The global markets have reached an inflection point that will separate businesses for decades to come. The major differentiator will be the decisions made in companies’ supply chains. These dramatic market shifts are happening on two dimensions: geographically and demographically. Millions of people in emerging markets are rising to the “middle class” which, in turn, increases the demand for products. At the same time, the “millennial” generation is emerging as a major demand driver, with access to huge amounts of information about products and trends, both good and bad, via social media.

These factors have significantly increased market volatility, a trend that is compounded by the average customer’s “need for speed” in all markets. Consumers can research and order products in real time, and want them delivered with the same sense of urgency. For the supply chain, it’s time to make some dramatic improvements — or risk being left behind completely.

**A New Paradigm: The Demand Network**

In light of this inflection point, companies will differentiate themselves through the responsiveness of their supply chain, introducing highly complex multi-channel ordering and fulfillment strategies across an already expansive logistics network. The leaders realize now is the time to imagine an entirely new supply chain that leverages the latest technology platforms to enable real-time decision making and visibility to drive predictive demand planning and response orchestration. In essence, the supply chains of the future will not be chains at all, but will transform into demand networks.

In other words, the transition from supply chain to demand network requires breaking down the silos and embedding supply chain functions directly into the most powerful functions of the company such as merchandising, marketing, engineering, service, and logistics. For example, industries such as retail, consumer products, and high-tech need to become part of (or at least become tightly integrated with) the marketing and merchandising organizations. Logistics service providers or wholesalers should leverage market data and customer insights to create new products and services for their customers. Only then can companies unleash the real potential of demand networks, eliminate redundancies, create efficiencies, and introduce truly innovative and differentiating processes.

**Drivers of the Demand Network**

There are several factors that have led to this supply chain crossroads and the emergence of the demand network. First, dramatic changes in market dynamics have given the end consumer more market power. The buyer of today (and tomorrow) is always connected, desires individualized products and services, and is not accustomed to having to wait for their needs to be met.
Secondly, more complex global business models create more complex logistics processes, which in turn create a need for more advanced planning and forecasting capabilities. In a demand-driven supply network, a real-time environment is essential not just for analytics, but to support up-to-the-second planning.

Lastly, efficient execution is more imperative than ever before. With transportation and distribution costs rising, and end consumers holding buying power, a supply chain cannot afford inefficiency in moving goods or filling orders.

SAP has been working closely with organizations around the world to help them adapt to these new realities in transforming their supply chains to demand networks. This is at the heart of our supply chain strategy moving forward.

The state-of-the-art demand network puts the customer at the center of all processes, and connects business partners needed to fulfill the demand while meeting all efficiency and profitability goals. Trading partners must be brought online quickly and efficiently so business leaders can focus on business and not IT. With the Ariba Business Network, SAP customers get access to more than one million trading partners and enhanced connectivity is ensured.

**How to Execute the Demand Network**

Upon closer analysis, there are four key technology-driven components that will transform supply chains to demand networks in the future. Let’s look at each component.

**Supply Chain Monitoring**

Transforming from a supply chain to a demand network requires end-to-end visibility and segmentation of customers, products, and suppliers. Think of the supply chain as a control tower with big data analytics as its primary engine to drive the acquisition, cleaning, and harmonization of data from the entire demand network in real time. But the control tower not only monitors current activity, it also provides the what-if simulations and predictive analytics needed by today’s supply chain professional. Leveraging cloud technology, all of the solutions integrating with the control tower will be powered by SAP HANA, the basis for driving efficiency, speed, and growth, as well as real-time end-to-end traceability.

Sustainability is another key aspect of monitoring, as it’s used to ensure compliance with regulations like batch traceability, serialization, and food safety. These principles need to be connected with real-time performance and alert management as well as the possibility to analyze the information and perform what-if simulations in real time.

**Integrated Business Planning**

Aligning supply and demand is crucial to success and a collaborative network not only facilitates the open exchange of data for sales and operations planning, but also drives enhanced communication among all of the partners involved. This is especially important given the diminishing boundaries between the supply chain professional and other areas of the business such as marketing or sales. Supply chain professionals must have a clear understanding of the market situation, true end-to-end visibility, and access to analytics and simulation capabilities. SAP sales, inventory, and operations planning solutions allow users to analyze the impact of different supply and demand scenarios, without the need to jump between systems.

**Demand-Driven Supply Network**

With market power in the hands of the end consumer, point-of-sale data is becoming increasingly important, not just for marketing and sales purposes, but also to support real-time replenishment processes. In parallel with point-of-sale data, the importance of market research data and product sentiment is on the rise. SAP Demand Signal Management gives supply chain professionals the ability to glean insights about markets, customers, and products at a granular level. Managing this data in real time for marketing, sales, and replenishment purposes is another cornerstone of the demand network, and a key driver for revenue growth. Demand networks are more responsive than traditional supply chains, and the Ariba Business Network can manage the solutions that support open communication and collaboration among partners.

**Logistics and Order Fulfillment**

Effectively executing these demand networks puts more pressure on the logistics processes. Service levels and costs need to be constantly balanced by considering global trade, sustainability, and multi-mode transportation and delivery. Traditional silos between transportation management and warehouse management must therefore be eliminated, and replaced with a fast, efficient, aligned system that connects disparate processes. SAP customers can address this challenge with SAP Supply Chain Execution, which covers the planning, orchestration, and execution of the physical movement of goods. This solution connects manufacturers, carriers, and receivers. It is a comprehensive supply chain solution with specific applications to cover all the business processes and end the traditional siloed approach.

**Partner Support Helps the Network Run**

The key to a successful transformation from supply chain to demand network is end-to-end visibility. A demand network must support all kinds of systems and environments, which is why there are no prerequisites to have an SAP application. But every supply chain is unique and achieving that broad visibility often requires specialized or industry-specific solutions. This is where SAP partners can add value. Partner solutions can extend the reach of the demand network, filling in any gaps in the network to allow for more efficient supply chain management.

**Learn More**

The new demand-driven supply chain rests on this next-generation platform, and is at the center of the new SAP strategy that aims to enable organizations large and small to transform their supply chains to this demand network. For more information, visit www.sap.com/scm or www.sap.com/solutionexplorer.
What do you think is the biggest supply chain challenge that SAP customers face in 2014?

Globalization in the digital world means that the supply chain — efficiently moving products and services from one place to another — needs to be a core competency of every organization. Companies need to think about how they can create greater efficiencies in their global supply chains, while remaining nimble enough to respond to new opportunities in emerging markets and meet customers’ complex demands. Technology can help streamline costs, but it can also be a vehicle for opening up new growth avenues, managing supplier risk, and efficiently sourcing materials from partners located around the world.

Mobility and social media platforms are also influencing customers’ expectations and putting power in their hands. As a result, businesses are feeling heightened pressure to deliver products and services in a timely, customizable way. This shift is influencing how companies interact with partners and suppliers.

How should companies address that challenge in the coming year?

These trends are just as much opportunities for transformation as they are challenges, but companies need to think about their response strategically. They must adapt their structures to be more flexible and responsive, balancing cost controls with the need to maintain an integrated view of the supply chain across businesses and geographies.

Given the complexities of global supply chains, organizations should take an incremental approach, first tackling a key process, division, or business unit that has the best likelihood of delivering the greatest value. For some companies, this might mean re-evaluating their sales and operations (S&OP) planning processes, leveraging in-memory solutions such as SAP HANA to make S&OP more of a strategic cross-functional discipline that is better aligned with business goals. Organizations should also consider how they can take advantage of cloud solutions like the cloud version of SAP Sales and Operations Planning to enhance their ability to collaborate internally and externally with partners and customers to create efficiencies, facilitate better customer service, and increase sales while controlling costs. Piloting such a solution may be the quickest way to get started on the path to technology enablement of these objectives.

Why might an SAP customer want to give EY a call?

EY was one of the first SAP alliance partners to roll out the cloud-based SAP Sales and Operations Planning solution with clients across a variety of industry sectors. We also have extensive experience in helping clients develop end-to-end global supply chain planning strategies, both from process and technology perspectives. Recently, an EY client in the CPG space (and an SCM leader) leveraged SAP HANA to start to transform its S&OP processes, uniting its supply chain stakeholders in a planning environment and translating risks and opportunities into actionable plans for manufacturing, logistics, and demand fulfillment.

We understand that organizations need to link supply chain performance to financial performance by managing risks and prioritizing opportunities to achieve growth and competitive advantage. To learn more, visit www.ey.com/advisory.
In late 2013, insiderPROFILES surveyed supply chain management (SCM) professionals about their priorities for the coming year. The results show an increased focus on SCM priorities and technology heading into 2014.

**Supply Chain Management Priorities**
- **71%**: A higher priority for us than in the recent past
- **25%**: The same level of priority for us as in the recent past
- **4%**: A lower priority for us than in the recent past

**Top Organizational Challenges**
- **53%**: SCM process optimization
- **15%**: Managing SCM costs
- **13%**: Finding the right technology to support SCM operations
- **10%**: Connecting with suppliers and partners
- **9%**: Finding the right talent for the SCM organization

**The Impact of Mobile**
- **50%**: Mobility
- **27%**: In-memory computing
- **23%**: Cloud

**Supply Chain-Related IT Spending**
- **48%**: Keep spending flat on supply chain-related IT
- **47%**: Increase spending on supply chain-related IT
- **5%**: Reduce spending on supply chain-related IT

**Merge Ahead: IT Integration on the Horizon**
- **63%** of SCM professionals polled said IT integration is a major priority
- **30%** said IT integration is a mild challenge
- **7%** said IT integration is a non-issue

This infographic is brought to you by EY. Read insights from EY in the Supply Chain Showcase in the January-March 2014 issue of SAPinsider (SAPinsiderOnline.com).