Creating a supply chain control tower in the high-tech industry
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A supply chain control tower gives high-tech leaders the ability to create a horizontal supply chain, increase talent and organizational alignment, and improve agility through more dynamic decision making.

It’s not easy managing a supply chain in today’s volatile global business environment. Executives must meet heightened demands to increase the profitability of the supply chain and support business growth requirements. They must deal with an expanding data universe and talent shortages, while managing supply chain security and risk, and balancing increasing customer expectations.

High-tech companies also face some challenges unique to their industry. They are managing an extended supply chain with significant complexities in forward and reverse flows compared to companies in other industries.

A retail company, for example, primarily receives goods, flows through inventory, and sells through channels in the market, with limited returns requirements. By contrast, a high-tech company must manage the remanufacturing of product, which then creates an additional supply chain around storage, parts management, planning, refurbishment standards and lifecycle management of product and repair, often for years after the initial sale of the product to the customer.

Many high-tech companies struggle with supply chain issues including:

- Lack of horizontal integration
- Inadequate inventory visibility due to siloed organization structures
- Inability to align demand to supply plans
- Limited agility— inability to act on alert to supply issues
- Lack of capacity to re-allocate inventory, cross-dock or direct ship
- Inadequate analytical capabilities— difficulty in pulling performance metrics; diminished forecast accuracy; inability to aggregate meaningful data to act upon; difficulty in modeling cost implications of business decisions

The result of these symptoms experienced by businesses is a negative impact on the bottom line. Revenue suffers from constant out-of-stocks, discounting and excessive returns. Customer service issues increase, resulting in poorer performance as customers either do not receive their orders on time or in full (OTIF). Significant cost issues affect distribution, transportation, expedites, obsolescence and cost of goods sold (COGS) for the supply chain. Cost considerations also impact customer care call volumes, field service trips, and installation schedules due to missing items.
Meeting the challenges: Three strategies

Three sets of capabilities in particular are required to address these challenges and get the high-tech supply chain running smoothly:

1. Horizontal supply chain collaboration and orchestration: Internal and external partner collaboration is required across the end-to-end value chain to enable more effective service. Close internal and external integration allows organizations to leverage supply chain partners’ strengths, optimize end-to-end supply chain costs and increase speed to market.

2. Effective centralized talent and organizational alignment: Critical supply chain skills are required to manage complex supply chain challenges. Because of the scarcity of talent, it is critical to centralize critical skills and leverage them regionally or globally in an effective way.

3. Dynamic decision making and increased agility: Successful supply chains must have an operating model and strategy that is agile, supports quick determination of root causes, models potential responses and enables data-driven decision making with speed.

Historically these capabilities have proven difficult to effectively enable with traditional supply chain technology and strategies. A supply chain control tower, on the other hand, promises to leverage these capabilities and new technologies, giving leaders the ability to create a horizontal supply chain, improve the effectiveness of talent and organizational alignment, and increase agility through dynamic decision making.
Why is a supply chain control tower important for high performance?

A supply chain control tower is a shared service capability that monitors and directs activities across the end-to-end supply chain to make it collaborative, aligned, agile and demand-driven. A control tower acts as a centralized hub that uses real-time data from a company's existing, integrated data management and transactional systems to integrate processes and tools across the end-to-end supply chain and drive business outcomes.

High-tech giant Dell, for example, adopted a control tower concept that acts as a command center for parts and service delivery. It has helped Dell work more closely with its service providers and be more proactive when it comes to customer service, thereby strengthening customer loyalty. Dell's service parts command centers are located in the US, Europe and Asia.

At each command center, experts in various subject areas closely monitor service developments and direct Dell's service providers. One command center, for example, is staffed with experts who sit at computer consoles arranged auditorium-style, so they can see an array of huge wall-mounted screens displaying service requests, maps, news, weather and other live information feeds. The five command centers' staffers monitor service requests from customers. In addition to offering assistance over the telephone, they route spare parts from more than 600 parts depots across the globe and dispatch technicians to a customer's site if needed. Real-time supply chain visibility plays a key role in ensuring Dell's ability to respond quickly to customers' requests.1

ETS is also establishing global centers of supply chain excellence for managing its end-to-end supply chain, enabling streamlined planning and fulfillment. (For more, see below.)

Control towers bring together the capabilities required to manage complex, end-to-end supply chains and help combat rising volatility, complexity and uncertainty. They enable the integration of supply chain processes and tools across silos, bringing together large amounts of data to support strategic decision making. Control towers target improvements in costs, inventory, quality, customer service and asset utilization. Control towers also support an integrated framework of real-time visibility, root-cause analytics enabling rapid response, and continuous improvement of process execution.

Supply chain control towers are supported by three sets of technologies in particular:

- **Supply chain partners' technologies:** These include ERP, planning and optimization, transportation and warehouse management. These technologies make available a wealth of data about operations along the end-to-end supply chain.

- **Cloud-based technologies:** New technologies have emerged that allow all the nodes along the end-to-end supply chain to be connected, regardless of the underlying execution platform. These cloud-based technologies are dramatically reducing the cost, complexity and time-to-value of inter-enterprise integration.

- **Analytics:** Advances in analytics are enabling organizations to make use of the enormous amount of data being collected and connected across the supply chain.

ETS: Measurable benefits from global centers of supply chain excellence

ETS, a leader in the field of assessment measurements, used a supply chain control tower to help create a new supply chain model. Working with Accenture, the team leveraged custom and off-the-shelf software for forecasting, inventory planning, production planning and scheduling, warehouse and transportation, and shipment tracking to build a planning and fulfillment control tower.

The control tower concept has enabled ETS to significantly improve the control, accuracy and integrity of its operations with an end-to-end supply chain management capability. These improvements are also helping ETS win new business in target markets. Today ETS is benefiting from guaranteed service levels for the first time in its history. ETS has also experienced an improvement in client win rates, boosting global sales to more than $100 million. In addition, ETS is benefiting from guaranteed service levels, thus gaining a consistent level of reliability and a predictable cost structure for its supply chain.

With the end-to-end visibility of a control tower providing efficient planning and fulfillment operations, ETS is achieving more than 99.5 percent accuracy in key service level agreement operational areas. The company has also succeeded in lowering print costs by 16 percent (consequently achieving $3.8 million in savings) and transportation costs by 24 percent (resulting in $4 million in savings). Improvements have also been realized in workforce effectiveness, including a 25 percent increase in warehouse productivity.
Managing the journey to control tower maturity

Implementation of a supply chain control tower is a five-phase journey as organizations move toward a demand-driven, end-to-end value network. Supply chain leaders can decide to implement some of these phases to achieve fast, interim results, or plan for a multi-year journey of change.

Visibility
Phase 1: This phase focuses on reactive fixes, providing visibility to events with minimal disruption to day-to-day operations.

Integration
Phase 2: Teams create projects to integrate processes and information technology. This is a stage where driving functional excellence can be balanced with trade-offs.

Performance Monitoring
Phase 3: As the transition is made to phase 3, the control tower enables cross-functional decision making, the development of basic “what-if” analytics, and management of functional key performance indicators. This is where an organization can design the supply chain with dynamic business modeling. In an environment where everything is changing rapidly, different supply chain segments need completely different treatment that brings solutions to the operational level.

Horizontal Processes
Phase 4: As projects are executed and completed, phase 4 begins and the control tower becomes an end-to-end, demand-driven supply chain process moving from managing vertical function silos to horizontal processes. The design of a long-term supply chain and business design with a gradual approach to implementation drives end-to-end process excellence and allows visibility into process outcome key performance indicators.

Synchronized Network
Phase 5: In the final phase, an organization has achieved a synchronized, demand-driven value network. At this stage, there is continuous assessment of value at the activity level and across the organization. Complex analytics can be conducted to optimize value and the business is able to manage business value and profitability.
Conclusion

Supply chain executives in high-tech industries are facing unprecedented challenges in managing highly complex supply chains and addressing the volatility of a global business environment. The difficulties of managing the supply chain in these circumstances continue to affect companies’ financials significantly.

In addition, executives face new demands to make the supply chain more profitable, nimble and flexible; to manage security and risks; to meet increasing customer needs; and to support growth opportunities.

A control tower can act as a centralized hub that uses real-time data from a company’s existing, integrated data management and transactional systems to integrate processes and tools across the end-to-end supply chain and drive business outcomes.

References:


Partner with Accenture to deliver your supply chain control tower

With broad technology and industry skills, extensive partnerships with leading technology vendors, and deep experience in supply chain management, Accenture offers a proven process for creation and management of a supply chain control tower.

One-Stop Shop for Supply Chain Control Tower

• Accenture brings the full suite of capabilities required to architect, build and operate a supply chain control tower, including technology, people and processes.
• Accenture also brings a shared services approach to control towers, running operations for our clients.

Strong Analytics and Execution Capabilities

• Accenture has a strong foundation of knowledge and experience in using extensive data, carrying out statistical and quantitative analysis, and developing explanatory and predictive models to support fact-based management to drive decisions and actions.

• A leader in supply chain outsourcing, Accenture has deep experience in executing control tower activities.

Industrialized Assets and Strong Alliances

• Accenture has developed proprietary, industrialized solutions and assets, and partners with best-of-breed technology vendors to deliver supply chain control tower solutions to address a variety of client problems and needs.

Flexible, Modular Solutions and a Variety of Partnering Models

• Our view of the end state is made up of a number of distinct “building blocks,” allowing us to develop a road map for our clients that prioritizes the most critical outcomes first.
About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 358,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world’s most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$31.0 billion for the fiscal year ended Aug. 31, 2015. Its home page is www.accenture.com.