



Is your network supply chain operation ready for 5G?



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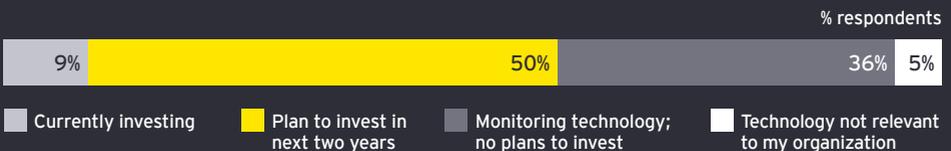
Building a better
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Capitalizing on the 5G opportunity

The legacy, number and specification of network equipment involved in any telecommunications' supply chain vary vastly between organizations. However, there lies one key common denominator for all telcos ... **there is a huge opportunity ahead of the 5G investment curve.**

EY research* finds that 1 in 10 businesses are already apportioning IT budgets toward 5G, with a further 50% of enterprises preparing to upgrade to 5G connectivity in the next two years.

Enterprise 5G spending intentions



In this report we illustrate typical warning signs of an under-performing network infrastructure supply chain and outline the opportunity for telcos to capitalize on the 5G investments.

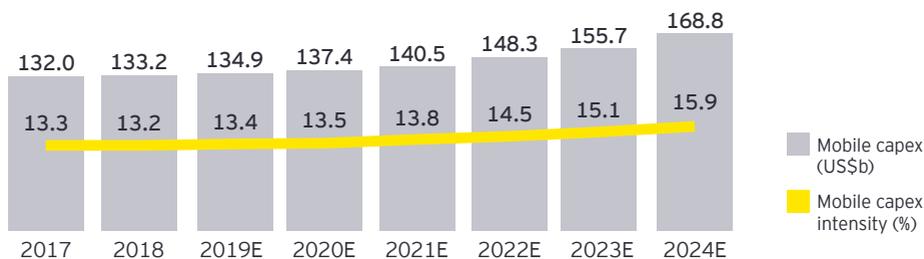
* Source: *Energizing the enterprise journey to 5G and IoT*, ey.com/uk/tmt/5g-iot-journey. Research consisted of 200 UK enterprises in the UK or with a significant UK presence, conducted in November 2018.

The 5G challenge

Containing the explosion in capital expenditure (capex)

The telecommunications data revolution has led to a surge in demand for network capacity, which is increasing with the introduction of 5G.

Global mobile capex is rising as we enter the 5G era*



of telcos state cost control and business efficiencies as strategic priorities

However, despite capital intensity rising across the sector, cost control and business efficiency tops the strategic priority list for over half of the telecommunications C-suite. It is not expected that this increase in network capacity will lead to proportional growth in revenue, meaning much greater pressure on margins.

Realizing business efficiencies

Most telco providers are taking steps to optimize their handset and consumer premise equipment (CPE) supply chains, delivering reasonable benefits back to the business. However, the network materials supply chain, which is typically much larger, valuable, complex and less visible, has often been neglected and is unable to cope with this pace of change. Tackling this ahead of 5G will not only deliver larger financial benefits for the CFO but also deliver greater speed of 5G deployment, increased flexibility, higher service levels and greater control to the wider customer-facing organization.

* Source: Telecoms capex: worldwide trends and forecasts 2017-2025, *Analysys Mason*, March 2019.

Combat the growing capex burden

Do more with less

Without a complete transformation of the network supply chain, operators will continue to struggle with the competing objectives of keeping capex investment under control and differentiating on network quality and footprint.

Employing the network supply chain as a strategic differentiator to increase asset and operational efficiency – to do more with less – will be fundamental if operators are to meet their margin challenges and remain competitive. The difference between a basic and a leading supply chain for network materials can mean as much as 20% improvement in a telco's asset efficiency and 25% working capital reduction. This is in addition to many other customer service, procurement and sustainability benefits.

20% average asset efficiency improvement resulting in moving from a basic to a leading network supply chain function*

Get control over your network material assets

Increasing visibility of where network materials have actually been deployed improves the accuracy of fixed asset valuations reported in the balance sheet. This enables firms to demonstrate compliance to Sarbanes-Oxley (SOX) and international accounting standards (IAS) such as IAS 16. Improving internal controls supports timely capitalization of equipment, with a subsequent impact on depreciation and earnings before interest and taxes (EBIT) valuations.

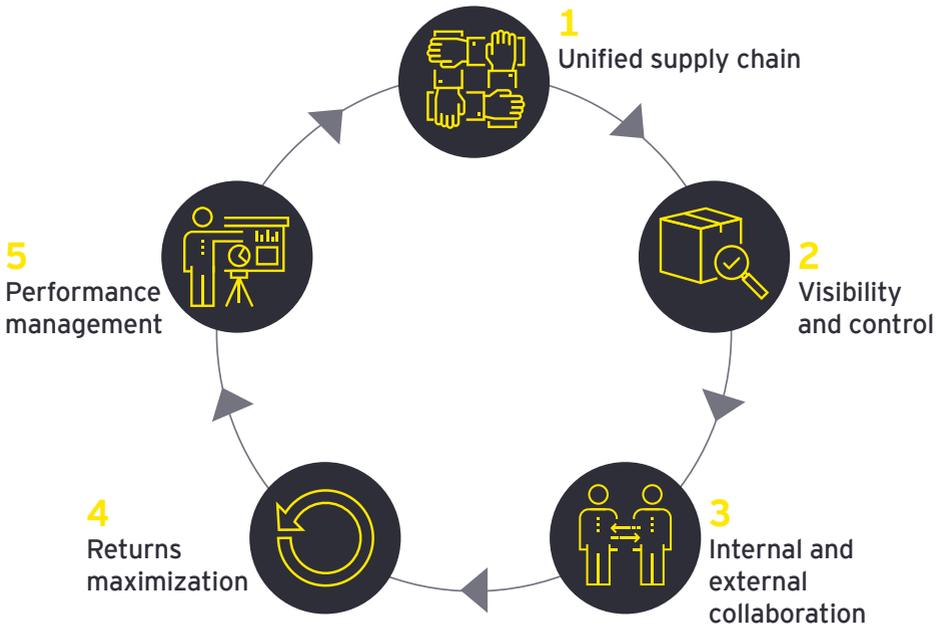
* Source: EY estimate based on experience and insights from the industry.

The warning signs

If you spot any of the following warning signs, this could indicate your network supply chain will not deliver the true value from your 5G investment:

- Lack of visibility** of how much network equipment is held within the organization, where it is located, how old it is, how much it costs to store it and whether it is finally installed into the network as upgrades or held as spares
- Unclear accountability** for who deals with excess equipment and should balance the trade-off between customer service levels and costs
- High levels of assets under construction (AuC)** held both on and off system, tying up valuable working capital and warehousing space, while also declining in market value
- Material duplication in master data** significantly weakening negotiating power while sourcing and creating unnecessary inventory and wastage
- Evidence of “squirrel stock”** held within various technical departments for “just in case” incidents that are managed via spreadsheets (at best)
- Long lead times** to get the right product to the right project, causing delays and wastage in the end-to-end build process, resulting in increased costs
- Manual intervention** in the ordering and inventory management processes, resulting in inefficiencies and manual errors
- Non-supply chain professionals** ordering, or even stocking, equipment outside of the supply chain organization
- Low level of returns** to reuse across the supply chain, with high levels of supplier trade-ins, scrapping and contractor disposal

Key levers to building a competitive advantage



1

Treat the network equipment supply chain as a strategic differentiator.

Establish a unified supply chain function that is accountable for end-to-end network materials with a clear supply chain configuration, processes and governance. This will also remove the skilled technical engineers' administrative burden of calculating, raising and tracking POs, enabling them to focus on more value-added activities.

2

Establish end-to-end visibility and control of all network inventory,

based on sound master data, deployment and maintenance processes, as the prerequisite for efficiently managing network assets and inventory. Having a unified process for the classification and recording of equipment reduces the proliferation of different material types and enables greater negotiating power for procurement and control of network assets across your suppliers' warehouses, your warehouses, sites and staging locations.

3

Collaborate across all areas of the business and implement an integrated network planning process to break functional silos and come up with a single view of requirements. Extend this collaboration to include your key suppliers and customers, moving away from transactional relationships and into a partnership. This enables lead times, inventory holding and project delays to be significantly reduced.

4

Maximize the use of returns and establish a robust return flow to enable one of the biggest opportunities for long-term savings in a network supply chain. This can also deliver quick wins by using excess unused materials either by reusing across your geographies or by speedy external sales.

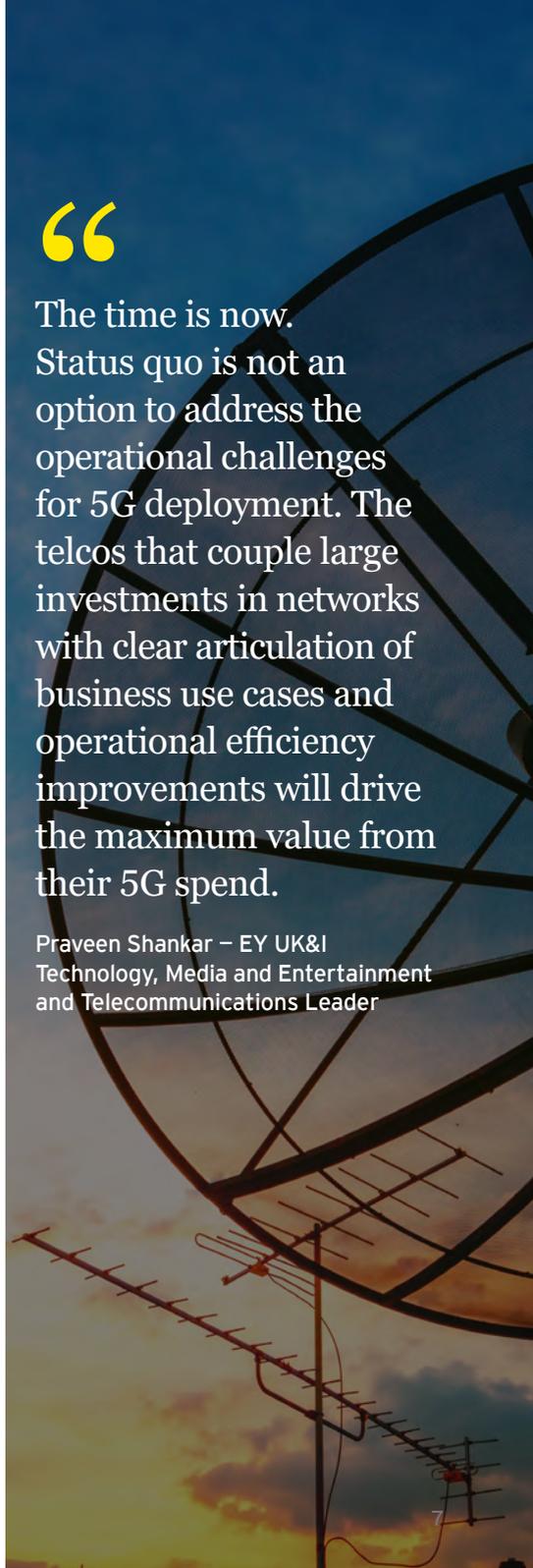
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Utilize performance management to embed change. Determine consistent deployment and maintenance objectives supported by tiered KPIs which are measurable, balanced across the ecosystem and aligned to business strategy. Continuously measure and drive improvements through rigorous governance and actions.

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The time is now. Status quo is not an option to address the operational challenges for 5G deployment. The telcos that couple large investments in networks with clear articulation of business use cases and operational efficiency improvements will drive the maximum value from their 5G spend.

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