Infographic

Tomorrow's factories **today**

The **future** of manufacturing **runs on private wireless networks.**

Technology adoption is a significant challenge facing manufacturers today. Groundbreaking automation, artificial intelligence (AI) and Internet of Things (IoT) technologies have the potential to transform factory operations.

Private wireless networks (PWNs) offer the high bandwidth, low latency and security to run these applications with a high degree of efficiency.

Data drives success.

Tomorrow's smart factories will thrive on massive data streams requiring near-real-time decision-making, helping create a more agile, responsive and resilient production process. 5G PWNs offer tremendous bandwidth and low latency to help meet the essential interconnectivity needs of machines, robots, AI and humans.

AI can be your MVP.

When AI runs on a 5G PWN, it unlocks a range of solutions to help increase production. This can include machine health, AI-powered computer vision for quality control, autonomous mobile robots (AMRs), automated guided vehicles (AGVs), digital twins, supply chain and inventory optimization, and safety and remote assistance for workers.

5 ways private wireless networks can help boost your factory's productivity, uptime and output

Connect your moving assets.

With increased factory automation and the use of AMRs and AGVs, consistent connectivity is critical. Initial investments in robotics can lead to long-term savings from reduced labor, waste and errors.

22% ↓
of total costs saved by companies that invested at least 20% of their IT budget in automation[1]

Empower your workforce.

Access to near-real-time data by factory employees can be a real game changer. This can help improve operations, optimize workflows, strengthen coordination and improve safety across the factory.

7%–20% ↑
increase in employee productivity reported by manufacturers that implemented smart manufacturing initiatives[2]

Leverage near-real-time analytics.

Near-real-time data from production systems and IoT sensors can help enhance overall equipment effectiveness.

40%
of survey respondents ranked data analytics a top priority for investment within the next 24 months.[3]

Enact high security standards.

The increased connectivity of modern manufacturing systems, often referred to as Industry 4.0 or smart manufacturing, introduces significant cybersecurity risks. One security breach can lead to expensive recovery programs, operational disruptions and damaged reputations.

89% ↑
increase in security breaches reported by manufacturers compared to the previous year[4]

Build your crucial connectivity.

For manufacturers seeking to optimize operations with smart factory initiatives, implementing a 5G PWN can help integrate enhanced technologies that may require increased bandwidth, low latency, critical application prioritization and more.

10%–20% ↑
increase in production output reported by manufacturers that implemented smart manufacturing initiatives[5]

Ready to start building your **factory of the future?**

Discover how we can elevate your production capabilities at **verizon.com/manufacturing.**

Our solutions architects are ready to see firsthand how your business operates and collaborate on your digital transformation.

Contact your Verizon Business representative to schedule an innovation session today.

1. "Automation Scorecard 2024: Lessons Learned Can Inform Deployment of Generative AI," Bain & Company, Jun 2024. https://www.bain.com/insights/automation-scorecard-2024-lessons-learned-can-inform-deployment-of-generative-ai (cited with permission from Bain & Company)
2. "2025 Smart Manufacturing and Operations Survey: Navigating challenges to implementation," Deloitte, May 1, 2025. https://www.deloitte.com/us/en/insights/industry/manufacturing-industrial-products/2025-smart-manufacturing-survey.html
3. Ibid.
4. "2025 Data Breach Investigations Report," Verizon, Apr 21, 2025. https://www.verizon.com/business/resources/reports/2025-dbir-data-breach-investigations-report.pdf
5. "2025 Smart Manufacturing and Operations Survey: Navigating challenges to implementation," Deloitte, May 1, 2025. https://www.deloitte.com/us/en/insights/industry/manufacturing-industrial-products/2025-smart-manufacturing-survey.html

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