The Customer-First Digital Supply Chain Model

Replacing the traditional supply chain with a digital customer-centric model

Today's businesses, and even today's savvy consumers, are well-versed in the traditional supply chain model.

A seller of goods needs fresh inventory, which triggers the long process of product manufacturing through delivery to the end-user. This involves multiple steps that can involve:

- Overseas production
- Slow freight carrier transportation of the product
- Warehousing and additional ground transportation before it finally reaches its point-of-sale destination

The party that benefits the most from the traditional supply chain model is the company itself – benefitting from a process that aims to minimize the costs of manufacturing, shipping and logistics.

However, a supply chain game-changer is rapidly emerging that puts the customer at the forefront of the process. The digital supply chain is quickly replacing the traditional supply chain – a customer-centric model that leverages real-time data to expedite the entire process and deliver goods with incredible accuracy and agility. How does it work? Radio-Frequency Identification (RFID) allows logistics technicians to pinpoint exact product locations from multiple warehouses or stocking locations from a mobile device, select the nearest warehouse and initiate 'pick & pack' with total accuracy in real-time. It enables faster, well-coordinated and cost-effective delivery of products to market. The days of massive warehouses run by antiquated tracking systems are soon to be forgotten. Inventory is literally at a company's fingertips, allowing for immediate location and shipping of exactly what is needed. The result is a more satisfied customer whose expectations are exceeded, allowing for a closer relationship and higher probability of repeat business.

As companies transition to a digital supply chain model, it's important to understand the details of how it works, the strategy behind it and what's necessary to make it successful. A digital supply chain focuses on three key elements – technology, data and agility. It's high-tech, happening in real time and with complete visibility throughout the process. It's all about knowing where your inventory is, ensuring accuracy and determining the shortest route to its destination. Implementing a digital supply chain offers a significant competitive advantage and will require businesses to develop a new strategy and train staff to properly execute the process and understand the technology.

It also has monumental financial benefit. According to the Center for Global Enterprise's Digital Supply Chain Institute (DSCI), executing the digital supply chain model can:[1]

↓ 20%	↓ 50%	↑ 10%
COST OF GOODS/SERVICES	SUPPLY CHAIN COSTS	REVENUE

The reference to increased revenue through operational or supply chain improvements is a novel one. The DSCI has done extensive research into what it calls the "Frontside Flip" which alludes to the ability to use the backend operation to drive front end growth and profitability.[1] Supply chains have long been a hunting ground for cost savings and improved productivity but the DSCI research shows that digitizing operations presents a powerful opportunity to impact service levels, linkage to markets, branding through technology, and the ability to capture additional revenue through better service, execution, and planning. Salespeople learn very quickly to love digitized supply chains.

The key element of the digital supply chain is technology, and there has never been a more exciting time than now for implementing proven solutions utilizing Artificial Intelligence (AI), cloud-based software and mobile technology in the supply chain process. Consumers have come to rely on mobile technology for nearly every aspect of their day-to-day lives – from checking various email accounts and accessing social media, to seeing who's at their front door and ordering groceries.

As a result, customers now expect immediate gratification in nearly every aspect of their lives. So, it should come as no surprise that mobile technology is also a key component of controlling the digital supply chain and heavily replied upon to expedite the process. The customer isn't necessarily concerned with what is happening behind the scenes to meet their demands, but they certainly always care to know the current status and when they can expect their issue to be resolved or their product to be received. For these reasons, mobile technology is the gateway to a digital supply chain. It puts the customer first – giving them real-time information and leading to satisfaction with your business. To put the importance of mobile technology into perspective, in 2015 global monthly mobile data traffic was 3.7 exabytes (that's 3.7 billion gigabytes). In 2020, it's expected to be 30.6 exabytes.[1] That indicates a significantly growing reliance on mobile technology and the need for a digital supply chain to become yet another industry evolution that offers customers the ability to have real-time information at their fingertips.

Likewise, tremendous advances in AI are also advancing the digital supply chain model. This is a key component to reducing supply chain costs and achieving long-term profitability. Extending human capital and capacity through each stage of the supply chain through automation and advanced analytics is both a significant cost-savings and a proven way to create efficiencies in the process. The Managing Director of the DSCI, George Bailey, says "companies need a whole new skillset that uses data to extend capabilities rather than relying solely on outdated reports and intuition". Bailey points to a suite of tools available today that allow workers and managers to make better decisions, go faster, and reduce expenses. The McKinsey Global Institute claims that Europe alone "could add about 19 percent to its output by 2030 if it were to develop and diffuse AI according to its current assets and digital position".[5] It's clear to the experts that AI leads to delivering smarter, faster service for the customer.

The transition to a digital supply chain certainly has the support of manufacturers, with 50% deeming digital planning as key to supply chain transformation. Supporting that stat, 45% of businesses utilizing those manufacturing services agree that new technology is the answer. In addition, 50% of companies view data and analytics as the primary drivers of change, and 40% list AI and machine learning as essential to transformation.[3]

You've read the word agility a few times in this article, and that is because organizational agility is a key component to successfully executing a digital supply chain. By its very definition, agility is the "ability to move nimbly with speed and ease". Being able to operate, strategize and react quickly in a digital supply chain is essential and often a determining factor in how your business stacks up against the competition. Businesses looking to implement a digital supply chain must focus on becoming agile in all areas so that no single part of the process becomes bogged down. Agile transformations are underway in several industries experiencing fast change in how they operate due to changing customer demands or the introduction of new competition. Their efforts are paying off, with 81% of surveyed businesses reporting moderate to significant increase in overall performance as a result of their efforts.[2]

Agile organizations are those that are proven to be both dynamic and stable. The dynamic side of the business means they are nimble and can respond quickly to challenges, threats and opportunities. The stable side means they can demonstrate reliability and efficiency in their operations. Currently, less than one-quarter of logistics firms are working towards agile transformations.[2] What is the starting point for the other three-quarters? While it's not a one-size-fits-all solution, it needs to start at the top of the business' hierarchy with a strong mentality of embracing change and enabling the culture. Collaboration across all departments, willingness of employees and the support of their superiors are all key elements. New skill development of existing employees as well as hiring the right talent is a critical factor, including a desire to learn and grow with the company. These businesses need to decide where to start, create a vision and stay the course until the agility transformation is complete. Failure to innovate and conform to changing market needs most often leads to losing your share of the market.

Making the digital supply chain switch is not without its risks. In fact, a recent survey of directors, CEOs and senior executives conducted by Harvard Business Review found that digital transformation risk is their No. 1 concern. In large part, that is due to a 70% failure rate of digital transformation launches.[4]

That high failure rate comes from lacking the right mindset and potentially flawed organizational practices. To avoid the potential pitfalls of a digital supply chain, companies should consider the following steps:

1. Develop a business strategy prior to investing in anything
2. Leverage the expertise of staff – embrace the ideas of the people who have the best working knowledge of your business systems, best practices and operations
3. Assess customer's needs and expectations, with feedback directly from them
4. Educate employees and alleviate fears – digital transformation will incite fear of job loss
5. Think like a start-up – they are agile, adaptable and tech-savvy
6. Embrace the idea of constant change – technology will continue to evolve and offer new opportunities

The impact experienced by the traditional supply chain as the digital supply chain has emerged is already being felt. Digital disruption is happening in every industry, and the supply chain is no exception. Companies need to start taking advantage to remain competitive and elevate their customer service to a new level. Companies are in place to manage the transition to a digital supply chain, such as Janus Logistics Technologies. They are doing their part to make a profound impact on global commerce by executing the digital supply chain effectively with the latest technology and demonstrating how accelerating the supply chain process can reduce costs dramatically, fuel competition and impress customers worldwide.

To learn more and utilize the expertise of the Janus Logistics Technologies team to evaluate your needs, visit https://jltech.com. If you are currently undergoing a digital transformation or have additional insight to share, please take advantage of the opportunity to comment below.

1 The Center for Global Enterprise's Digital Supply Chain Institute, Digital Supply Chains: A Frontside Flip
2 McKinsey & Company, How to Create an Agile Organization
3 Digitalist Magazine, 9 Eye-Opening Digital Business Planning and Supply Chain Transformation Stats
4 Harvard Business Review, Digital Transformation is Not About Technology
5 McKinsey & Company, MGI in 2019 Highlights of our research this year