#2 of Four TMS Perspectives

Using **Communities** to Bridge Partitions

As global trade encircles the world in twisting, complicated ways, profit margins are decreasing everywhere. Supply chain expertise is becoming a crucial means of differentiation. There's great pressure to create agile, responsive, and risk-proof supply chains while curbing costs and improving overall efficiency.

Any serious effort to reduce costs cannot ignore transportation. Second only to the direct cost of goods themselves, transportation is an organizations's highest indirect cost. Despite this, there's been limited effort to reduce it. The main reason is that in most organizations, transportation spend gets distributed across multiple silos.

Organizations have looked to transportation management systems (TMS) to optimize transportation and costs within these silos. But traditional TMS technology limits just how much cost organizations can remove, and does not address the larger goals of supply chain agility and responsiveness.

This four-part series focuses on a new type of TMS, one that is not just globally aware, but is rooted in the very idea of breaking down silos and encouraging transparency. This new TMS — a global TMS — is end-to-end, network-based, and trans-business. It looks to optimize costs, savings, and efficiencies – without a massive rip-out-and-replace project.

This Perspective Piece explores how the idea of 'communities' plays into breaking down supply chain silos.

Partitions

Enterprises large or small require structures to address their functional needs, take advantage of different skill sets people bring, expand geographically, or grow into multiple product lines. This evolution creates natural partitions within an enterprise to function efficiently. As organizations grow, these structures grow in complexity and partitions give rise to barriers restricting information flow across an enterprise.

A particular supply chain function within an organization may have some of these partitions based on skill sets required for procurement, warehouse management, transportation management, demand planning, inventory planning, supply planning and other functions. The transportation management function itself may be partitioned by geography, business unit, mode or the part of the supply chain it addresses. Most of these partitions are essential for efficient functioning of an organization.

Each department within these partitions has its own perspective and unique needs for insight and information. Accounts Payable utilizes goods movement data to understand cash flow impact or deviations, and to process payment for goods and services; the inventory management team would use the same information to determine inventory levels and take remedial steps; the warehouse labor management team may use it to schedule labor; and the transportation management team would monitor it to handle transportation exceptions. All these groups are fundamentally looking for and using the same information but think about it very differently.

Multi-enterprise business processes add another dimension to this structure. For example, the supply chain of one organization extends into other organizations for its strategic, operational and information needs. In fact, today's supply chain draws close to 80% of its information from outside the enterprise. These supply chain partners — suppliers, manufacturers, logistics services

providers, transportation carriers, financial institutions, and others — play different roles in a global supply chain. These organizations have different interests and partitions between them and are often more likely to create barriers. All the same, they need to share information and collaborate with one another to build a successful supply chain.

A traditional TMS is deployed in a local or regional model even when it is rolled out across a large part of the organization. It is further partitioned from the extended supply chain because it is built as an enterprise application and cannot represent a multi-enterprise supply chain. These TMS deployments cannot manage the flow of goods across the globe and through divisional barriers. They can model transportation management inbound and/or outbound from a location, but beyond that, they are blind. Transportation managers, both upstream and downstream, create and execute their own plans. Drawing from disconnected data sets adds to lack of visibility even at the planning stage and causes confusion, conflicts of interest, and disruptions in the supply chain.

Businesses need a platform where all these disparate groups aren't restricted by the partitions and can communicate through them to collaborate. Partitions exist, but they do not have to create barriers.

Bridges

Where natural barriers exist, the first instinct becomes to build a bridge. Bridges are sophisticated technological solutions to real world problems. But choosing the right kind of bridge for a given situation is extremely important.

In the past, businesses have tried to use ERP applications to bridge partitions within the enterprise and beyond. It has not been very effective, even between internal divisions of an enterprise. Since 80% of supply chain information comes from outside an organization, at best, any ERP application is working with just 20% of the information it needs.

ERP is inherently an inward-looking solution. It is a county road system, good for accommodating limited traffic in a restricted space. But it is inadequate for the interstate, transcontinental voyages that make up the majority of today's logistics operations.

ERP handles the internal functions of a business well. But when it comes to supply chain functions, like transportation management, it fails because it was never built around the one crucial thing necessary to operate complex supply chains — community.

Community

"Community" in today's multi-enterprise supply chains has a very different meaning than in the past.

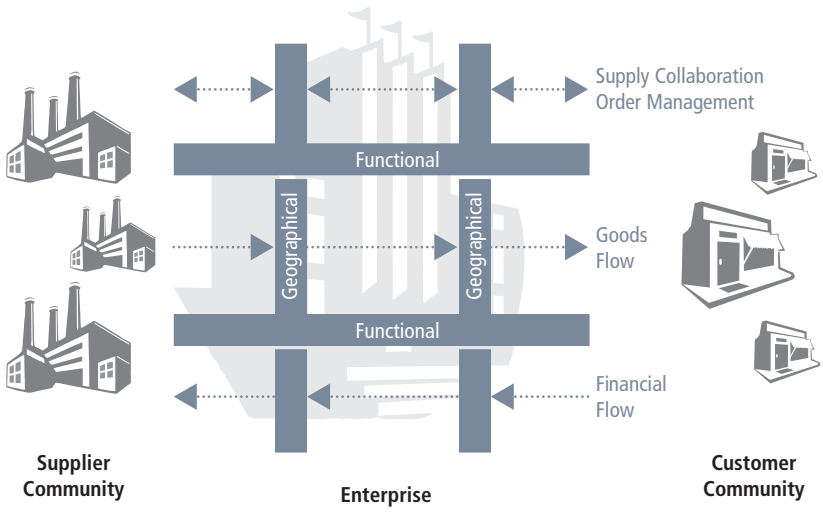
In the past, a community was defined as a homogeneous group of business entities. A carrier community, or even more narrowly a ground carrier community, was often cited as what was needed to manage transportation. But this narrow definition restricts the actual advantages a community model can have in reducing the cost of connecting to carrier partners. It's an inside-out view of community, and though it represents a significant value, it overlooks much more significant business value. It ignores the information coming into an enterprise from its partners by relegating that information into a silo.

Today's supply chains require two very different kinds of communities — 'Homogeneous' communities like carriers, freight forwarders, logistics service providers, financial institutions, suppliers, manufacturers, — and 'Heterogeneous' communities who operate in the context of a specific supply chain as well as strategic global supply chain initiatives.

Homogeneous communities bring value in the form of a connectivity solution. The reusability of these connections itself generates a lot of cost savings. In a network model, the ability to propagate changes is even more valuable. These communities, working with each other, offer the most successful way to converge to industry standards around data and processes.

But studies show a disconnect between these communities in their operational performance. A heterogeneous community, made up of these individual communities,

FIGURE 1: Partitions create barriers internally & externally.



strategically represents the best chance to come up with a common set of industry benchmarks for everyone to measure supply chain performance.

Information barriers have historically impeded all collaboration efforts between various organizations connected through a supply chain. Traditional TMS delivers cost reductions within specific pockets of business. These savings are real in an isolated view of the supply chain. However, a lot of these savings get lost in the context of end-to-end transportation. Competing objectives between various supply chain functions and other corporate initiatives further reduces these savings.

Platform TMS and Unified 'Heterogeneous' Communities

The next level of cost reduction and customer experience requires moving across partitions to bring all information and stakeholder interests together. A platform approach to transportation management can accomplish this by delivering a unified control structure that can drive savings by aggregating sourcing volumes and optimizing end-to-end transportation for everyone involved. Beyond business integration is the benefit of ensuring compliance — a key driver for cost reduction across the entire supply chain.

Homogeneous communities can be separate from a platform and can deliver some of the benefits while existing in isolation. This approach limits value and does not provide a mechanism to bring these communities together to achieve strategic goals. It fails completely to provide a collaborative platform for supply chain operations.

A heterogeneous community of all partners in a supply chain, operating on a common platform to ensure a single version of the truth, is necessary to overcome years of mistrust and allow them to collaborate. We have long agreed on a need to bridge partitions. Collaboration is a key element of bridging partitions and this heterogeneous community, unified through a network-centric platform to build bridges across these partitions, is the key enabler.

We can use this platform to change how we measure supply chain performance and partner performance. Silo-focused metrics and measurement philosophies are often counter-productive to supply chain efficiency and partner relationships. For instance, when companies collect data from within silos and not across them, planners often expect a high degree of uncertainty and build slack into their parts of the supply chain. A connected, global, platform supply chain view provides the visibility to address uncertainty and obviates the need to create artificial slack.

A Platform Approach to Freight Spend Visibility

With partitions and groups across the supply chain connected through a common platform, there is greater visibility and easier execution of tasks for everyone involved.

When a supplier provides its "ready to ship" information, TMS builds a transportation plan, tenders it to a carrier, confirms the booking, receives updates and absorbs unplanned events and costs. Other groups stay on the same page. The freight pay organization says, "I can project when I need to pay and its impact on my cash flow projections." The procure-to-pay group says, "I can estimate when my goods will reach the customer and when I need to pay the supplier." The inventory analyst says, "I understand the impact on my stock projections, and I can allocate inventory with more certainty." Each party across various partitions has a different answer to these two questions: What kind of visibility do I need? What am I doing with the information?