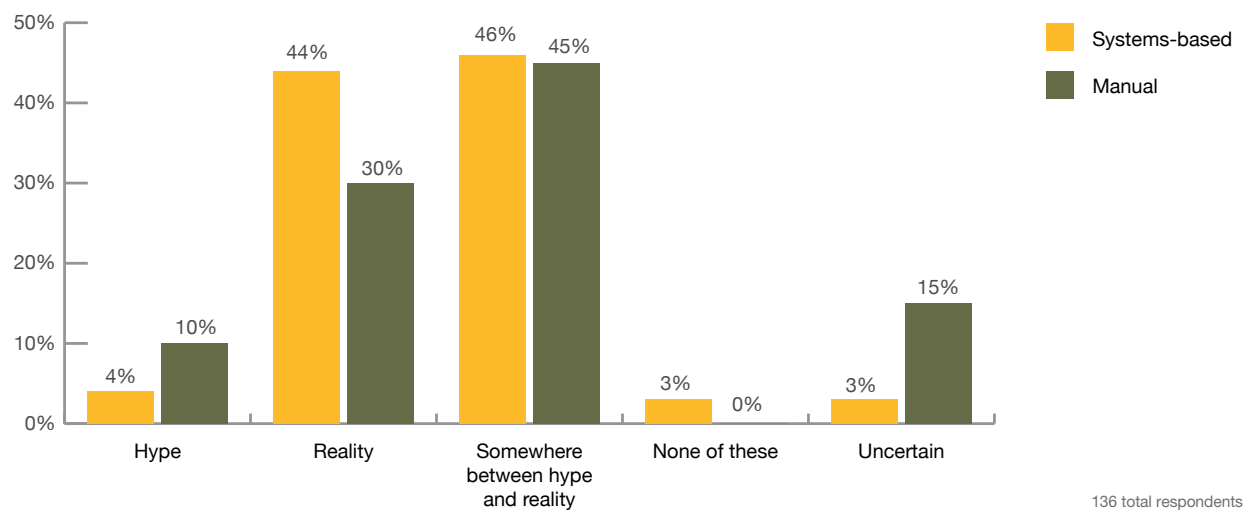
One of those challenges is keeping pace from a technology perspective. But it's often difficult to separate the latest buzzwords from the true developments that are here to stay. In this case, respondents were asked whether they saw supply chain convergence as hype or reality. Given that respondents predominantly say they are aiming to integrate and merge systems and processes, it's little surprise that few see supply chain convergence as pure hype.

However, nearly half of respondents see it as somewhere between hype and reality—that is, supply chain convergence may be great in theory, but less obtainable in practical terms.

That said, nearly an equal number of systems-based respondents (meaning those that predominantly use systems to manage global trade) say that supply chain convergence is reality, compared to only 30 percent of manual companies (those that predominantly manage global trade by spreadsheet). Perhaps this suggests that those companies already on the path to convergence are more convinced that this is no passing fad.

It's often difficult to separate the latest buzzwords from the true developments that are here to stay.

Figure 8: Supply Chain Convergence—Hype or Reality?



One such example of supply chain convergence, of companies managing with a focus on compliance, is the extent to which importers and exporters involve global trade personnel in new product development and introduction.

Fig. 9 shows that around 70 percent of companies say global trade is involved in such processes, but less than 20 percent of those companies manage the trade compliance implications in an internal, automated fashion. The other 80-plus percent manage it manually or outsource it. Which is, of course, better than not including trade compliance at all in such decisions, but demonstrates a potential lost opportunity in this highly competitive and strategic process.

Figure 9: Is Global Trade Part of the Product Development/Introduction Process



Section III: GTM in the Cloud

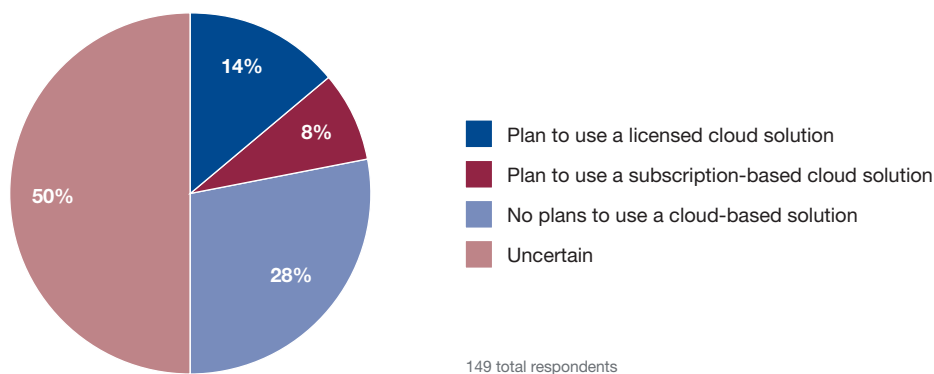
The nature of cloud-based solutions means that networks can be created internally and externally to share data, merge processes, and allow more cross-functional decision-making. It's hard to go one day without hearing someone discuss the cloud—whether it be at work, at the airport, at the gym, or even at home while watching TV. The cloud is everywhere.

GTM is no different. There are a plethora of solutions available via the cloud. As Fig. 1 shows, cloud as a delivery model is as widely used as on-premise solutions. But it's also important to state that the buzz around the cloud has yet to match its true usage.

Cloud definition: a type of computing that relies on sharing computing resources rather than having local servers or personal devices to handle applications.

Fig. 10 shows that fewer than a quarter of respondents say they plan to move to a cloud-based GTM solution in the next two years. To be fair, half are uncertain, but it's worth noting that a larger percentage of respondents said they are not moving to a cloud-based GTM solution than said they are moving to one. The market, in many cases, remains to be convinced about the cloud model.

Figure 10: Plans to Use Cloud-based GTM Solution in Next Two Years



As consumers, users have certain expectations of cloud-based GTM solutions, and those expectations can be driven by a number of factors—most notably, their business needs, and their experience with cloud-based solutions in other aspects of life and business.

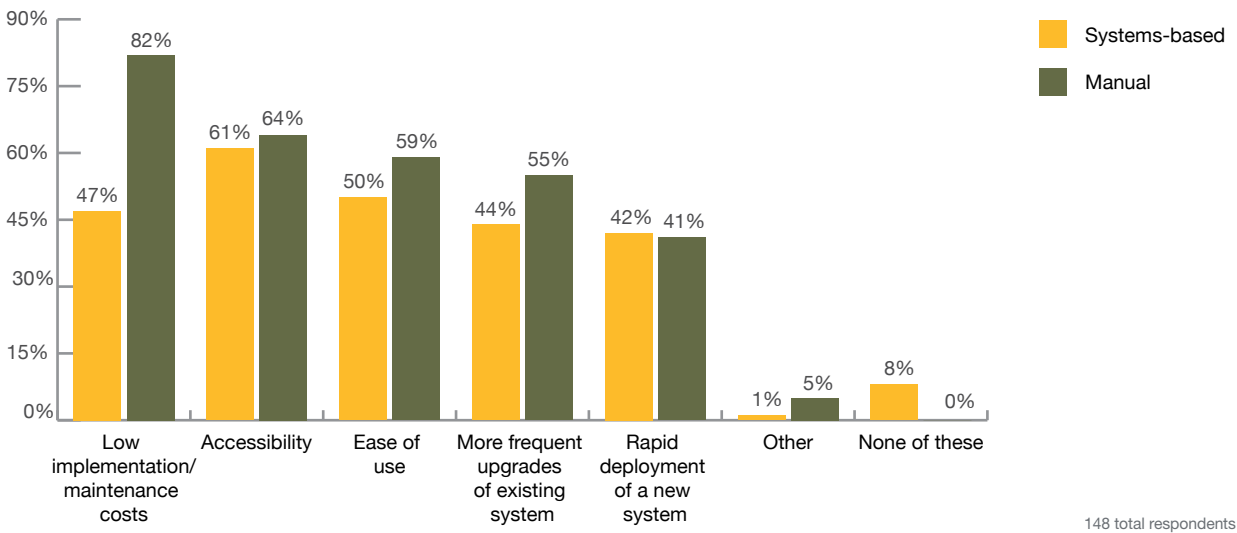
More than half of respondents expect cloud-based solutions to be very accessible, easy to use, with low implementation costs and frequent upgrades. These are areas where cloud-based solution vendors press home their perceived advantages. Note, however, that manual respondents are twice as likely to believe cloud-based systems come with low implementation and maintenance costs as system-based respondents. Those systems-based respondents likely know better—that cloud typically means lower upfront costs, but is not necessarily a slam dunk when it comes to implementation, integration, and maintenance across all vendors.

On a related note, manual respondents had higher expectations of cloud-based GTM systems across the board relative to their systems-based peers. This suggests that companies employing manual processes see the bright side of lower upfront-cost, browser-based systems compared to their existing processes.

Companies employing manual processes may see the bright side of lower upfront-cost, browser-based systems compared to their existing processes.

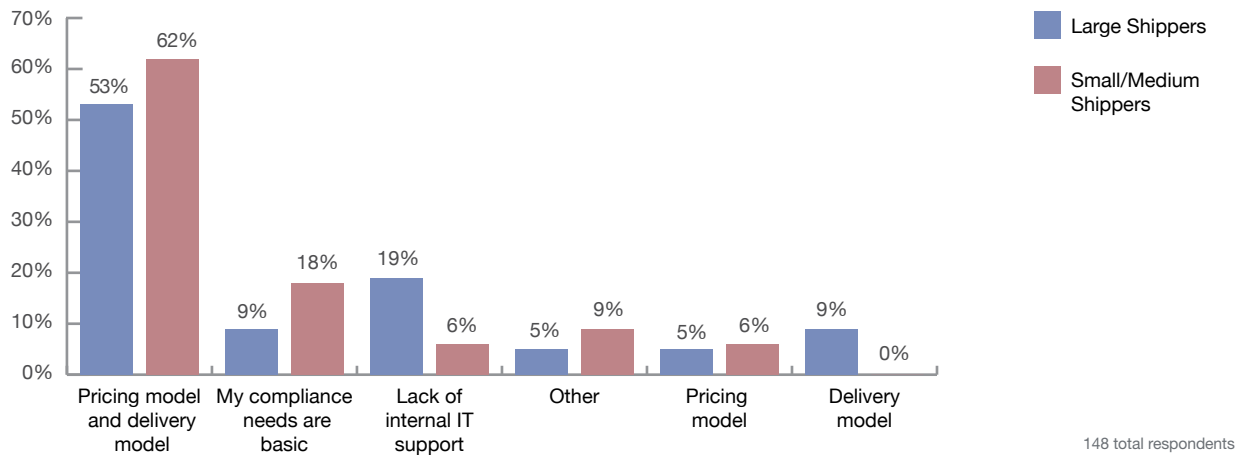


Figure 11: GTM Cloud Expectations



The drivers for cloud-based GTM systems are clear—shippers large and small see the mixture of the pricing and delivery model of cloud-based systems (which are usually priced on a pay-as-you-go basis) as their most attractive characteristic. A secondary driver for large shippers is a lack of IT support to take on an on-premise solution. For smaller shippers, a secondary driver is the reality that many deal with relatively basic GTM needs, and so only need a scaled-down, browser-based compliance tool.

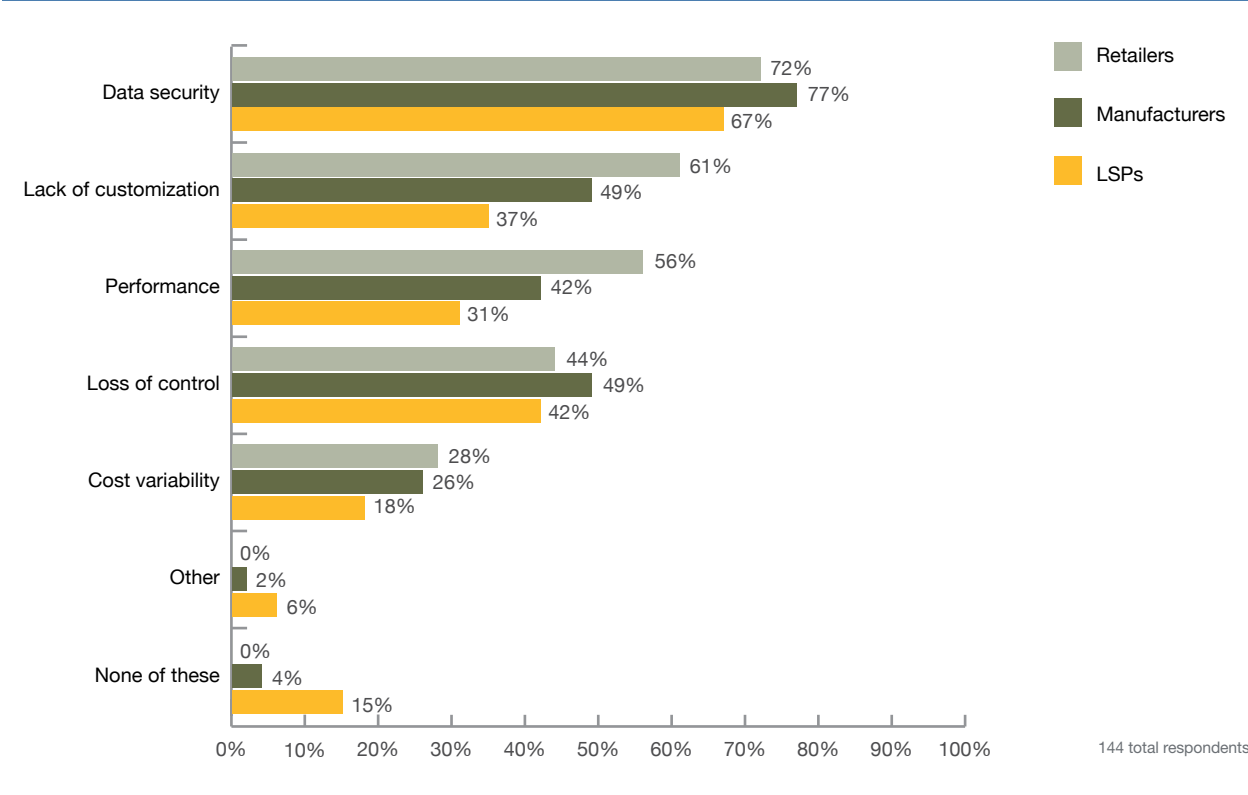
Figure 12: Primary Driver to Use of Cloud-Based GTM Solutions



The other side of the coin is the elements of cloud that make people wary—chief among those is clearly data security. An on-premise solution provides companies with peace of mind that their proprietary data is secure, and for many companies, that faith does not yet exist. Roughly three-quarters of respondents cite data security as their biggest concern in the cloud.

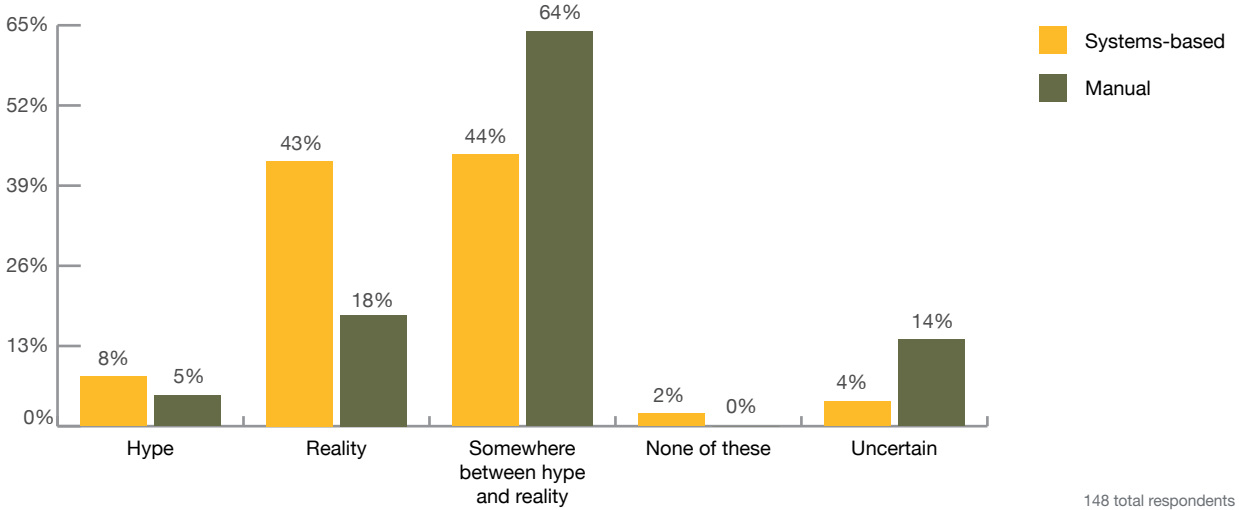
Retailers also cite concerns over a perceived lack of customization and performance, while manufacturer respondents say lack of customization and loss of control are barriers. 3PL respondents, almost across the board, say they are less likely to be concerned about cloud-based solutions as shippers.

Figure 13: Biggest Concerns about Cloud-based GTM Solutions



So does the market view cloud as hype or reality? Again, the bulk of respondents see it as lying somewhere in the middle. Around two-thirds of manual respondents are yet to be entirely convinced. Meanwhile, 43 percent of systems-based respondents see it as reality, more than double the number of manual respondents who see it the same way. Less than 10 percent see cloud as pure hype.

Figure 14: Cloud-based GTM Solutions—Hype or Reality?



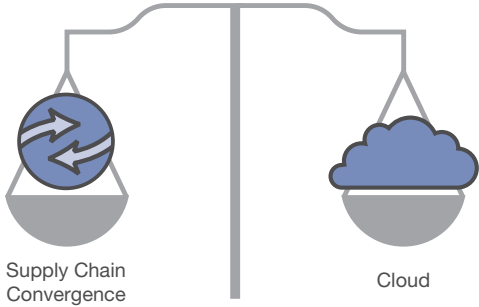
Section IV: Conclusion

The market clearly has its focus on how supply chain convergence and cloud impact global trade management, and vice versa. The majority of shippers and 3PLs are working toward merging processes and systems, and many have either moved to a cloud-based GTM model, or are considering doing so. But there are also tangible concerns about whether these dynamics are practical.

The decision about whether convergence or cloud is more integral to a company's business is an either/or decision. In many ways, the concept of convergence is at odds with cloud. Wanting more centralized control through tight integration across all the people and systems and people global trade touches might lead a company to choose an on-premise system. Alternatively, an application delivered via the cloud yields benefits in upfront cost and implementation time, but reduces a company's ability to integrate across all the departments global trade touches.

It's fair to say, based on the perspective from respondents in this survey, that global trade practitioners see convergence and cloud as more reality than hype, but a large proportion are yet to be completely convinced.

Figure 15: Supply Chain Convergence vs. Cloud



Contributors

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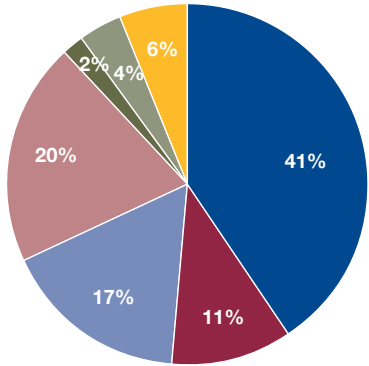
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Appendix A: Survey Respondents

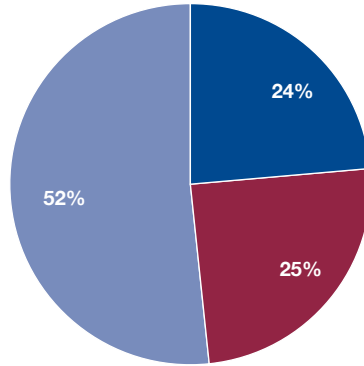
Figure 16: Industry Segments



- 3PL/Forwarder/NVOCC/Intermediary
- Retail/Wholesale
- Process manufacturing
- Discrete manufacturing
- Government/Public Sector
- Raw materials/Commodities
- Engineering/Construction/Energy

170 total respondents

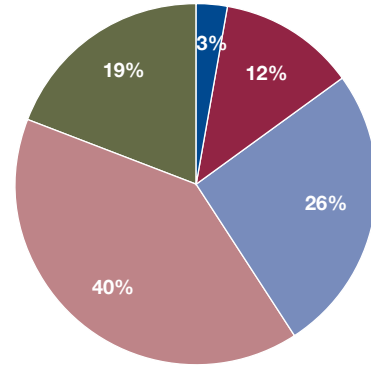
Figure 17: Company Size



- Less than \$100 million
- Between \$100 million and \$1 billion
- More than \$1 billion

170 total respondents

Figure 18 Job Titles Surveyed



- C-Level (CEO,CIO,CFO, etc)
- Executive (SVP, VP, GM, etc.)
- Director
- Manager
- Staff

168 total respondents



Appendix B: About Our Sponsors



CSC

CSC is a global leader in providing technology-enabled business solutions and services. With the broadest range of capabilities, CSC offers clients the solutions they need to manage complexity, focus on core businesses, collaborate with partners and clients, and improve operations. CSC makes a special point of understanding its clients and provides experts with real-world experience to work with them. CSC leads with an informed point of view while still offering client choice. For more than 50 years, clients in industries and governments worldwide have trusted CSC with their business process and information systems outsourcing, systems integration and consulting needs.



Oracle Cloud Solutions

Oracle offers a comprehensive portfolio of modern cloud solutions, which provide customers with the widest selection of choices to meet their evolving business, IT infrastructure, and development needs. To learn more about Oracle's cloud offerings visit www.oracle.com/cloud



Appendix C: About *American Shipper* Research

Background

Since our first edition in May 1974, *American Shipper* has provided U.S.-based logistics practitioners with accurate, timely and actionable news and analysis. The company is widely recognized as the voice of the international transportation community.

In 2008 *American Shipper* launched its first formal, independent research initiative focused on the state of transportation management systems in the logistics service provider market. Since that time the company has published more than a dozen reports on subjects ranging from regulatory compliance to sustainability.

Scope

American Shipper research initiatives typically address international or global supply chain issues from a U.S.-centric point of view. The research will be most relevant to those readers managing large volumes of airfreight, containerized ocean and domestic intermodal freight. *American Shipper* readers are tasked with managing large volumes of freight moving into and out of the country so the research scope reflects those interests.

Methodology

American Shipper benchmark studies are based upon responses from a pool of approximately 40,000 readers accessible by e-mail invitation. Generally each benchmarking project is based on 200-500 qualified responses to a 25-35 question survey depending on the nature and complexity of the topic.

American Shipper reports compare readers from key market segments defined by industry vertical, company size, and other variables, in an effort to call out trends and ultimate best practices. Segments created for comparisons always consist of 30 or more responses.

Library

American Shipper's complete library of research is available on our Website:

AmericanShipper.com/Research.

Annual studies include:

- Global Trade Management Report
- Global Transportation Procurement Benchmark
- Global Transportation Management Benchmark
- Global Transportation Payment Benchmark
- Import Operations & Compliance Benchmark
- Export Operations & Compliance Benchmark

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