

A Smart Factory

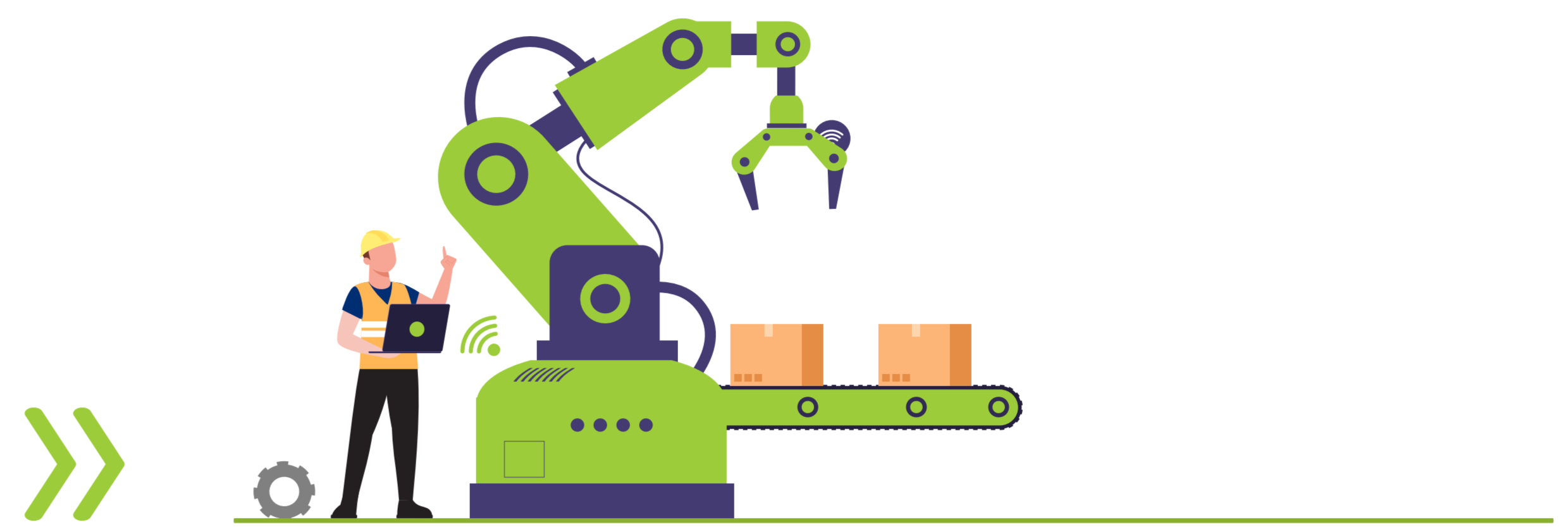
– IT is a Perspective Shift

Let us take a tour of a smart factory shop floor. This is a highly complex environment with a wide array of sensors connected to high-powered analytics engines stored in the cloud. It can assess performance, manage production schedules, maintain supplies, and coordinate all the activities on the factory floor.

A 2023 survey of manufacturers to understand their digital investments for the next decade to increase operational efficiency

Robotics and Automation - 62%

The market value for Robotic Process Automation globally stands at US\$3.2 billion in 2023 and is expected to reach US\$26.5 billion in revenue by 2033.



Data Analytics - 60%

Big Data allows manufacturers to slice and dice data that comprehensively understands the business. By 2026, the analytics market for the manufacturing sector is projected to be worth \$28.4 billion.

Internet of Things (IoT) Platform - 39%

The IIoT (Industrial Internet of Things) connects unique devices within an existing internet infrastructure for making strategic decisions using real-time data. As per industry forecast, its market size will grow from \$11.51 billion in 2023 to \$137.67 billion by 2030.

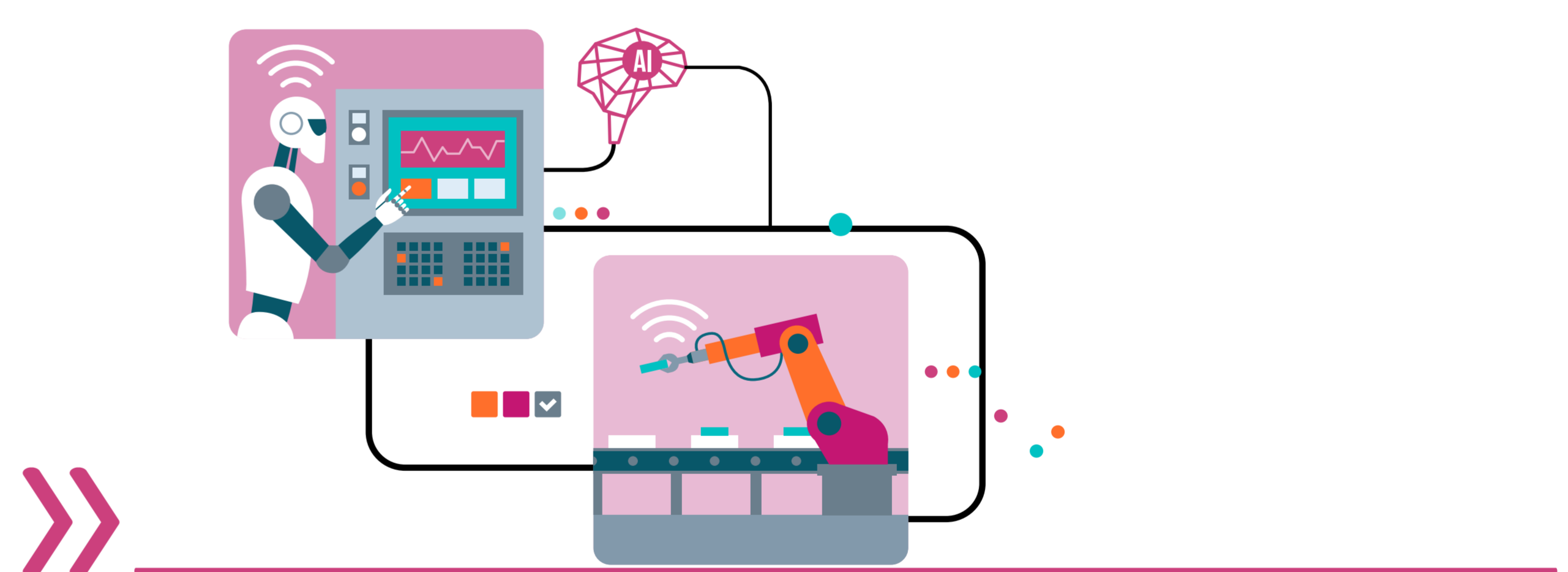


Cloud Computing - 32%

Around 62% of global companies are planning to increase their investment in cloud computing in the next five years. And investments toward Cloud-based Manufacturing Execution Software are forecast to reach US\$5.4 billion by 2031.

AI/ML/Cognitive Computing - 26%

AI and ML are highly used to combat issues in quality, supply chain, production line checks, and inventory. Almost 50% of the surveyed companies are planning to invest in AI, Internet of Things, and production automation tools.

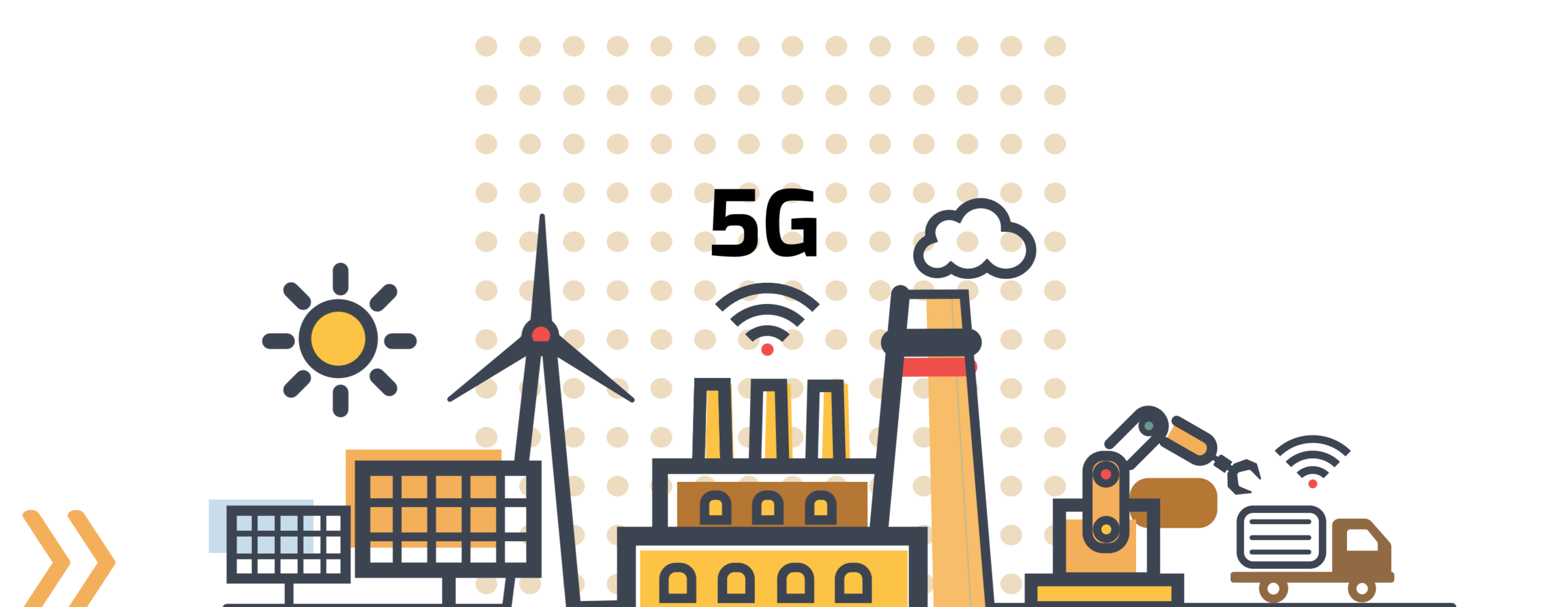


Digital Twin - 16%

A virtual replica of everything, the digital twin is useful as a testing ground for monitoring, simulating, and optimizing operational performance and as per industry experts its market size will grow from \$11.51 billion in 2023 to \$137.67 billion by 2030.

5G Connectivity - 15%

The 5G-enabled factory supports massive machine-type communications, up to a million devices per square meter, boosting productivity and bringing operational benefits. The 5G market size is projected to reach \$140.88 billion by 2030, growing at 27.5% CAGR.



Technology has the potential to provide solutions to challenges and the convergence of these trends will create real value for the manufacturing industry. For reaching its full potential, the manufacturing industry must shift its perspective and the suitable approach is IT.