

# Improving Network Deployment Logistics

How Vertix Consulting Resolved a  
Major 4G/ LTE Deployment's Logistics Issues



## THE CHALLENGE

Vertex Consulting recently completed a project for one of the nation's top 4 wireless carriers. The team helped the carrier to define and manage its internal logistics processes in order to complete a national upgrade to their 4G/LTE network under an aggressive timeline. The carrier was just coming off of a deployment that faced challenges, partially because of logistics-related issues.

In an attempt to resolve these issues, the carrier engaged a third party logistics provider (3PL), one of the large international logistics operators. In evaluating the logistics process, Vertex found that 3PLs approach network deployments much like they would approach projects outside of the telecom industry, as they did not have the specialized skills to deal with a telecommunications deployment. To compound the issue, the carrier did not have the required systems and personnel to manage such a program. The network upgrade's aggressive timeline required a defined in-house logistics structure and operation in order to effectively forecast, order and conduct warehousing operations.

Vertex quickly realized that the client needed to engage a fourth party logistics provider service (4PL) to provide the systems, process controls and reporting required to be successful. The firm worked with the carrier to select and setup the 4PL vendor, which added the missing specialized skills and resources.



## THE SOLUTION

Vertex worked extensively with the 3PL to integrate the 4PL within its warehousing operations. The 4PL was brought onboard to provide systems and personnel for:

- Calculating a rolling forecast of materials required
- Creating executive, as well as detailed operational reports
- Building individual site level Bill of Material (BoMs) • Tracking materials status and location
- Reporting shortages and failure trends
- Labeling and assembling sub-systems within the 3PL's warehouse to accelerate the deployment in the field
- Assisting with optimizing the daily 3PL operations to meet aggressive deadlines

As with other cellular network deployments, each site is a complex

integrated solution, which is specific to that location. Field personnel evaluate each site, and they use the 4PL's system to select the specific materials required, creating a site level Bill of Materials (BoM). Using the BoMs across all sites, the 4PL is able to create a running forecast and compare that to current inventory and orders to highlight shortages.

The 4PL was able to bring its systems on line within weeks of starting, and was able to customize its reporting and processes to the carrier's specific requirements. For example, the 4PL was able to bring on more people to assist with the subassembly to meet surges in demand, which enabled the carrier to meet its aggressive deadlines. Once the 4PL was on boarded, we created a governance and reporting structure to evaluate performance and monitor the status of materials (e.g. ready in warehouse, in process, at site). Vertex worked with the 4PL to produce detailed daily reports covering material status, and communicated issues and timing to the field operations. Vertex presented



the weekly reports to the executive team as well as the field teams to keep everyone abreast of the overall logistics status and the materials availability. Vertix also worked with the field team to setup processes to handle out-of-box failures and returns, and to correct the points of failure once identified.

## THE RESULTS

Vertix's work with the 3PL and 4PL vendors ensured improved logistics performance, which enabled the carrier to meet its aggressive deadlines. In addition, the 4PL simplified the work required in the field and improved speed and reliability of the final construction. Through the weekly meetings, which Vertix led, and reports, which Vertix delivered, the field and executive teams were able to understand and correct outstanding issues, prioritize materials for deployment and accurately forecast new materials orders.

This same approach and use of a specialized 4PL is applicable across any complex implementation of high value materials. In the case of a wireless company, each site is customized

and there is a significant cost to the carrier if the service is disrupted. Other companies, such as a medical equipment supplier, have a similar need. If the materials are not delivered and installed exactly right, there are significant costs. In all of these cases, a 4PL may add significant value and reduce the time to deploy.





## About Vertex Consulting

We are a highly specialized consulting firm that provides pragmatic and actionable insights on the most critical issues faced by providers and consumers of telecom, media services, and technology.

At Vertex, we pursue our collective passion for helping carriers, OEMs, tower companies, MSOs, network services vendors, equipment suppliers, and telecom and technology consumers resolve their most complex strategy, sourcing, and deployment challenges. From helping a carrier deploy a 4G network to negotiating an IoT services contract for a client in the manufacturing sector, we cover the entire TMT value chain.

Our focus and simplified model enables us to deliver an alternative vision for our clients: producing client-centered solutions in a way that only experienced and proven professionals can.

**For more information on Vertex and its services portfolio please visit [www.vertexconsulting.com](http://www.vertexconsulting.com) & follow us on twitter @vertexconsult.**