

## Beyond Software: The Role of Content and Connectivity in Global Trade Management

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### Keywords

Global Trade Management, Trade Content, Connectivity, Software-as-a-Service, Avery Dennison, Integration Point

### Summary

Although global trade volumes will decline this year due to the weak economy, the costs, complexities, and risks of moving goods across borders will

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Companies often overlook the importance of global trade content, particularly the role it plays in extending the value of GTM across the enterprise.

The same is true for connectivity.

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continue to grow. Customs agencies around the world are moving away from paper-based filings to electronic-based communications, preferential trade agreements are on the rise, and trade initiatives, such as '10+2' in the United States, are presenting importers and exporters with a whole new set of challenges.

Simply stated, companies can no longer rely on manual processes to manage their global trade operations, which is why the Global Trade Management (GTM) systems market is one of the fastest growing segments of the software industry.

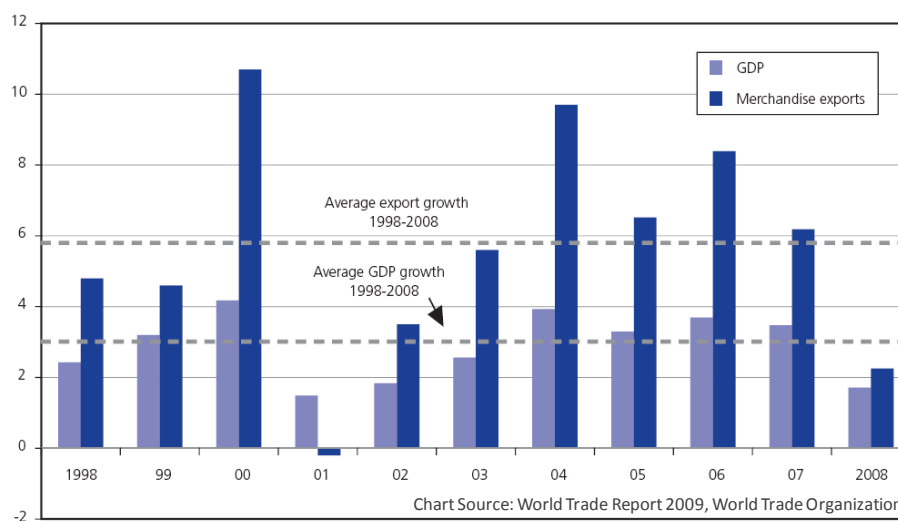
Software functionality, however, is only one component of a complete GTM solution. Companies often overlook (or underestimate) the importance of global trade content, particularly the role it plays in extending the value of GTM across the enterprise to areas such as global sourcing, network design, product development, and strategic planning. The same is true for connectivity. Global trade processes are inherently network-centric, involving the exchange of information between many external parties, including customs agencies, freight forwarders, customs brokers, and suppliers. Establishing and maintaining connectivity with a dynamic set of trading partners is an integral component of GTM, but one that many companies fail to consider when evaluating solutions.



This report examines the business case for investing in a Global Trade Management solution; provides an overview of the critical components of a GTM solution—compliance, content, and connectivity—and how they create value across the enterprise; and presents a case study of Avery Dennison’s global trade operations.

## Analysis

The World Trade Organization (WTO) forecasts that world merchandise trade will decline 10 percent in 2009 in response to the global economic crisis. Although this news is troublesome, it is important to keep the long-term trends in perspective. According to WTO statistics, the value of world merchandise imports and exports (in current prices) totaled more than \$32.5 trillion last year, a 52 percent increase from 2005, and almost double the value from 1998! In volume terms, world merchandise trade grew an average of 5.7 percent annually from 1998-2008.



### Annual percentage change in the volume of world merchandise trade and GDP, 1998-2008 (Source: World Trade Organization)

A variety of factors have fueled this growth, including:

- **Global Sourcing.** Companies are continuously seeking new sources of raw materials, components, and finished products—in every region of the world—as they seek to reduce the cost of goods, and establish manufacturing plants and sales operations in new geographies.

- ***Preferential Trade Agreements.*** These agreements, such as the North American Free Trade Agreement (NAFTA) and the Central European Free Trade Agreement (CEFTA), serve as a catalyst for trade by reducing or eliminating duties between participating countries (among other benefits and incentives).
- ***Manufacturing Outsourcing.*** Many companies are transferring their manufacturing operations to low-cost countries or they are outsourcing the entire process to third-parties to reduce costs and/or serve new markets quickly.
- ***Mergers and Acquisitions.*** Companies are increasingly expanding their scale, scope, and geographic reach by merging with or acquiring foreign companies.

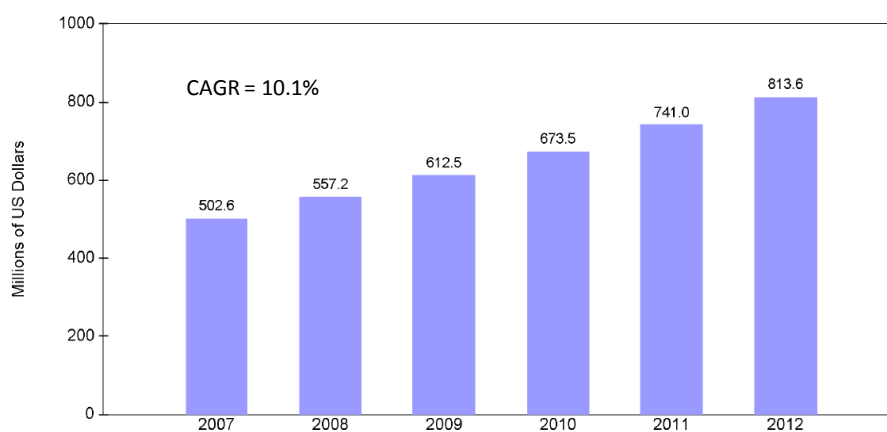
These growth factors will continue to drive global trade activity in the future, once economic conditions improve. Also, it is important to note that although trade volumes are down this year, the costs, risks, and complexities of global trade continue to increase. Consider these recent developments:

- In July 2009, the European Union (EU) voted to implement a “permanent” tariff (typically lasting five years) on Chinese steel pipe imports. Duty rates will range between 18 and 39 percent, depending on the product classification.
- In March 2009, the Mexican government implemented tariffs on 90 U.S. industrial and agricultural products valued at \$2.4 billion.
- In January 2009, the Importer Security Filing (ISF) rule went into effect for U.S. importers. ISF (also referred to as “10+2”) requires importers or their agents to submit ten data elements to U.S. Customs and Border Protection (US CBP) 24 hours prior to vessel departure, and ocean carriers to submit two additional data elements. Previous regulations did not require importers to file some of this information, or they were able to file after the shipment had arrived in the US (within fifteen calendar days of arrival).
- Customs modernization projects, like the European Commission’s eCustoms Initiative and the Automated Commercial Environment (ACE) in the United States, continue to move forward. Although

these initiatives make customs processing more efficient by replacing paper-based filings with electronic communication, they also create new challenges, requiring companies to upgrade their trade compliance processes and technology to meet ever-changing regulatory requirements.

In addition, many companies continue to leave money on the table by (among many other things) failing to take advantage of preferential trade agreements and by misclassifying products and paying too much in duties and taxes. While these missed opportunities are sometimes worth millions of dollars, they are also the most difficult to track unless you have the right knowledge, experience, and metrics.

Simply put, managing the flow of goods, information, and money across borders is a highly complex, regulated, and dynamic process—and becoming more so every day! Therefore, companies can no longer rely on manual processes to manage their global trade operations, which is why the Global Trade Management (GTM) systems market is one of the fastest growing segments of the software industry.



**Growth of Global Trade Management Solutions Market**  
(Source: ARC Advisory Group)

The scope and capabilities of GTM solutions have evolved significantly over the past two decades, from simple desktop applications focused on generating and printing export documents to service-oriented, enterprise-class solutions focused on a broad spectrum of import and export processes.

Compliance is what most people associate with a GTM solution. These capabilities focus on automating customs and regulatory compliance activities, including:

- Facilitate product classification
- Perform restricted party screenings and embargo checks
- Create and file trade documents
- Determine total landed costs
- Assign export and import licenses
- Communicate electronically with legal authorities
- Manage customs processes and transit procedures
- Determine preferential trade eligibility

Compliance, however, is only one component of a best-in-class global trade management solution.

### The Three Cs of Global Trade Management

The other two critical components of a GTM solution, which many companies overlook, are *content* and *connectivity*.

#### The C-Level Perspective

CEOs and CFOs must have a clear understanding of the link between financial performance and global trade management, as well as the associated risks. The following metrics provide a good baseline of understanding:

- % of revenues and profits derived from imports and exports
- % of revenues and profits from controlled or licensed products
- % of revenues and profits from “risky” countries or regions
- % of cash-to-cash cycle linked to trade activities
- % of vendors, manufacturing capacity, and customers in foreign countries

Companies must have accurate and complete trade content for every country they operate in and trade with in order to successfully comply with trade regulations and prevent customs clearance delays. A GTM solution without a comprehensive and continuously updated trade content database is only marginally useful.

Trade content should include information regarding (among other things):

- Denied parties
- Embargoed countries
- Harmonized system chapters and descriptions
- License codes, descriptions, and requirements
- Document templates
- Duty, value added tax, excise taxes, seasonal taxes

Not all GTM vendors, however, provide their own trade content. Many vendors partner with content providers, while others, like Integration Point, aggregate and supply trade content themselves. Establishing a trade content group is not a trivial task. It requires a commitment to having trade experts on staff, as well as a network of in-country sources, who can interpret, normalize, and digitize the information collected, as well as track and process ongoing changes.

Briefly stated, trade content is the foundation of a GTM solution. A book without words is just sheets of paper bound together. Similarly, a GTM solution without accurate, complete, and up-to-date trade content is just a collection of software code with limited applicability.

Process	Description
Sourcing	Purchasing managers must evaluate sourcing options from a “total landed cost” perspective, taking into account other cost factors such as duties, taxes, and transportation costs. They must also consider the impact of country of origin. For example, duties and taxes can be minimized or eliminated by sourcing from a country participating in a preferential trade agreement.
Network Design	Global trade factors must be considered when determining where to locate manufacturing plants, distribution centers, and other value chain nodes. For example, import quotas are sometimes implemented for certain products originating from specific countries; building a manufacturing plant in a quota-affected country could limit a product’s exportability depending on the scope, scale, and expected permanency of the quota.
Product Development	A product’s attributes ultimately define its Harmonized Tariff Schedule code which underlies most trade processes and affects duty rates, documentation and licensing requirements, and exportability. Briefly stated, developers must understand the impact of their design choices from a global trade perspective in order to minimize a product’s lifecycle costs and maximize its market potential.
Logistics	Global trade knowledge plays a role in logistics strategy. For example, companies may be paying duties or incurring duty drawback costs for imported products that are destined to be exported at a later date; establishing a bonded warehouse or leveraging a Free Trade Zone (FTZ) may be a more efficient and cost effective strategy
Finance	Global trade processes have a direct impact on costs, revenues, and other financial metrics. Duties, taxes, transportation charges, and currency exchange rates are contributing factors; but there are other less tangible factors that also influence the bottom line such as the cost of increased inventory, longer cash-to-cash cycles, expedited shipments, and additional overhead caused by inefficient processes.

### Extending the Role and Value of Trade Content Across the Enterprise

The value of trade content, however, is not only limited to importing and exporting processes. For example, consider the role of trade content in making sourcing decisions. At many companies, sourcing decisions are driven primarily by unit cost, but this silo perspective could have serious and costly consequences. At a minimum, purchasing managers must evaluate sourcing options from a “total landed cost” perspective, taking into account other cost factors such as duties, taxes, and transportation costs. In addition, purchasing managers must consider the impact of country of origin. Duties and taxes can be minimized or eliminated by sourcing from a country participating in a preferential trade agreement, such as the North Atlantic Free Trade Agreement (NAFTA). Country of origin can also limit a product’s exportability.

Connectivity is perhaps the most underrated aspect of global trade management, but its importance cannot be overstated. Simply put, global trade processes do not occur in a vacuum. A cross-border shipment typically involves the exchange of information with about 25 external parties, including customs agencies, freight forwarders, brokers, banks, regulatory agencies, transportation providers, and suppliers. Establishing and maintaining connectivity with a dynamic set of trading partners, as well as keeping up with customs modernization efforts around the world, is a challenging task that few companies would call a core competency. This is why poor data quality (late, inaccurate, and/or incomplete) is the Achilles’ heel of global trade management, a problem that results in higher supply chain costs and lower productivity.

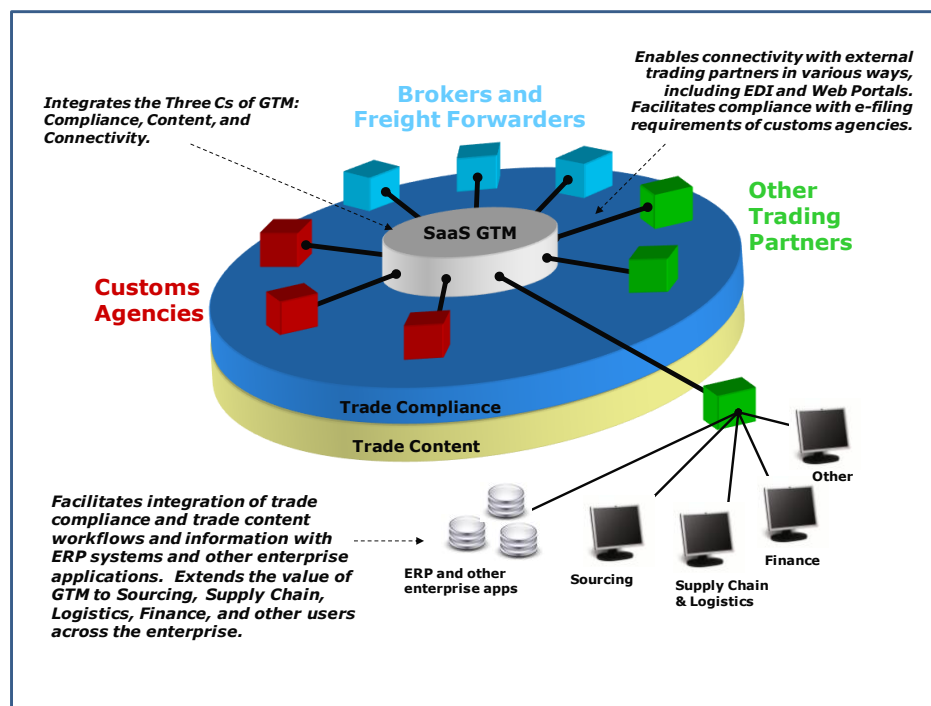
Internal connectivity presents similar challenges. Many companies have very heterogeneous IT environments, due to mergers and acquisitions, different stages of ERP rollouts, and other factors. As a result, companies have a hard time implementing standard GTM best practices across the enterprise, and they often lack centralized visibility to global trade processes and activities.

Fortunately, resolving these internal and external connectivity challenges is one of the hidden benefits of software-as-a-service (SaaS) global trade management solutions.

### **The Hidden Value of a Software-as-a-Service GTM Solution**

Software-as-a-Service (also referred to as “on demand”) has become the dominant deployment model for global trade management applications.

According to ARC's Global Trade Management Worldwide Outlook study, 51 percent of the revenues recognized by GTM vendors in 2007 came from subscription/transaction fees, a proxy for SaaS deployments. This is up from 38 percent in 2005, and ARC expects the percentage to exceed 56 percent by 2012.



### SaaS Solutions Integrate the "Three Cs" of GTM

There are several reasons why a growing number of companies are implementing SaaS GTM solutions, and content and connectivity are among them:

- Trade content is continuously changing and users cannot afford to manage their operations using outdated information. The situation is analogous to anti-virus protection where users need continuous updates to virus definitions pushed to them. Briefly stated, managing the creation, distribution, and maintenance of global trade content lends itself very well to a SaaS subscription model.
- As highlighted earlier, GTM process flows span across many distributed parties and users, including customs agencies, freight forwarders, carriers, and financial institutions. SaaS is well suited for these types of "network-based" processes because they facilitate connectivity between

disparate parties among other benefits. SaaS solutions, most of which are based on a services-oriented architecture, also serve as a centralized platform for enabling GTM functionality across multiple internal ERP systems and other applications.

- The global trade management group is often an underdog when it comes to receiving IT budget and support. SaaS offers many companies the opportunity to acquire GTM capabilities without obtaining capital expenditure approval or requiring much IT support.

Lower upfront costs and faster time-to-value are the two attributes most people associate with software-as-a-service. While these benefits are certainly noteworthy, it's the "hidden value" SaaS solutions provide, in terms of content and connectivity, that most differentiates it from traditional, in-house implementations. Simply stated, SaaS is arguably the best model for integrating the three Cs of global trade management: compliance, content, and connectivity.

### **Case Study: Avery Dennison**

*"Our business is changing constantly and if we don't have a global trade management solution that can support these changes, it will be hard for us to succeed."*

This is how Lisa Thatcher, Trade Compliance Manager at Avery Dennison Office Products, framed the underlying driving force for investing in a global trade management solution. Fortunately, Avery Dennison is unlike many other companies, where C-level executives fail to recognize the role and importance of global trade management. *"We've recognized the importance of trade compliance,"* says Thatcher, *"and we're investing in the necessary infrastructure."*

Thatcher is responsible for trade compliance at the Office and Consumer Products division, one of four business groups at Avery Dennison. Each division has its own trade compliance group. The Office and Consumer Products division manufactures and sells a wide range of Avery-brand products for office, school and home uses, such as printable media, organizational and filing products, and other stationary products. The division has manufacturing facilities in Massachusetts, Mississippi, and Mexico, where the company leverages Maquiladoras—i.e., plants that manufacture finished goods for export and provide advantageous tariff regulations.



#### Company Profile

- ◆ A global leader in pressure-sensitive technology, self-adhesive base material, and self-adhesive consumer and office products (\$6.7 billion in sales in 2008).
- ◆ Over 200 manufacturing and distribution facilities in more than 60 countries.
- ◆ Four groups of businesses: Pressure-sensitive Materials, Retail Information Services, Office and Consumer Products, and other specialty converting businesses.

#### Key Global Trade Management Objectives

- ◆ Replace manual processes with automated workflows.
- ◆ Streamline NAFTA solicitation and qualification process.
- ◆ Obtain real-time visibility to global trade transactions.
- ◆ Integrate global trade information across systems.

#### Benefits Achieved

- ◆ Enhanced visibility to end-to-end trade activities and team productivity.
- ◆ Improved integration of workflows between import and export processes—trade data flows seamlessly between different Integration Point modules.
- ◆ Paperless process—all workflows, records, and controls are within software.
- ◆ More flexible and scalable processes—able to add new modules as needs arise.

### Overview of Avery Dennison Global Trade Management Operations

Since Thatcher's group processes a large volume of trade transactions with Mexico, support for NAFTA solicitation and qualification was high on her list of requirements. Additionally, with the changing business environment, support for other trade agreement was just as important when evaluating global trade solutions. *"Many vendors were still in the concept/development phase in terms of free trade agreement support,"* explains Thatcher, which quickly narrowed down the field. Among her other requirements: the solution needed to have a global framework, be flexible and scalable, and be cost effective to deploy. After evaluating several options, the company selected Integration Point ([www.IntegrationPoint.com](http://www.IntegrationPoint.com)), a Software-as-a-Service solution provider.

Thatcher views Integration Point Global Trade Content as a differentiator. *"From my office in California, I can manage our worldwide trade operations by accessing the Integration Point content library [which covers over 140 countries],"* says Thatcher. *"The value of a web-based SaaS solution is that I can access this information from all over the world and have it on my desktop."*

Avery has implemented several solution modules, including Integration Point Free Trade Agreement, Integration Point Entry Visibility, Integration Point Export Management, and Integration Point Global Classification. *"All*

*my data travels in and out of these modules and through our ERP systems in a binary structure, with visibility throughout the process,”* explains Thatcher. *“One set of data can be utilized across multiple modules, completing multiple functions without having to re-enter data.”* The net result is enhanced process efficiencies and improved data quality.

At the moment, Avery is still fine-tuning the modules (the system went live in April), but down the road Thatcher expects to further leverage the connectivity capabilities the SaaS model provides. Vendors, for example, can provide them with information via a portal, thus streamlining and expediting the solicitation process. Providing customers (retailers and wholesalers) with enhanced visibility to trade information and transactions is another priority. *“Five years ago,”* explains Thatcher, *“customers were just interested in country of origin information. As their businesses continue to evolve, we need to be in a position to support them and their additional requirements.”*

Thatcher offers these words of wisdom for other companies and trade compliance managers embarking on a similar journey: *“You can never plan enough. Make sure your SaaS provider understands how you manage your trade operations, and the same is true for your internal IT department and other functional groups. Understand how the data moves, where does it go? Why do you need it? Who else needs it? What are you going to do with it? When it is all said and done, you are the best person who understands the entire process.”*

## **Conclusions**

- Although trade volumes are down this year, the costs, risks, and complexities of global trade continue to increase.
- Companies can no longer rely on manual processes to manage their global trade operations, which is why the Global Trade Management (GTM) systems market is one of the fastest growing segments of the software industry.
- The scope and capabilities of GTM solutions have evolved significantly over the past two decades, from simple desktop applications focused on generating and printing export documents to service-oriented, enterprise-class solutions focused on a broad spectrum of import and export processes.

- Compliance is what most people associate with a GTM solution. Compliance, however, is only one component of a best-in-class global trade management solution. The other two critical components, which many companies overlook, are *content* and *connectivity*.
- Trade content is the foundation of a GTM solution. A GTM solution without accurate, complete, and up-to-date trade content is just a collection of software code with limited applicability. The value of trade content, however, is not only limited to importing and exporting processes. It extends to other business processes across the enterprise, including sourcing, network design, product development, logistics, and finance.
- Connectivity is perhaps the most underrated aspect of global trade management, but its importance cannot be overstated. Establishing and maintaining connectivity with a dynamic set of trading partners, as well as keeping up with customs modernization efforts around the world, is a challenging task that few companies would call a core competency.
- Software-as-a- Service (also referred to as “on demand”) has become the dominant deployment model for global trade management applications. SaaS is arguably the best model for integrating the three Cs of global trade management: compliance, content, and connectivity.

*This paper was written by ARC Advisory Group on behalf of Integration Point. The opinions and observations stated in the paper are ARC's. For further information or to provide feedback on this paper, please contact the author at [adriang@arcweb.com](mailto:adriang@arcweb.com).*