

# How 5G Will Unlock New Levels Of Automation



## When Time And Accuracy Translate Into Cost Savings, The Quality Of Your Connectivity Matters.

5G will unlock new levels of automation across industries with the fast, low-latency connectivity needed to support advances like intelligent robotics in smart factories, automated inventory management in stores, and video analytics nearly anywhere.

More than just introducing new efficiencies that can boost your bottom line, 5G-enabled automation can free up your employees to focus on more strategic efforts and create a safer working environment.

## The Business Benefits Of Automation

### Processes

- Drive production levels to new heights
- Improve accuracy and reduce rework
- Minimize downtime and accelerate repairs
- Reduce power consumption, waste, and overall cost



### People

- Boost employee satisfaction
- Improve employee safety, from training to field work



## How Will 5G Do It?

### Speed and latency



5G's fast speeds and low latency are key to connecting more things and expanding process automation beyond what's possible today.

**Speed** = How fast your data moves

**Latency** = The delay in your connectivity (or "lag")

When your systems are both fast and responsive, they can **react to changes in real time**, making it possible to automate things that were impractical before.

## What Will 5G-Powered Automation Look Like?

### Industrial robots



Fast, low-latency wireless connectivity means equipment can be untethered from Ethernet cables. Industrial robots can be placed nearly anywhere in the factory to **automate visual inspections, detect defects in products or machines, or pick the right parts for assembly.**

### Automated guided vehicles



AGVs powered by 5G and AI can **drive freely around a warehouse or factory floor, transport loads, and move heavy parts** without bumping into each other—or anything else important.

### Intelligent video surveillance



Cameras nearly everywhere can **monitor the furthest boundaries of your property or campus**, processing multiple live video feeds to automatically detect threats and alert the authorities.

### Automated inventory management



AI-powered cameras placed in nearly every corner of the store can **track each item in real time**, so that sales teams know when products arrive, where they are on the floor, and when they get sold.

### Container tracking



Busy ports can **analyze live video streams to keep an eye on containers**, monitoring location, content, and status.

### Automated building management



Building managers can **automatically lock or unlock doors, adjust lighting, and optimize heating** based on what's happening in each building or room using sensors and video analytics.

## Looking Towards The Future

### Getting the most out of emerging 5G use cases



**Start with a high-performance network partner.** T-Mobile is well-positioned to enable the future of 5G with the largest and fastest 5G network in America.



**Customize your connectivity.** Private networks give you the control to configure speed, latency, capacity, and coverage to meet your needs.



**Deploy multi-access edge computing.** Further reduce latency to enable the critical IoT and responsive AI use cases that take automation to the next level.

5G: Capable device required; coverage not available in some areas. Some uses may require certain plan or feature; see T-Mobile.com. 5G use cases are still emerging and new devices being created; see details on current 5G capabilities and services. Fastest: Based on median, overall combined 5G speeds.



**T-Mobile for Business starts every project with an exploration of specific connectivity challenges, team dynamics, and business goals. It's what helps us build solutions tailored to your operations.**

**Explore 5G HQ from T-Mobile for Business to learn more about how 5G and other transformative technologies are changing the pace of innovation today.**

