

WHITE PAPER

3 steps toward achieving a connected supply chain

 **Anaplan**

Executive summary

With high customer expectations, global supply risks, and intense competition, organizations face more volatility every day. And even with the digitization of information and advanced innovation in technologies ushered in by Industry 4.0 (also known as the fourth industrial revolution), traditional linear supply chains can't keep up.

What's the solution? A "connected" supply chain, which is made up of dynamic, tightly integrated digital supply networks. By connecting data, people, plans, and networks, savvy enterprises can reap the rewards of greater transparency and enhanced collaboration. A connected supply chain requires new ways of linking physical and digital assets—a transition that results in improved agility, efficiency, and cost competitiveness. This paper explores how organizations can enable business readiness and drive growth with the connected supply chain of tomorrow.

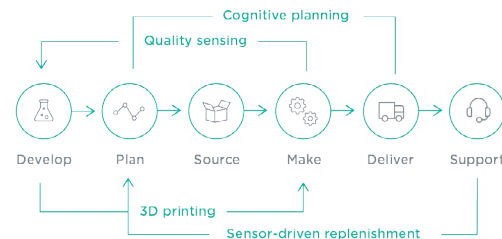
Supply chain in transition

The digital world and a new model for consumer behavior is fundamentally changing business and significantly impacting supply chain practices. Industry 4.0 pairs the convergence of advanced manufacturing techniques with the Internet of Things (IoT) to create a tightly integrated digital enterprise that can gather and analyze data, and then use that information to drive actions in the physical world.

Organizations are under extreme pressure to have much more agile supply chains and, as a result, have begun to embrace the vision of Industry 4.0. But in traditional linear supply chains that operate in functional silos—like plan, source, make, and deliver—each step in the process has little visibility into other processes and, consequentially, the entire supply chain is not able to quickly adjust to supply and demand variability.

To overcome this problem, organizations are transforming their supply chains to become dynamic, tightly integrated, and connected. Deloitte has coined the term digital supply network (DSN) to describe this concept (see Figure 1). According to the Deloitte article “The rise of the digital supply network”, “DSNs overcome the delayed action-reaction process of the linear supply chain by employing real-time data to better inform decisions, provide greater transparency, and enable enhanced collaboration across the entire supply network.”¹

Traditional supply chain



Digital supply networks

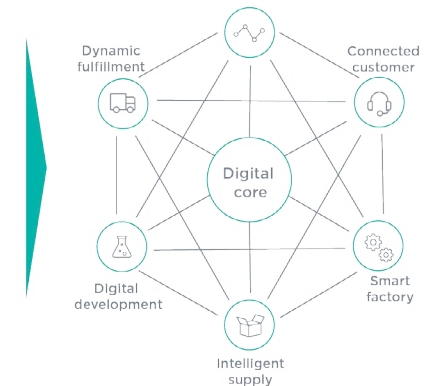


Figure 1: Supply chains are transforming from siloed, linear models to dynamic, tightly integrated networks. Source: Adam Mussomelli, Doug Gish, and Stephen Lapeer, “The Rise of the Digital Supply Chain Network,” Deloitte University Press. Published December 1, 2016.

“This shift from linear, sequential supply chain operations to an interconnected, open system of supply operations could lay the foundation for how companies compete in the future.”

Source: Adam Mussomelli, Doug Gish, Stephen Lapeer, “The Rise of the Digital Supply Chain Network”, Deloitte University Press. Published December 1, 2016.

Breaking down supply chain silos

So how are most supply chain professionals adapting their practices to respond to this new model? Slowly. As a recent survey by Supply Chain Insights reveals, many companies face significant gaps in cross-functional alignment, the ability to access data, and supply chain visibility. (See Figure 2.)

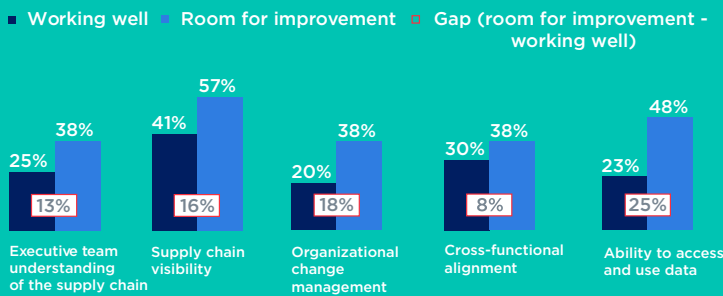


Figure 2: Every supply chain characteristic has room for improvement, according to a 2016 survey. Source: Lora Cecere, “2016 Research in Review: Highlights of Supply Chain Insights’ 2016 Research,” Supply Chain Insights. Published December 15, 2016.

The traditional “plan, then execute” model is the product of both historical thinking about supply chain processes and the state of current technology. However, in the dynamic environment of the future, these traditional planning processes won’t serve the needs of the enterprise. As noted in Figure 3, even the most mature traditional supply chain networks assume that execution will always go as planned.

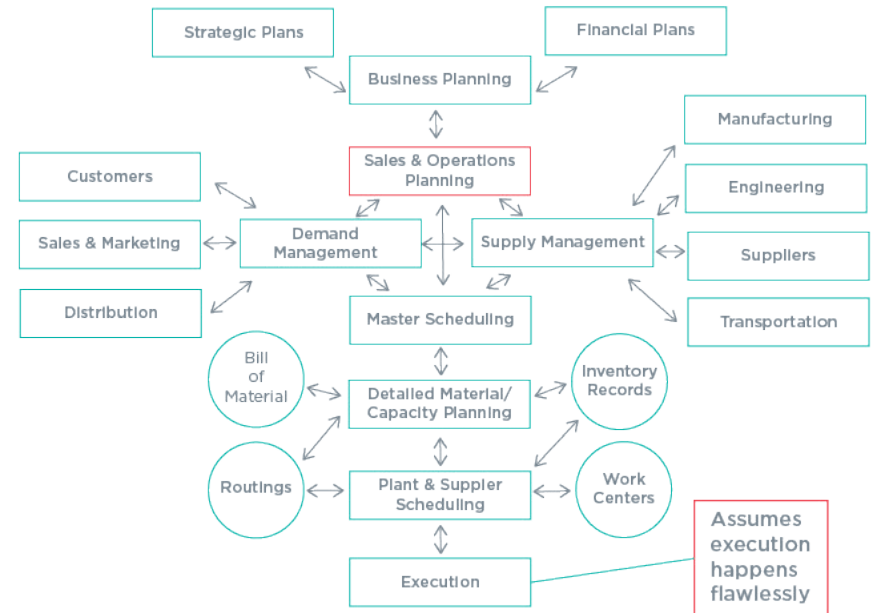


Figure 3: A model of a traditional supply chain network. But what about when execution doesn’t go flawlessly? Source: Anaplan

Dynamic processes such as sales and operations planning (S&OP), which open the door to integrated business planning (IBP), have the potential to enable greater efficiency and value for enterprises. However, some companies struggle to build those processes because of the lack of technology and talent, in addition to process roadblocks.

In a digital world, planning needs to be much more dynamic. Enterprises need the ability to plan, monitor, and respond to ever-changing market conditions. As Gartner points out in their announcement of the 2017 Supply Chain Top 25, “leading companies view digitalization as an opportunity to not only provide agile support for existing products, but to reduce time to market for new ones. Some of the most disruptive and impactful technologies include solutions combining Internet of Things (IoT) sensors, cloud computing, and advanced analytics.”²

Enterprises must get their data out of silos in order to achieve collaboration that crosses hierarchical, departmental, and enterprise boundaries. This certainly isn't a new idea, but in the past, the gaps in data and traditional solutions were too wide. Now, with cloud, IoT, mobility, and other technologies, the vision of cross-functional and supply network alignment can become a reality. Better yet, investing in a platform that can grow organically across your enterprise and supply network sets the stage for improved agility, efficiency, and cost effectiveness.

Evolving to a connected supply chain

Forbes recently noted in their “Digital Supply Chain—Are You Leading the Pack?” survey (a survey of 490 top supply chain executives) that “the next two years will see the inflection point in how the digitized supply chain drives competitive advantage and growth.”³

The vision of a tightly integrated, truly connected supply chain can be achieved, but change doesn't simply happen—it requires action. Supply chain executives must drive the evolution from their current linear supply chains by making the transition in three steps:

- 1** Connect supply chain planning data and processes
- 2** Connect people and plans across the enterprise
- 3** Connect and align the supply chain network

Evolving your company from to a disjointed state to an efficient one may seem insurmountable. The time and effort required for the transition will vary depending on the maturity of your current supply chain processes and organization. It definitely won't be achieved overnight, but don't be discouraged. Each step along the journey is a huge win and can provide measurable benefits.

As you work to connect supply chain planning, prioritize high-value processes and connect the corresponding people and plans first. Focus on quick wins, and let the momentum build and spread across the organization.

A traditional supply chain technology ecosystem

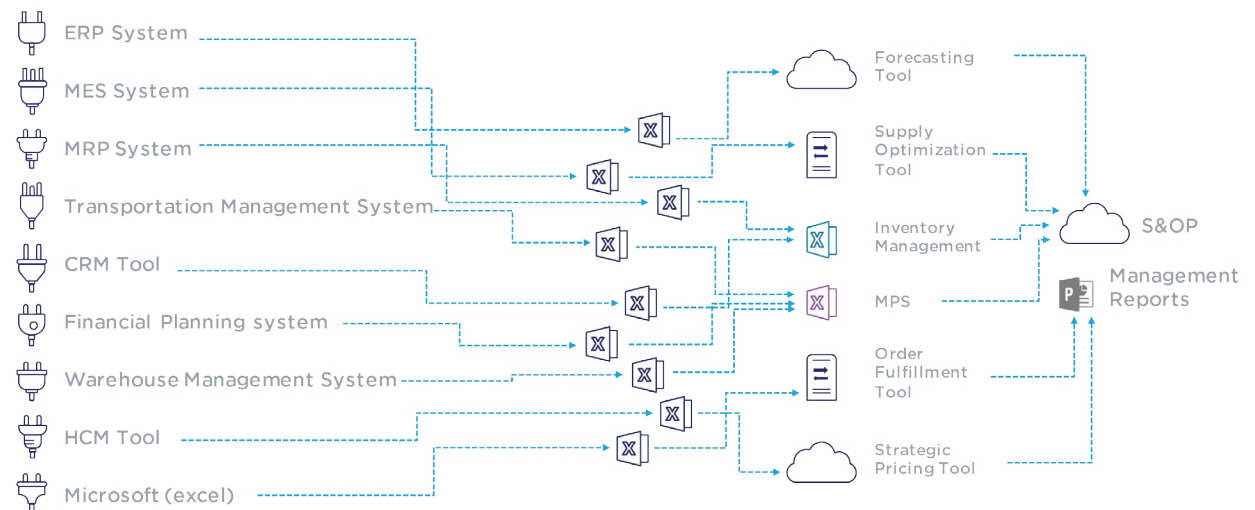


Figure 4: Does this look familiar? Today's average supply chain organization operates with disjointed systems, databases, and spreadsheets. Source: Anaplan.

Step one

Connect supply chain planning data and processes

From the factory floor to the executive suite, supply chain stakeholders can benefit from spending less time wrangling data and more time doing analysis. To achieve that, they need key supply and demand data to be accurate and available. For instance, supply planners need granular, real-time views into individual supply levels, demand forecasts, and costs—and that's often impossible to achieve using a combination of spreadsheets and outdated systems.

But the right supply chain technology, like the Anaplan platform, can mold to your unique goals, processes, and challenges. The Anaplan platform puts all your pertinent data in the cloud, and enables planners to run real-time “what-if” scenarios and complex models, see the effects of supply and demand changes on the forecast, and use these capabilities in a “sense and respond” operating model.

The benefits of evolving to a connected supply chain platform include:

- Automating integration of supply chain data from any source with a simple interface
- Maintaining a single repository of supply chain data, drivers, hierarchies, and metrics
- Leveraging a visual representation of data integration flows to correct problems
- Collaborating with suppliers and customers in real time to gain true network visibility

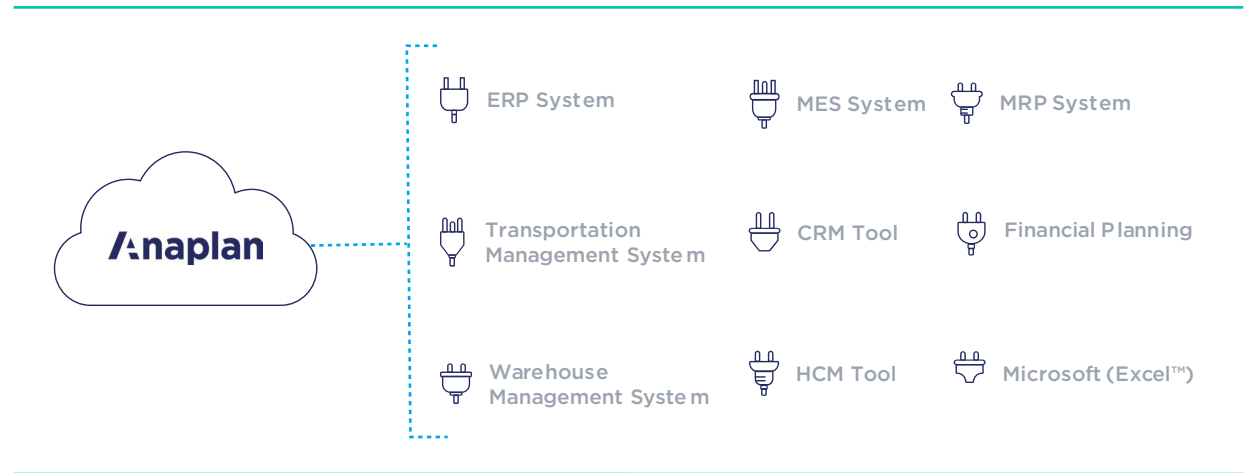


Figure 5: Anaplan consolidates key supply chain data in the cloud to simplify the planning process.
Source: Anaplan

Step two

Connect people and plans across the enterprise

Your organization might be dealing with a lack of shared goals across supply chain-related functions. This can lead to poor forecasting, inventory issues, and an inability to respond to supply-side challenges. These factors can reduce response time and drive up operating costs.

A connected supply chain helps create a demand-driven, profitable supply response, allowing synchronized decision-making to become the norm instead of the exception. As Deloitte noted in “The Rise of the Digital Supply Network”: “Instead of planning incremental improvements within the supply chain, organizations can consider how the supply network can be used to fuel growth across the business.”⁴

One example is the connection between supply chain and finance. Using the Anaplan platform, fast-moving consumer goods company Del Monte manages the financial risk associated with business volatility by aligning its supply chain strategy with overall financial and business goals. This allows its finance teams to accurately evaluate product costs and complete profitability analysis. The integration also empowered Del Monte to anticipate, predict, and accommodate market changes in real time. For example, because of El Nino, Del Monte struggled to prioritize product allocation. But now with Anaplan, it can run real-time scenarios and see what areas may not be profitable and report this to their sales, channel sales, and logistic teams to adjust strategy.

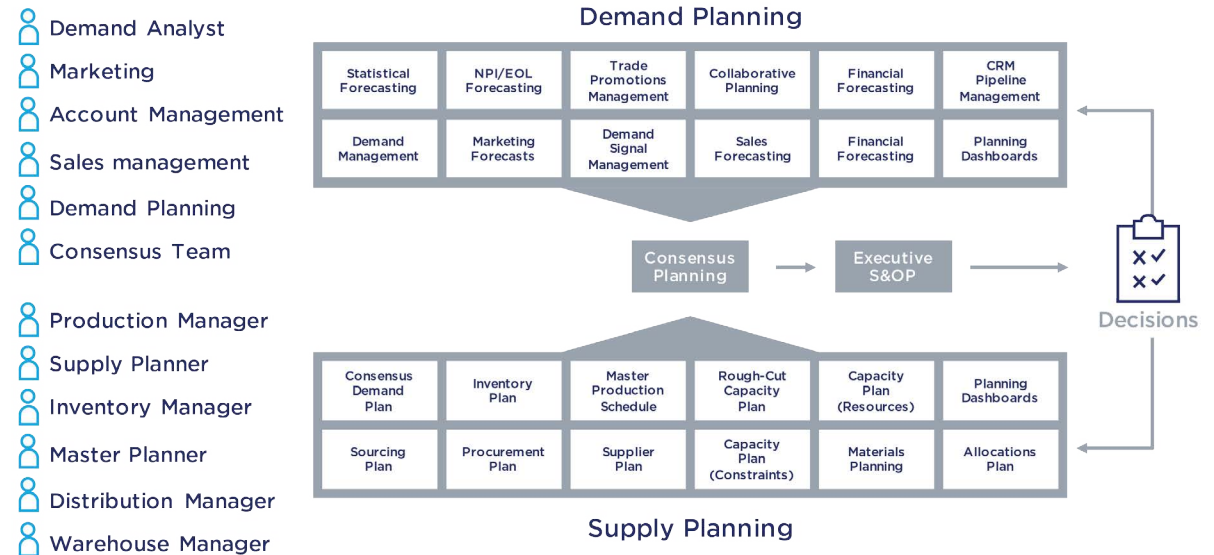


Figure 6: Connected supply chains make cross-functional processes like sales and operations planning (S&OP) more seamless and efficient. Source: Anaplan.

When supply chain professionals can align their plans with those of their counterparts in finance, sales, and marketing, it helps them understand the real-time implications that supply chain decisions have on high-level corporate strategy. Other benefits include the ability to:

- Collaborate with suppliers and customers in real time to efficiently improve service levels

- Update supply chain planning models as demand changes without waiting for consulting or IT resources
- Automatically identify and quantify trade-offs contextually across all business functions

Cross-functional processes like S&OP can also deliver greater value within a connected supply chain. (See Figure 6.)

Step three

Connect and align the supply chain network

Once key people and plans within the enterprise are connected, the next step is to connect and align the larger, extended supply chain network. This helps you stay ahead of the market, which is a key goal in supply chain.

With a fully connected supply chain platform, it's possible to improve visibility and control across the extended network while aligning to value-based metrics. Connecting and sharing data across your network with suppliers, distributors, production facilities, and channel partners can help an organization:

- Gain control and visibility across all network events and exceptions, minimizing the bullwhip effect
- Take immediate action with rule-based responses to deviations in the extended supply network
- Run “what-if” scenario assessments of your suppliers' capabilities and customer needs

By leveraging a cloud-based connected supply chain planning platform, enterprises and their trading partners can make changes instantly available to all participants, creating visibility into the impact of supply and demand balancing. The benefits include reduced redundancies, improved time-to-insight, and faster, more accurate decisions across the entire value chain.

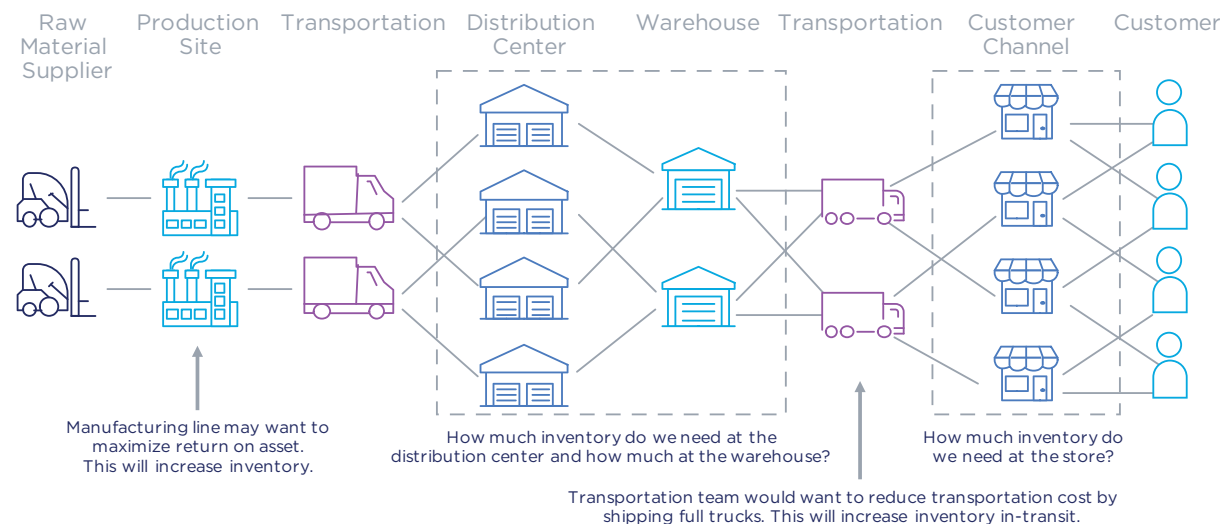


Figure 7: Anaplan helps enterprises build connections across a global supply chain network.
Source: Anaplan

One example of a space where the practical benefits of a connected supply chain are evident is the rapidly changing world of retail. In today's omnichannel retail environment, when consumers can purchase online or in-store, return online or in-store, and choose from delivery or store pickup, a connected supply chain network is essential.

To support omnichannel demand, retailers need a single pool of inventory data to track and support multiple demand streams. They need an agile

fulfillment process, multi-level dynamic inventory planning, and inventory optimization. In the traditional model, organizations could develop these processes “offline” periodically. But in today's dynamic world, they need to respond at the pace of the consumer, if not two steps ahead. With a connected, transparent supply chain in place, retailers can make the necessary connections quickly and efficiently to effectively respond to demand, returns, and rising consumer expectations.

A connected supply chain delivers business growth

Achieving a connected supply chain takes time and multiple steps. It's an evolution, so start small and lay the foundation by connecting several workflows or processes within the supply chain. Once those connections are achieved, build on that success and keep connecting for better results. As Deloitte explained in "The Rise of the Digital Supply Chain,": "Information clusters will likely move from separate silos to free-flowing, integrated information supported by interconnected technology solutions."⁵

Supply chain responsiveness will continue to increase as enterprises:

- Apply a long-term outlook
- Make digital a competitive advantage
- Use analytics more effectively
- Focus on training and talent
- Increase success of performance improvement initiatives

It's imperative to find the right platform to get started on the journey to connected supply chain planning. The Anaplan platform can help your business scale existing and new business processes across data, people, plans, and networks without the need for programming, coding, or IT ownership.

With many enterprises eager to achieve the capabilities and benefits of connected supply chain planning, Anaplan is ready to enable this journey every step of the way.

"We cut down our planning cycle time by 80%, which means we were able to lock our plans in two days instead of two weeks."

- Steve De Castro, Finance Business Partner for Commercial and Operations, Del Monte Pacific Limited

Source: Anaplan, "Del Monte aligns supply chain with finance using the Anaplan platform." Published July 26, 2017.

Footnotes

¹ Adam Mussomelli, Doug Gish, and Stephen Lapeer, "The rise of the digital supply network: Industry 4.0 enables the digital transformation of supply chains," Deloitte University Press. Published December 1, 2016. <https://dupress.deloitte.com/dup-us-en/focus/industry-4-0/digital-transformation-in-supply-chain.html>

² Gartner, "Gartner Announces Rankings of the 2017 Supply Chain Top 25," Published May 25, 2017. <https://www.gartner.com/newsroom/id/3728919>

³ Cognizant, "Digital Supply Chain—Are You Leading the Pack? Lessons From Companies That Derive the Most Value From Their Supply Chains." Published May 2017. https://www.forbes.com/forbesinsights/cognizant_supply_chain/index.html

⁴ Adam Mussomelli, Doug Gish, and Stephen Lapeer, "The rise of the digital supply network: Industry 4.0 enables the digital transformation of supply chains," Deloitte University Press. Published December 1, 2016. <https://dupress.deloitte.com/dup-us-en/focus/industry-4-0/digital-transformation-in-supply-chain.html>

⁵ Ibid.

About Anaplan

Anaplan is driving a new age of connected planning. Large and fast-growing organizations use Anaplan's cloud platform in every business function to make better-informed plans and decisions and drive faster, more effective planning processes. Anaplan also provides support, training, and planning transformation advisory services. Anaplan is a privately held company based in San Francisco with 18 offices and over 150 expert partners worldwide.

To learn more, visit anaplan.com

