



# ZTE CORP.

## Driving Change Through Measuring the Digital Supply Chain

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*Interview conducted on June 12, 2017*

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Interviewee:

**Anders Karlborg**  
Assistant Chief Executive Officer  
ZTE Corp.

In conjunction with the Center for Global Enterprise, APQC is examining how best-practice organizations measure supply chain performance amid the digital transformation. This case study examines how ZTE Corp. is working toward its ambitious goal to become one of the world's most efficient supply chains.

## ZTE CORP.

China-based ZTE Corp. is a global telecommunications manufacturer of base stations, enterprise and mobile phones, and systems for switching, optical transport, videoconferencing, power supply, and monitoring. With more than 81,000 employees, the organization sells to more than 500 telecommunications carriers worldwide, including AT&T, China Mobile Communications Corp., China Unicom, and China United Network Communications. ZTE has operations in 160 countries and reported \$14.8 billion USD in revenue in 2016 (with just more than half of that revenue generated in China). Approximately 12 percent of that revenue returns to R&D.

Assistant CEO Anders Karlborg spoke with APQC about the performance measures ZTE is using to monitor its supply chain transformation. Karlborg is focused on overseeing the supply chain and procurement.

At the beginning of 2016, ZTE set out to revamp its supply chain, from planning to custom collaboration and smart manufacturing. The organization is working to perfect its fundamental practices before digitizing the supply chain, said Karlborg. “We are now running e-commerce projects with customers and suppliers,” he said.

“We are integrating ourselves with the IT platform, our customers, and suppliers. We are working with the time-to-market for our products. We are doing smart manufacturing, automated ordering, and so many different things in this transformation project.”

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—Anders Karlborg

This work is the launching pad from which ZTE plans to digitize its complete supply chain. Ultimately, ZTE aims to increase its revenue in four years, without dramatically expanding its workforce, by developing a best-practice supply chain operation. Efforts will include: moving manufacturing closer to customers, reducing inventory by optimizing delivery, scaling back warehouses, making 60 percent to 80 percent of supply chain operations no-touch or fast track (i.e., customers and suppliers interact through a platform managed by ZTE), and shrinking lead time by 50 percent to 60 percent. Technology will be a key enabler.

## TRADITIONAL SUPPLY CHAIN MEASURES

Through a monthly dashboard and quarterly in-person reports to the executive team, ZTE's supply chain management function uses traditional measures of costs, efficiencies, customer satisfaction, process maturity, and lead time. Using 10 key performance indicators (KPIs), Karlborg reports on five primary supply chain objectives:

1. **Segmentation**—Redefine the supply chain platform to process volatility, seasonality, and different product offerings.
2. **On-time delivery**
3. **Quality improvement**—Boost the quality, efficiency, process maturity, and the consistent physical management of warehouse goods.

4. **Inventory turnover**
5. **Cost reduction**—Reduce supply chain costs both small (e.g., physical goods and shipments) and large (e.g., engineering, installation, and delivery).

As its supply chain improvement efforts take hold, the function will expand on its traditional KPIs with more refined customer-driven performance measures. The supply chain function led the enterprise in 2016 by establishing customer satisfaction measures. A third party conducts a semi-annual survey of external customers (such as AT&T and T-Mobile) and a monthly survey of internal customers (i.e., the functions the supply chain invoices), as well as benchmarks those results against domestic and international competitors. ZTE is currently focused on closing the gap with the best-practice benchmarks and then aims to be an industry leader in supply chain customer satisfaction.

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—Anders Karlborg

Overall, the supply chain function anticipates reducing the number of KPIs it tracks, possibly by half, to focus on customer satisfaction. This reflects a shift in focus from internal to external perceptions of the function regarding its five primary objectives such as on-time delivery performance and inventory turnover. “We don’t want to measure how good we are; we want to measure how good our customers think we are,” said Karlborg. “Instead of being very proud of the goods that are leaving the factory, we want to be very proud when the goods have arrived with the customers. That’s a completely different measure.”

For example, to measure *quality* with a customer focus, the supply chain function is focusing on inbound quality from its suppliers. Measures follow quality through the supply chain to delivery performance.

These measures are reinforced by process-level and global quality leaders. Also, process owners were organized in 2016 to ensure responsibility for continually driving supply chain maturity. The performance of these roles in driving improvements (broken down by key tasks such as implementing new operating procedures or processes) is measured twice a year and sometimes quarterly or monthly.

## PERFORMANCE REPORTING

ZTE’s supply chain function provides a monthly report of KPIs through a dashboard to the executive team and affected staff. This information is compiled manually from biweekly meetings of quality leaders and process owners to review performance.

At the enterprise level, ZTE’s project management office creates weekly status reports detailing progress on project milestones. Targets and status are reported electronically organization wide, with Karlborg meeting weekly with the project management office to review projects affecting the supply chain function.

Moving forward, these efforts will be integrated into a new IT platform. The supply chain function currently uses an Oracle platform for planning and a separate Oracle ERP platform. ZTE implemented an SAP global trade system (SAP GTS) in 2016. Along with “hundreds” of systems within ZTE, all supply chain systems will be integrated into a global platform within the next few years. This shift will integrate planning for engineering, manufacturing, and other core parties across regions under standardized metrics, as well as operating procedures and operational planning. With the company growing so quickly, Karlborg said this centralization will be a key component in improving supply chain operations.

## EVALUATING THE IMPACT AND CONTINUOUS IMPROVEMENT

As ZTE’s supply chain function works to close the gaps on top performance in customer-focused terms, it is challenging long-held assumptions, managing change through workshops, and ensuring supply chain staff members have the competence and experience to meet aggressive goals. These change management efforts are focused on switching from a headquarters-oriented supply chain to a customer-oriented supply chain.

Karlborg said the function has already experienced a cultural shift toward a customer-focused orientation. Supply chain professionals are working with customers to understand their needs and demands.

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—Anders Karlborg

As the organization moves forward, it will optimize its IT integration with additional supply chain efficiency efforts. For example, the supply chain function is establishing a global network so that it won’t have to ship from China to every region. Karlborg said the expanded configuration, closer to its customers, may reduce lead times from 60 to 70 days down to 15 to 20 days.

In another example, ZTE is collaborating with key suppliers to develop more strategic agreements. So far, it has established about 25 agreements with suppliers that shift the focus from short-term negotiations on price to three-year strategic collaborations. In the instance of semiconductor companies, ZTE is partnering on long-term R&D and product development. Sponsors from such partners are involved in yearly, quarterly, and monthly formal business strategic performance reviews. “We are a small company compared to some of our competitors,” said Karlborg. “When we set up a strategic partnership, we review the whole supply chain.”

These efforts are already helping ZTE to close the gap in overall supply chain performance. Within the first year, the organization has increased revenue by about 20 percent without increasing its headcount, said Karlborg. With its transformational efforts focused on customer satisfaction, ZTE expects to quickly mature its supply chain operations.

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## ABOUT APQC

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The Center for Global Enterprise (CGE) is a nonprofit, nonpartisan research institution devoted to the study of the contemporary corporation, globalization, economic trends, and their impact on society. CGE's [Digital Supply Chain Institute](#) (DSCI) is a leading-edge research Institute focused on the evolution of enterprise supply chains in the digital economy and the creation and practical application of supply chain management best practices.