Collaboration - the future of supply chain

By Jaco Barnard

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To remain relevant in today's increasingly competitive and dynamic markets, and to extract maximum value from operational environments, organisations should move towards a 'collaborative' supply chain model - powered by the latest technological innovations.

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This collaborative model - tightly integrating suppliers, assemblers, partners, distributors and end-customers - is in sharp contrast to the previous era. Supply chain was historically composed of individual point-to-point interactions. Think of the large retail giants of the second half of the 20th century, whose super-efficient proprietary supply chain models were predicated on scale.

However, in today's connected world, point-to-point models are weighed down due to costly maintenance requirements and lack of scalability. They inhibit firms from moving with agility into new directions and markets.

Customers today are not only more cost-conscious and well informed about competitor offerings, but also demand ever-faster fulfilment, the ability to customise, and also other services like the ability to track the progress of goods being delivered.

To respond to these changing dynamics in consumer markets and in technology, organisations are recognising that efficient supply chain is the key to a business's success.

Reducing lead times

A recent IDC survey showed that 71% of companies (across all verticals) aim to reduce the lead times in their supply chain, and 68% planned to increase their fulfilment capabilities, to keep pace with customer needs.

In the retail sector specifically, this pressure to enhance supply chains becomes even greater. But to improve an organisation's value chain, one has to carefully navigate through complexities like regional regulations, fines, international shipping restrictions, competition, and many more.

The complexity is further heightened by the emerging concept of 'co-opetition' or 'cooperative competition', where companies look to partner with competitors in interesting new collaborative models - leveraging the unique strengths of different players in order to satisfy customer demands. Being able to partner with direct competitors, or marginal competitors in adjacent verticals, may well prove to be a transformational difference between a success and a failure.

How can organisations manage these complex scenarios?

There are four primary spheres of enterprise technology shaping the new supply chain landscape:

- Cloud architecture - By flexibly resourcing IT assets, there is less need for huge upfront investments and multiyear deployment timeframes. Organisations can rapidly scale up and enhance their supply chain architectures, allowing for fluid integration with partners
- Big Data - Smart systems that analyse reams of data can be used to design rule-based decision-making engines. This speeds up processes, reduces the need for unnecessary human intervention, and replaces the arduous processes of manually drawing reports and compiling data
- In-memory computing - This allows for real-time responses to events, the "oil" that keeps the supply chain spinning at maximum efficiency
- Mobility - While rule-based decision making automates the day-to-day activities, there is a need for human, managerial input whenever certain thresholds are breached. Advances in mobility (devices, broadband, and applications) allows for faster responses and always-on visibility of the supply chain's health.

Logistics analyst [David Krebs](#) pinpoints mobility as a transformational technology in supply chain management - saying that recent innovations in mobility have been pushing the industry closer to a "completely wireless, real-time supply chain nirvana". These advances, he explains, help organisations work smarter and faster in increasingly competitive environments.

In fact, there is a dazzling array of other innovations that are breaking through and finding application in supply chains - from drone technology, to ruggedized devices for delivery staff, to advanced robotics. All of these should ultimately plug into a collaborative environment that connects all members of a value chain.

But to embed new innovations within the organisation's operations, and move towards a collaborative state, change agents and managers need to follow some fundamental steps:

Firstly, they require the support of key stakeholders - particularly executives from within one's organisation and in the relevant interface/partner environments. Secondly, they need to modularise each component of the value chain, standardise on terms, and determine the rules that will underpin the collaboration. Thirdly, all the organisations involved need to determine their states of readiness, and chart the roadmap to achieving the eventual vision.

Ultimately, collaborative value chains using game-changing new technologies not only improves efficiencies, but also helps organisations achieve greater customer satisfaction and personalised service levels.

ABOUT THE AUTHOR

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