

Data Management Drives Omnichannel Supply Chain Planning to Meet Evolving Customer Demand

Analyst Insight: Numerous drivers are propelling a greater need for both improved data visibility and the ability to manage information required to make effective business decisions. International trade tensions and an increased need for rapid response to customer demand signals are causing many companies to consider on-shoring. Consumers will pay for convenience, but they will not sacrifice shipping time or product selection. Relocating resources in the U.S. provides added supply chain control for organizations racing to create a positive omnichannel experience for customers.



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Companies formulating business strategies to protect profitability in this climate employ improved technology to gather an enormous amount of data. Descriptive analytics employ that volume of information to support supply chain planning decisions, while even predictive analytics increasingly guide traditional network design. However, the scale at which companies are compiling data pushes them to explore new ways to manage that information and identify

the best way to optimize supply chain performance.

Shippers that rely on forward-looking prescriptive analytics will be able to understand real-time dynamics of the supply chain network and make response-focused decisions. As retailers increasingly invest in artificial intelligence to help in the planning process, their ability to modify forecasts and fulfillment plans will require manufacturers to achieve improved order visibility to enable rapid, necessary production adjustments. Likewise, improved supply chain visualization emerges through this data refinement to the most important information. Retailers are able to identify optimal channel distribution strategies, whether that includes a distribution center model, fulfillment from brick-and-mortar retail locations or drop shipments from manufacturers direct to consumer.

To address this needed level of data visibility and actionable intelligence, organizations will make heavy investments in data management technology. While expanding usage of blockchain is spurring conversation around data availability issues, more technology investment will focus on making sure that data is correct. Companies

will also test emerging concepts that overlap existing predictive modeling applications to validate prescriptive models supported by AI-type algorithms.

As enterprise logistics providers continue to make significant data-focused technology investments, supply chain planning and optimization will continue to improve. In addition, an increase in dynamic application of these technologies will focus on better integrating data into operational decisions and then sharing that information with stakeholders across the supply chain network. By advancing technology capabilities in these ways – and consolidating with or acquiring smaller service providers and niche solution developers to achieve similar ends – enterprise supply chain consulting partners will be able to extend robust service platforms to companies not otherwise capable of investing the capital required to address the critical need for optimal transportation and supply chain management. While there is always concern about potential slowdown, and some businesses and technologies will fail, more will experience growth by leaders making hard decisions and taking data-driven risks to put their company in an advantaged position.

Outlook: In the long term, businesses will focus on what is critically important. Consumers will still demand fast order delivery, so manufacturers will develop technology to make their products as close as possible to the end user to minimize transit time. Complementing strategies to bring products closer to consumers, organizational data capabilities will also leverage analytics related to the physical attributes of a shipment to increase efficiencies in packaging, lane and mode selection and in the end, reduce cost to protect margin – without passing additional costs along to customers.