

Accenture **Analytics**

Part of Accenture Digital

Data-Driven and Analytics-Powered: Digital supply chain is the new reality



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Highly connected, intelligent and automated

That's the future order for supply chain operations. Today's increasingly complex global operations and new digital technologies are giving rise to a sea of data and the evolution of a smarter, more efficient networked supply model. The modern digital supply network model will be powered by advanced analytics, which will be embedded throughout its entire operation—and without analytics, virtually inoperable.

Time to get digital and real with analytics

The pressure is on. Supply chain operations must gear up to adopt a modern digital supply network model enabled with advanced analytical capabilities and fast.

Supply chain managers will increasingly need to depend on alert-based decision making to operate effectively and prevent costly business disruption in the future.

Executives leading the supply chain operations of their organizations are facing significant pressure internally as well as externally from suppliers and business partners to implement

digital technologies in the supply chain. They have high expectations for deriving major business value and return on their digital technology investments. The adoption of analytics technologies in particular has already impacted and will have an increasingly significant impact on their organizations' supply chains for helping to deliver on expectations for realizing business value.

The business case is evident

The roadmap for digital technology implementation is paved with opportunities to improve operational efficiency and decision making across the supply chain. An ever-expanding big data universe begets advanced supply chain analytics, which begets increased operational automation and business intelligence.

Supply chain analytics helped an auto-parts supplier produce multiple benefits, including more accurate forecasting with leaner management of parts nearing end of life resulting in a one-time savings of \$5.6 million and recurring cash-flow benefits from reduced sales losses estimated at \$8.7 million.¹ For a leading pharmaceutical company, a transportation model overhaul and the implementation of a global transportation control tower with real-time visibility into operations helped it resolve issues quickly, boost network performance and reduce logistics costs by 8.9 percent.²

The volume of structured and unstructured data generated from disparate sources across today's increasingly complex global supply chains is enormous and will only continue to multiply with the advent of new digital technologies. Traditional supply chains that fail to evolve their model of operations to effectively compete in a digital business world will become increasingly overwhelmed. Supply chains will grind to a halt or, best case scenario, struggle along for a limited and uncertain future.

A look at the model of the very near future

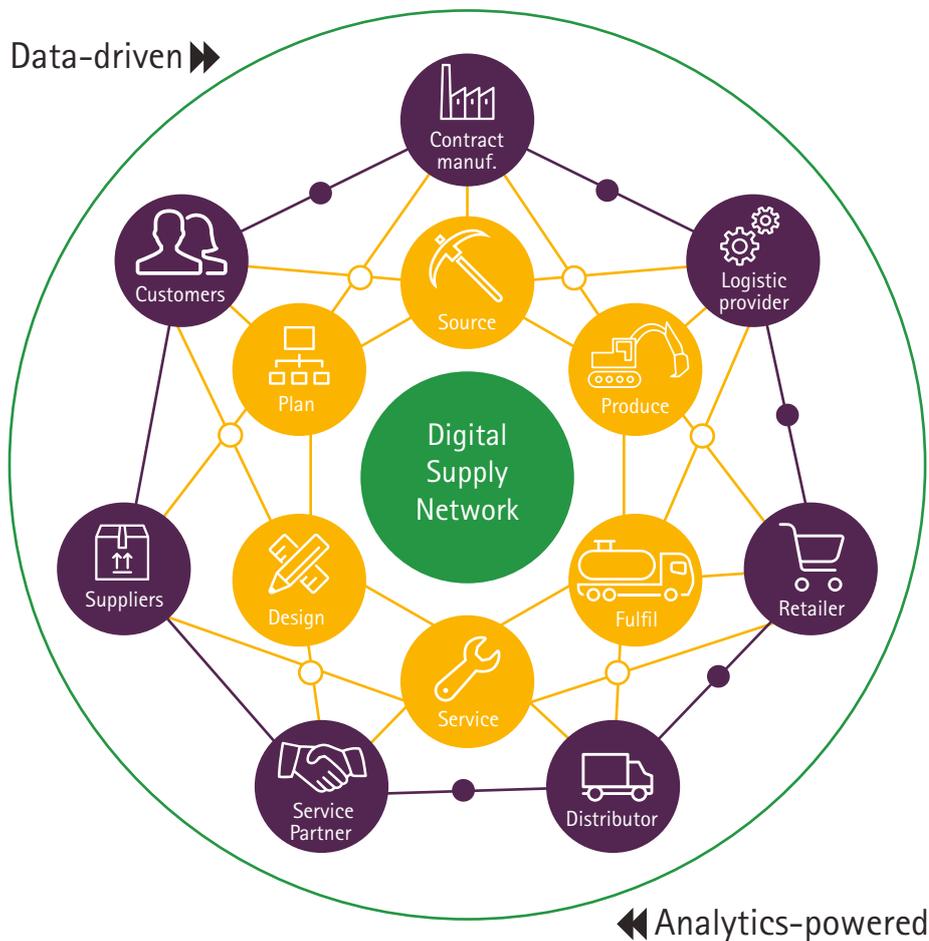
To enable more effective operational decision making, supply chain managers need to make sense of all the data generated. Analytics, the science of translating data into meaningful and actionable insights, will power the data-driven digital supply network of the future (see figure below).

Without analytics, this model for future operation will be most difficult, if not impossible, to operate.

Supply chains can essentially jump the digital evolution curve by adopting a networked supply model of operation enabled with advanced analytics instead of following a more conventional progression based on legacy enterprise resource planning and supply chain management systems. As organizations integrate big data analytics strategies into their operations, they will need to update their talent strategy, including upskilling and hiring, or contracting, talent to leverage the power of analytics.

Using analytics to automate more routine supply chain decision making-related tasks will help free up existing resources in house to upskill talent to focus on higher value-added business tasks. Additionally, automating the ingestion of massive amounts of data from myriad sources across the supply chain will lead to increased operational efficiency. Automating data ingestion, in turn, will help enable increased use of business intelligence for improved decision making.

The digital supply network model of the future



Analytics transformational impacts

More data. More opportunity. More complexity. Despite increasing supply chain complexities, the data explosion presents many exciting business opportunities to gain deeper insights into market trends and digital consumer behaviors. Opportunities to also discern signals from all the noise created by so much data and discover important hidden insights will help better guide strategic decisions about operational excellence.

As the analytics market evolves, transformational impacts on supply chains are occurring across five key dimensions:

DATA

Big data does not equate to good data, and technologies now exist to efficiently capture, integrate, store and leverage supply chain data to gain relevant insights for competitive advantage.

INSIGHTS

Analytics is getting embedded into supply chain operational DNA at critical decision points and will produce strategic insights for driving talent, organizational and cultural transformation.

VISUALIZATION

Powerful software and self-service tools are enabling real-time data visualization and a more immersive

and interactive user experience for insights consumption, facilitating rapid identification of operational bottlenecks and risks and more robust root cause analysis.

MACHINES

Advances in machine learning, cognitive computing, Internet of Things (IoT) and robotics are impacting all supply chain functions, automating decisions and driving a host of operational improvements—from asset utilization to customer intimacy to service and enterprise agility.

SECURITY

Supply chain analytics is playing a key role in overall supply chain security as a more open and connected ecosystem of players creates a dynamic, quickly shifting environment with new risks to manage.

Turning data into insights with analytics—a case in point

Advanced analytics can help improve overall supply chain visibility and unleash powerful insights to better understand the current situation and predict future possibilities. Forecasting, simulating and optimizing with analytics can enable more informed, strategic and timely decisions and actions to efficiently balance supply against demand and anticipate and address issues before they occur.

As an example, a global beverage company sought to better understand causal factors affecting demand by

implementing a demand planning solution that would integrate with its data sources and enterprise resource planning system. Pilot results demonstrated improvements in stock keeping unit accuracy at multiple levels. Improved forecasting is expected to help improve supply chain management and anticipate demand fluctuations. With greater control of inventory and costs, future benefits (annual and recurring) to the company's bottom line are estimated at \$3.9 million.³



Powerful new capabilities to take control and action

Supply chain analytics offers the capability to enable increased automation efficiencies and business intelligence for facilitating more proactive, effective decision making. Businesses can in turn leverage greater economies of scale while more effectively serving the unique and localized market needs of customers.

Analytics insights can help positively impact top and bottom-line business growth specifically through improvements across the whole supply chain:

DESIGN

Make better informed, more cost-effective design decisions with time/cost analytics and simulation.

PLANNING

Prevent overstocking and understocking, achieve higher sales and increase customer satisfaction using demand sensing and forecasting techniques.

SOURCING

Optimize procurement and reduce costs using sourcing analytics for commodity pricing, risk management, spend, supplier performance management and total cost of ownership.

PRODUCTION

Optimize manufacturing, improve product quality and prevent breakdowns with predictive analytics.

FULFILLMENT

Streamline network flows, reduce costs to serve and improve flexibility.

SERVICE

Improve customer service and loyalty with IoT and predictive analytics, detection of quality issues via warranty claims analysis, and service network and resource optimization.

To effectively compete and stay ahead in the future, supply chain managers need to adopt a modern digital supply network model enabled with analytics. An inescapable reality, the future of your organization's supply chain operations will depend on analytics.

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Accenture Digital, comprised of **Accenture Analytics**, **Accenture Interactive** and **Accenture Mobility**, offers a comprehensive portfolio of business and technology services across digital marketing, mobility and analytics. From developing digital strategies to implementing digital technologies and running digital processes on their behalf, Accenture Digital helps clients leverage connected and mobile devices; extract insights from data using analytics; and enrich end-customer experiences and interactions, delivering tangible results from the virtual world and driving growth. To learn more about Accenture Digital, follow us **@AccentureDigi** and visit www.accenture.com/digital.

About Accenture Analytics

Accenture Analytics, part of **Accenture Digital**, delivers insight-driven outcomes at scale to help organizations improve their performance. With deep industry, functional, business process and technical experience, Accenture Analytics develops innovative consulting and outsourcing services for clients to help ensure they receive returns on their analytics investments. Accenture also offers the **Accenture Insights Platform**, a comprehensive and scalable solution that allows organizations to get actionable insights and business outcomes quickly with a competitive, flexible commercial model. It hosts an advanced analytics applications portfolio, an integrated design, build, run studio environment enabling the agile development of industry and function-specific analytics solutions that are reusable, configurable and adaptable to meet the needs of each unique company and its individual users. For more information follow us **@ISpeakAnalytics** and visit www.accenture.com/analytics.

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