

T-Mobile



Supply Chain Platform Architecture Drives Digital Transformation, Enabling the 5G of our Future

Introduction

T-Mobile's dynamic approach to the customer experience is best encapsulated by its 'un-carrier' strategy. Officially debuting in 2013, this philosophy saw the company actively seeking to 'break the rules' of industry tradition, eliminating everything that has no (or even negative) consequence to the customer, including contracts and international roaming fees. In early 2020, T-Mobile and Sprint merged to create a much-needed transformational nationwide 5G network, drive innovation in the US, and bring wireless access to people throughout the country*. The merger presented a significant challenge to its already monolithic supply chain technology and its ability to create a seamless experience across its retail landscape for both brands. T-Mobile's cultural approach to supply chain solutions and their importance in the enablement of a unique and desired customer experience is what drives their competitiveness and agility today.



At a glance

T-Mobile US, Inc. is headquartered in Bellevue, Washington and is currently ranked among the top 3 largest wireless carriers in the country with over 100 million subscribers. In the US alone the T-Mobile supply chain totals \$13B and supports over 19,000 stores.*

Spinnaker SCA was selected as T-Mobile's lead supply chain technology consulting firm for a multi-year engagement to help:

- transform their supply chain systems and processes into a digital retailer
- merge the Sprint and T-Mobile supply chain systems
- enable omnichannel capabilities

Spinnaker SCA's deep technical expertise in supply chain technology combined with its operational excellence enabled T-Mobile to transform its monolithic supply chain to a digital platform while enabling the expansion of the nation's largest 5G network.

Outcomes

- Deployed a highly automated, multi-channel distribution center solution for all US mobile device and accessory fulfillment
- Developed and modernized their 5G network supply chain
- Re-architected their reverse supply chain to:
 - optimize inventory utilization
 - enable common inventory and customer experience across Sprint and T-Mobile stores
 - enable serial number tracking in stores

The Challenge

Erik LaValle, T-Mobile's Digital Supply Chain leader and Spinnaker SCA's sponsor joined the company in early 2017 after a long-tenured career primarily in the retail sector. He was responsible for overseeing an end-to-end technology solutions portfolio across a US\$13bn supply chain of more than 8,000 stores for the flagship Magenta brand, over 11,500 stores for the Metro brand, as well as for the build-out of the network itself. LaValle and his team field the technological requirements associated with T-Mobile procurement for external sales and internal consumption. LaValle admits he was initially unsure why T-Mobile (a telco) reached out to him. "It was then that I learned T-Mobile, in addition to being a telco, really operates as a retailer for the customer experience aspect of obtaining devices and accessories. So much of the customer experience and the brand promise comes from its supply chain, and I was very intrigued." As e-commerce was growing and supply chains were being outsourced and product innovation was coming to the forefront, T-Mobile had little in the way of digital solutions. The challenge for T-Mobile was to begin to transform their supply chain technology and business processes to become more flexible and agile and be able to support the Sprint/T-Mobile merger from a customer experience perspective. This included a transformation roadmap involving order management, distribution and logistics and the enablement of omnichannel capabilities. "Buy online and pick up in-store, same-day delivery, and special delivery options are all components that are powered mostly by supply chain", says Erik.*

The Results

With its \$37 billion merger complete, T-Mobile is well-positioned for further growth and innovation and its continued digital transformation, reporting +71% revenue in Q4 2020 with over 102 million users. It's also expanding rapidly its 5G network users and coverage.** COVID has pushed forward T-Mobile's plans in this regard, including buy online/pick up in-store, contactless and curbside delivery, and same-day delivery. Customers can now have options to get their product where, when, and how they want to get it. LaValle added, "The challenge of integrating two separate supply chains into a single ecosystem has been difficult, although nothing has impeded T-Mobile's quest for a better customer experience." Spinnaker SCA has helped T-Mobile solve some of their most challenging problems by leveraging their deep industry experience. It's been transformative in changing our relationship with our business partners.**

*Source: <https://www.supplychaindigital.com/magazine/february-2021>

**Source: <https://www.bizjournals.com/kansascity/news/2021/02/09/tmobile-fourth-quarter-earnings-report.html>

The Spinnaker SCA Solution

Spinnaker SCA provided an end-to-end solution that included these five objectives along the T-Mobile transformation roadmap:\

- ✓ Design + deploy highly-automated distribution center solution
- ✓ Support T-Mobile's consolidation of all US mobile device/accessory inventory to a centralized DC
- ✓ Consolidation of all returns (devices & accessories) to one DC greatly reducing inventory shrink
- ✓ Introduction of a closed loop supply chain (E2E return tracking) to eliminate fraud
- ✓ Enable omnichannel capabilities (pick up in store, ship from store, and return in store)
- ✓ Design + optimize the 5G network supply chain

Spinnaker SCA's approach and experts provided end-to-end agile program management, solution architecture, logistics strategic advisor, and technology deployment roles.

"Spinnaker SCA has become a very trusted advisor. Using a stable of extremely experienced and pragmatic professionals, Spinnaker SCA helps us solve some of our most challenging problems by leveraging their deep industry experience."

- Erik LaValle