Target 4 Key Buyer Roles to Accelerate Private 5G Success in Industrial Manufacturing

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By Analyst(s): Sylvain Fabre, Alexander Hoeppe

Initiatives:Create Tech Solutions for the Communications Industry

TSPs looking to maximize their go-to-market resource allocations for private 5G for industrial manufacturing must engage and convince several stakeholders during the sales process. This research helps TSP product leaders focus their go-to-market strategies around the key enterprise roles involved.

Overview

Key Findings

- Despite increasing adoption of private 5G in the manufacturing industry, technology and service providers (TSPs) face difficulties in identifying key influencers and their specific needs in the buying process.
- The final decision of private 5G procurement is primarily influenced by the CEO, P&L center leaders or business unit leaders, CIO, and CTO, each having distinct responsibilities and expectations.
- Security leaders play a minor role in the final decision process for private 5G in the industrial manufacturing industry, but their buy-in remains essential for project acceptance.

Recommendations

- Develop tailored engagement plans, instead of using generic materials, for key decision-making roles in the manufacturing industry to increase the success of private 5G adoption.
- Task the presales consulting teams to be experts on private 5G and the industrial manufacturing context, as well as to demonstrate understanding of the mission-critical priorities of each key role.
- Engage the security team early on to address potential cybersecurity concerns preemptively. Failure to do so may cause delays in project acceptance and revenue recognition.

Strategic Planning Assumptions

By 2025, over 10% of enterprise sites will use 5G as a primary or backup fixed-wireless-connectivity option, up from less than 1% in 2022.

By 2025, at least 40% of full-production private-mobile-network deployments in industrial manufacturing will be 5G-based, compared with less than 10% in 2022.

Analysis

Industrial Manufacturing Relies on Private 5G

Manufacturing remains the leading vertical when it comes to adopting private mobile networks, both 4G and 5G variants. [1] Gartner defines industrial manufacturing as having complex products and processes or multiple production types. Private 5G is required to support several needs specific to this vertical, including:

- High-performance and more-reliable data processing across internal business functions and with external parties
- More flexibility in factories (mobile frontline worker experience, enabling more product variants to be produced)
- Control and responsibility for highly reliable low-latency communications, required to operate critical machinery in near real time

From a networking support standpoint, manufacturing in general also requires specific solutions such as private 5G to achieve industrial-grade wireless networking, due to structural issues:

- Most manufacturing locations are far away from residential centers and areas with the best wireless coverage from the public network, which is aimed at consumers.
- Most manufacturing use cases are in buildings, within structures containing many radio obstructions (reinforced concrete, heavy machinery, bulk fuels and so on). So, outside-to-inside coverage from the public network will be suboptimal at best, and will cause a battery drain on wireless and Internet of Things (IoT) devices.

So, there is a good fit and market opportunity for providers of private 5G solutions within industrial manufacturing — but how can TSPs optimize the selling process?

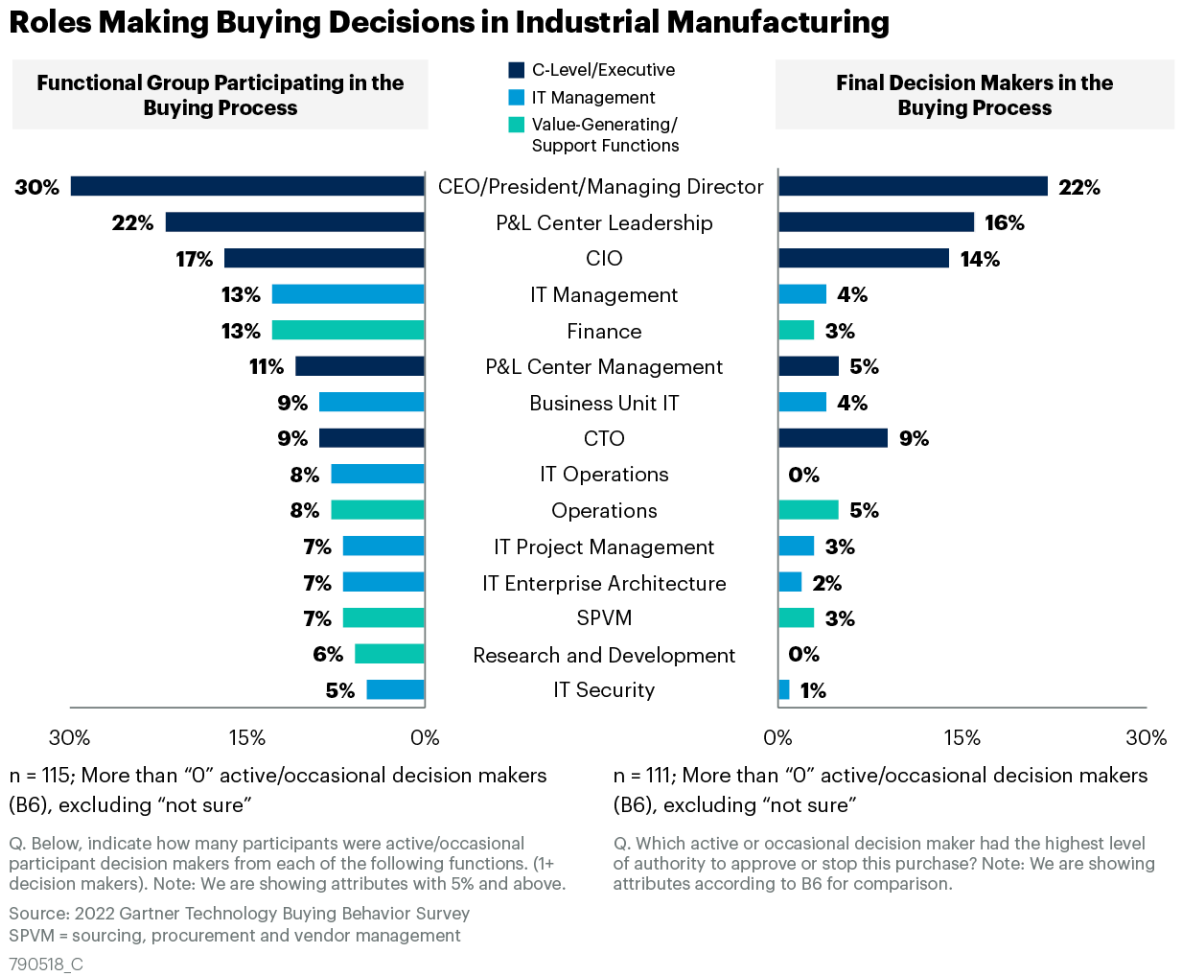
In previous research, [2] we highlighted how cross-functional teams were critical in the process of going from proofs of concept to paid deployment for private 5G. But what is the makeup of these teams, and which teams have the biggest say in the final decision to buy? Knowing this will increase win rate, as TSPs can target these key stakeholders with dedicated presales messages that tell them how private 5G will support their own mission-critical priorities.

TSPs Must Target Key Roles Involved in the Private 5G Buying Decision

Multiple roles from several functions are involved in the buying process, but with different levels of influence and engagement. When it comes to those making the final decision, the responsibility is even more irregular. Several functions are seemingly underrepresented compared with some of the key challenges involved with the future private 5G operations (for example, IT operations and IT security).

Figure 1 details who is involved in the buying decision process in industrial manufacturing for all projects, of which private 5G would be a subset (see Note 1 for details).

Figure 1: Roles Making Buying Decisions in Industrial Manufacturing



So, the private 5G presales team should focus on understanding and addressing the needs of these buyer roles:

- CEO, president or managing director
- P&L center leaders — that is, business unit leaders, such as factory managers
- CIO
- CTO

TSPs can ease purchase decision making by guiding and leading these roles through the purchase decision with prescriptive selling and a frictionless process.

In the next paragraphs, we provide some examples of targeted questions that each role will want to have answered.

The CEO, President and Managing Director Role

- Primary role: Key member of the procurement team
- Primary impact: Final purchase approval or veto

The CEO, president and managing director of an industrial manufacturing firm is responsible for the overall leadership and management of the company and its strategic direction, goals and objectives. They also oversee the day-to-day operations of the company, including the manufacturing process, sales and marketing, finance, and human resources.

The CEO is responsible for ensuring that the company is profitable and competitive. The CEO also has a responsibility to the company's employees, customers and shareholders. The CEO must make sound decisions, build relationships and motivate employees. The CEO must also adapt to change and respond to challenges.

The CEO's questions (some of which are similar in nature) may be phrased thus:

- What other leading organizations in my sector have deployed a similar private 5G solution?
- What is your track record in industrial manufacturing?
- How will private 5G address my key concerns of improving operational efficiency and productivity?
- How does private 5G support my overall modernization efforts to improve productivity and agility?
- How can private 5G promote resilience — for example, by addressing labor costs and shortage challenges?
- How will private 5G help me gain a competitive advantage?
- How will it help with flexible capacity and increased automation?

Recommendations for TSPs engaging with the CEO:

- Include metrics in addition to references and testimonials from your other clients. For example, some clients have mentioned that they realized up to a 30% improvement in production since implementing private 5G in their factories.

The P&L Center Leader (That Is, Business Unit Leader) Role

- Primary role: Key member of the procurement team, and future user of the 5G private mobile network
- Primary impact: Provides business requirements; is a decision maker

The P&L center leader (or business unit leader) is responsible for the overall performance of a business unit within an industrial manufacturing factory. This includes setting strategic goals, developing and executing business plans, managing resources, and overseeing operations.

The P&L center leader typically reports to the factory's CEO or COO. This role works closely with other senior leaders, such as the CTO, CIO and CFO, to ensure that the business unit is aligned with the factory's overall strategy.

Some of the P&L center leader's main concerns may be voiced as:

- How will this help cost optimization? Will this improve operational efficiency, increase productivity or reduce cycle time?
- How will this improve revenues as a result of the above improvements?
- How will private 5G enable mobile or flexible production and assembly workplaces in factories, allowing for more product variants being produced, using high product mix, mass customization and low lot sizes?
- How can you demonstrate increased product quality as part of the private 5G proof of concept?
- How will this enable digital twins?

Recommendations for TSPs engaging with business unit leader:

- Include sample metrics, such as implementing private-5G-enabled digital twins that could enable 10% reductions in rework and 10% reduction in scrap. [3]

- Provide examples of how private 5G improves workers' experience and widespread collaboration.

The CIO Role

- Primary role: Key member of the procurement team who will be partly responsible for the 5G private mobile network
- Primary impact: Provides functional requirements; approves parts of the proposal; is a decision maker

The CIO is responsible for the business aspects of IT, such as security, data management and IT governance. This role works with the business units to understand their needs and to develop IT solutions that support those needs. The CIO also oversees the internal IT budget and infrastructure, and ensures that IT is aligned with the company's overall business strategy.

The CIO would be interested in how private 5G could achieve the following:

- Support a flexible environment — for example, with cable reduction.
- Enable digital initiatives — for example, integration of IT, engineering technology (ET) and operational technology (OT).
- Boost security with 3GPP infrastructure.
- Clarify the managed service for private 5G, and any implications for cybersecurity — for example, when providing remote management (that is, outside of the enterprise's security perimeter).
- Improve network and infrastructure reliability and performance; real-time access to data; system and network performance; and load balancing across distributed IT, OT and ET system landscapes.

Recommendations for TSPs engaging with the CIO:

- Show how private 5G improves network and endpoint security.
- Demonstrate performance monitoring, in particular how network SLAs can be tracked by the enterprise even while the network is under an outside provider's managed service agreement.

The CTO Role

- Primary role: Key member of the procurement team who will be partly responsible for the 5G private mobile network
- Primary impact: Provides functional requirements; approves parts of the proposal; is a decision maker

The CTO is responsible for the technical aspects of the OT, including machines, robots and IoT, which detects or causes a change, through the direct monitoring or control of industrial equipment, assets, processes and events. This role works with the engineering team to design and implement new systems, as well as sets the technological strategy for the company.

The CTO's needs may be voiced as, "What are the existing and upcoming use cases being used in the industry?"

- Does it support new capabilities (such as extended reality for remote expert)?
- Does it test and support more-demanding use cases — for example, where high availability, and low latency are needed? Does it align to the right private 5G technology?
- Does it address the issues surrounding endpoints availability for Release 16 and over?
- What features are coming in which release — for example, 5G New Radio positioning enhancements (less than 1 meter) in Release 17?
- Will it leverage industrial developers' ecosystems?

Recommendations for TSPs engaging with the CTO:

- Create a timeline matching 3GPP 5G release functionality with the use cases currently in use and upcoming on the shop floor, during the presales process.
- Show how the Multi-access Edge Computing (MEC) APIs can enable valuable use cases — for example, with ETSI MEC APIs for IoT applications or augmented reality and virtual reality applications.
- Build a detailed proof of concept scope with the CTO office, building in steps to move toward a paid solution. [2]

Evidence

[1] Quick Answer: What Metrics Can TSPs Consider for Their Private Mobile Network Solution Development?

[2] Infographic: 5 Steps for Vendors to Scope and Run Successful POCs for Enterprise 5G PMNs.

[3] Could 5G Open Doors to More Digital Twins? DEVELOP3D.

[4] The **2022 Gartner Technology Buying Behavior Survey** was conducted to understand how organizations approach large-scale buying efforts for enterprise technology. The research was conducted online from November through December 2021 among 1,120 respondents in organizations with at least 20 employees and $1 million in annual revenue, and residing in either North America, Western Europe or Asia/Pacific regions. The North American countries represented in the survey were the U.S. (36%) and Canada (7%). The European countries were France (12%), Germany (13%) and the U.K. (20%), and Asia/Pacific countries were Australia (6%) and Singapore (5%). Industries surveyed included education, financial services, government, insurance, healthcare, manufacturing, natural resources and energy, media, retail, services, telecommunications, transportation, utilities, and wholesale. Respondents representing information technology organizations were excluded from the survey. Respondents were required to be at a manager level or higher, aware of large-scale buying efforts for technology occurring during the past two years, and directly involved in the evaluation or selection of products or services for technology projects. Qualifying technology purchases included new, replacement or expansion purchases of software, services, hardware, managed services or integrated solutions. At least 70% of the purchases reported by respondents had contract values of at least $250,000. Approximately 87% of expansion purchases resulted in at least a doubling of the original contract value. Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

Note 1: The Manufacturing Cut of Gartner Survey Is Shown in Figure 1

The data for Figure 1 is from the manufacturing cut of the 2022 Gartner Technology Buying Behavior Survey. [4] This cut includes:

- Aerospace and defense
- Automotive

- Healthcare equipment and supplies
- Industrial equipment, including mining, construction, agricultural machinery, and oil and gas equipment

At the same time, this cut excluded:

- Chemicals and allied products, like diversified chemicals, industrial gas and specialty chemicals
- Other, like metals (fabricated and nonfabricated) and paper

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

Infographic: 5 Steps for Vendors to Scope and Run Successful POCs for Enterprise 5G PMNs

Research Roundup: How to Build Winning Propositions in 5G Private Mobile Networks

Market Guide for 4G and 5G Private Mobile Networks

Quick Answer: What Metrics Can TSPs Consider for Their Private Mobile Network Solution Development?

3 Go-to-Market Strategies for Product Leaders in Private Mobile Networks

B2B Tech Buying Basics in Industrial Manufacturing, 2022

Enterprise 5G Opportunity Is Playing Out at a Different Pace in Different Industry Verticals

Manufacturing Industry Overview: Kick-Starter for Technology Providers, 2023

Infographic: How to Use Dynamic Personas for Asset-Intensive Manufacturers

Personas With Purpose: Five Steps to Operationalizing Buyer Personas