Knowing the 8 currencies of 5G means you're ready.
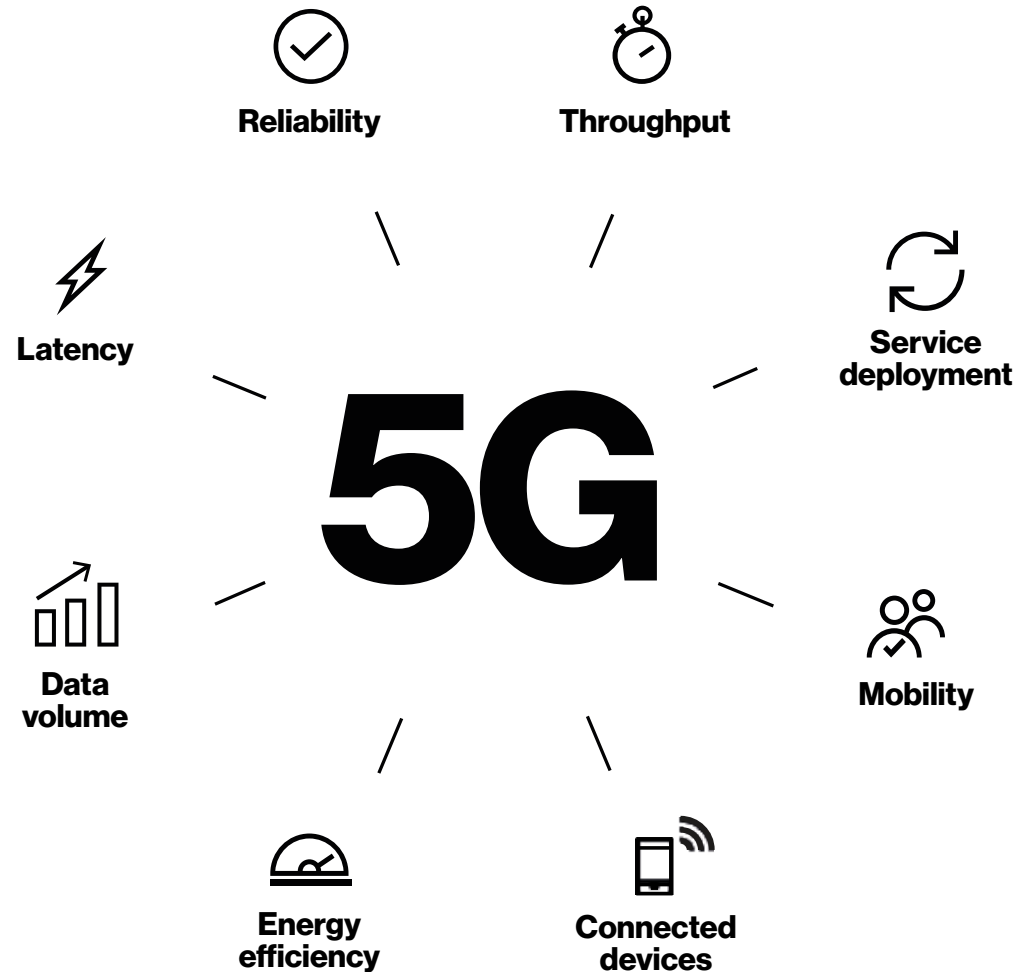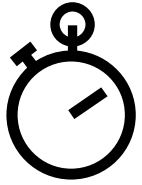
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There are eight performance attributes, or currencies, to be considered when evaluating whether a 5G network can deliver on its full potential.

With these eight currencies you have a powerful, game-changing platform for innovation. And that's what Verizon will build with you.
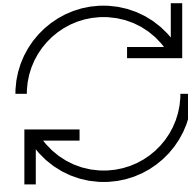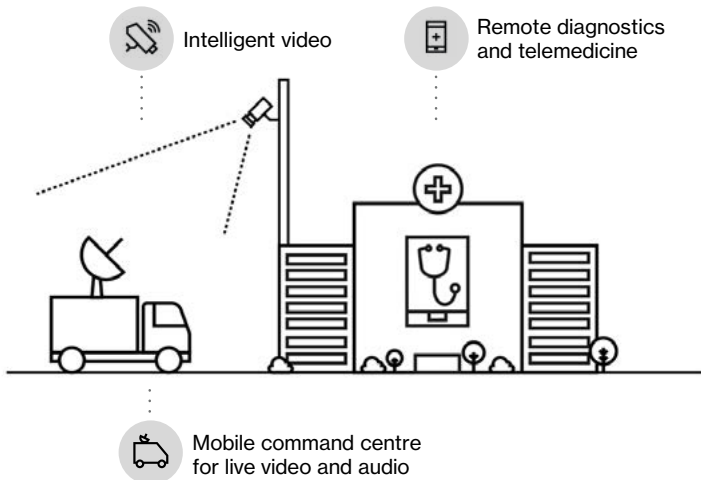
5G

- Reliability
- Throughput
- Service deployment
- Mobility
- Connected devices
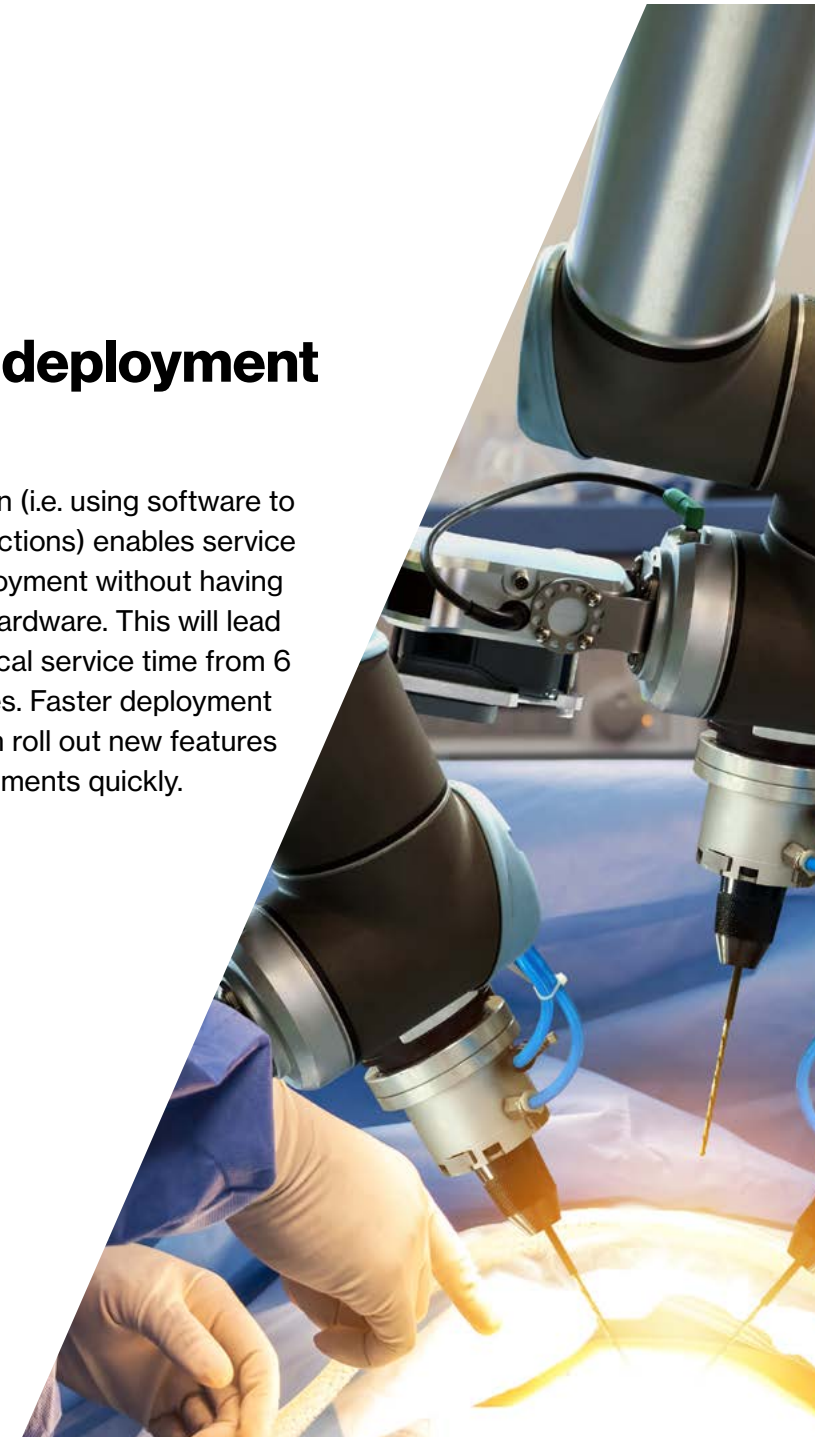- Energy efficiency
- Data volume
- Latency

1. Throughput

5G has the potential to deliver speeds many times faster than today's 4G networks, powering uses such as:

- Intelligent video

- Remote diagnostics

- Mobile command centres for live video and audio

Intelligent video

Remote diagnostics and telemedicine

Mobile command centre for live video and audio

2. Service deployment

Network virtualisation (i.e. using software to perform network functions) enables service and application deployment without having to install additional hardware. This will lead to a reduction in typical service time from 6 months to 90 minutes. Faster deployment times means you can roll out new features and security improvements quickly.

3. Mobility

5G is designed to enable devices to stay connected to your network, even when they are moving around your site.

So a 5G private network has more than enough flexibility to enable increased productivity for your business.
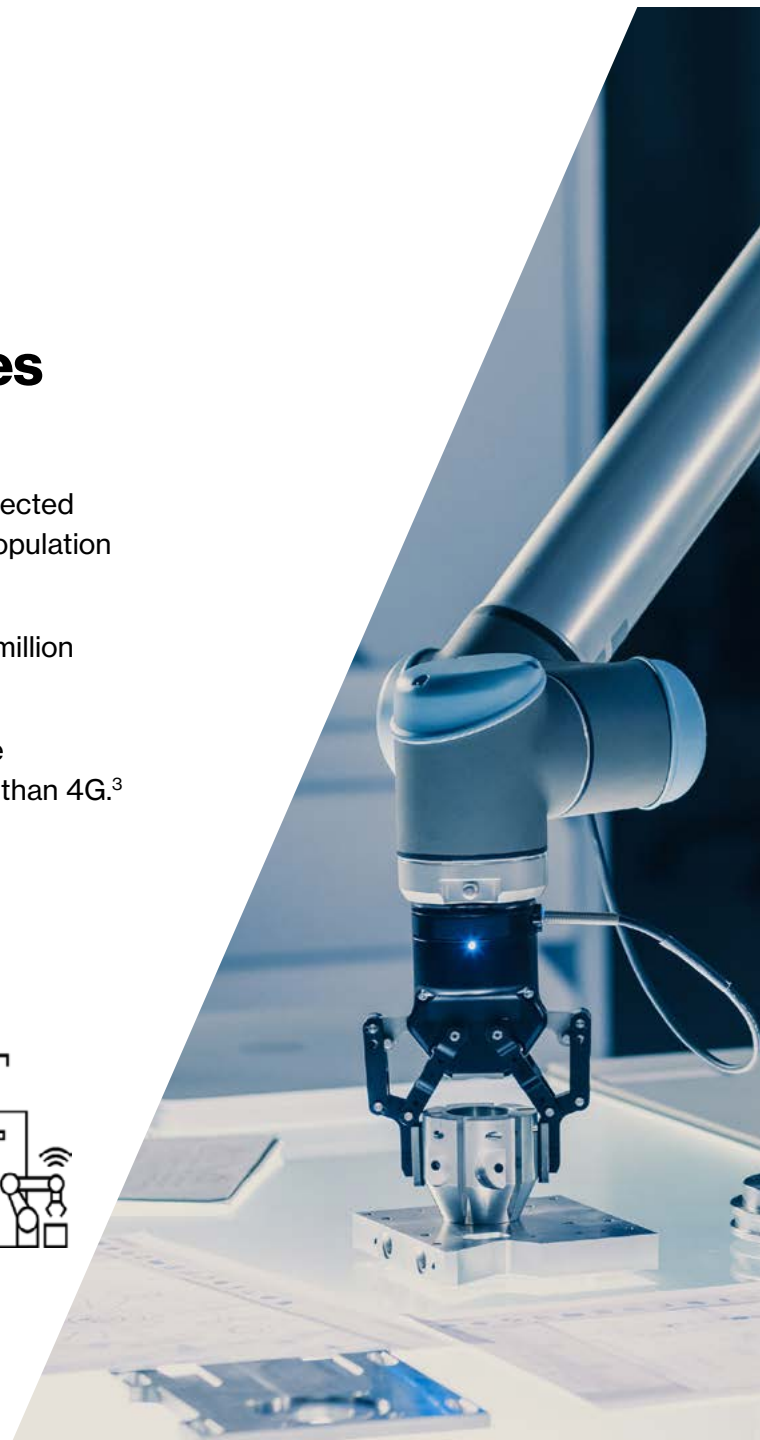
4. Connected devices

The number of connected devices is expected to be more than three times the global population by 2022.[1]

5G will be capable of supporting up to 1 million devices in a square kilometre.[2]

5G will eventually handle over 100x more connected devices per square kilometre than 4G.[3]
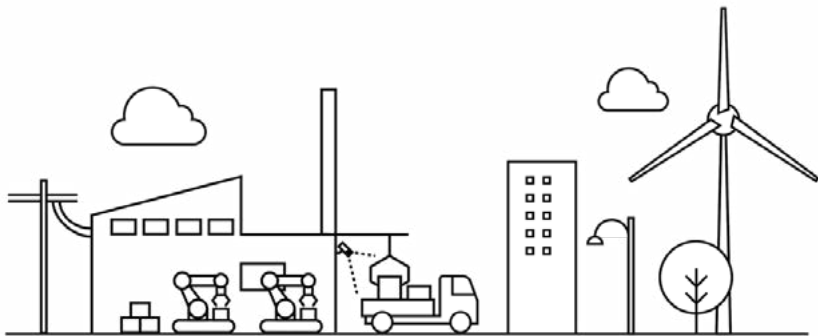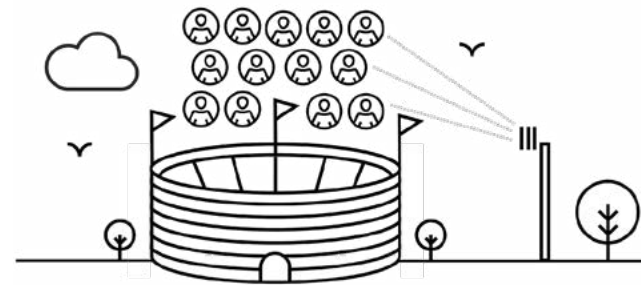
5. Energy efficiency

5G will have lower energy requirements for network operations (up to 90% less than 4G when compared per bit). With 5G, complex functions could happen within the network, near the end user.[4] That means the end user's device will not need as much processing capability and will consume less energy.

6. Data volume

The 5G standard is designed to support 10 TB/s/sq.km.[5] This means that a 5G network can carry a massive amount of data for a large number of simultaneous users. So users in high density areas – like airports and stadiums – will all experience the fast speeds and low latency of 5G service.
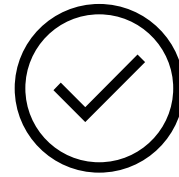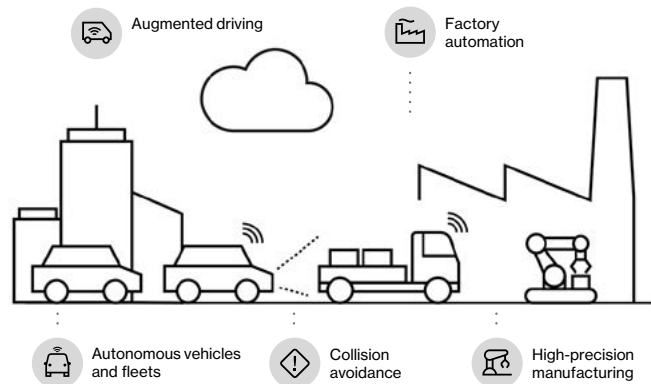
7. Latency

5G's rapid end-to-end latency (the time it takes for data to travel from the user, over the network to the central processor and back again) will be one of the drivers of true technological change, bringing data transit speed to many times less than the blink of an eye. All kinds of new applications become possible once you reach very low levels of latency, including:

- Immersive extended reality (XR), combining artificial reality (AR), virtual reality (VR) and mixed reality (MR)

- Autonomous driving

- Computer vision

- Haptics-enabled tactile internet

- Robotics

8. Reliability

It was true with 4G – and the generations that came before – and it remains a critical quality for 5G: to deliver the performance that businesses demand requires proven reliability.

"What is the general-purpose technology of this new Industrial Revolution? It's the 5G network. In an era that's all about fast, clear connections—between people and people, between people and devices, and between devices and devices— the connective network is the universal enabler, the essential platform."

— Hans Vestberg, CEO, Verizon Communications

What will 5G mean for your organisation?

We're building our network to deliver the full potential of 5G, so businesses can:

• Drive enhanced productivity

• Create new revenue streams

• Generate and harness massive amounts of data to improve operations

• Provide secure, mission-critical services

• Deliver better value to customers

• Respond more quickly to changing business dynamics

1. https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white-paper-c11-741490.html
2. https://www.samsung.com/global/business/networks/insights/news/5g-is-now-part-1-2018-the-year-of-5g/
3. https://www.raconteur.net/technology/4g-vs-5g-mobile-technology
4. https://www.verizon.com/about/our-company/5g/how-5g-will-pull-cloud-closer
5. https://5g-ppp.eu/wp-content/uploads/2015/02/5G-Vision-Brochure-v1.pdf

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