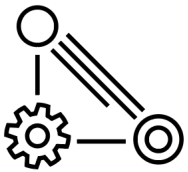
verizon business ready

5G—Fourth Industrial Revolution & Global Leadership

First Industrial Revolution

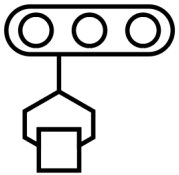
Water and steam power
Through **mechanization**, work was no longer constrained by individual's physical strength or endurance.



First mechanical loom, 1784

Second Industrial Revolution

Electrical energy / assembly line
Electricity meant work could be done almost anywhere. **Mass production** became possible.



First conveyor belt, 1870

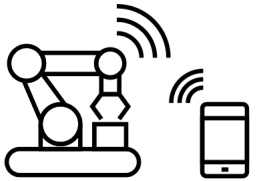
Third Industrial Revolution

Electronics and information technology
It became possible to offload mental work and **automate production**.

First programmable logic controller, 1969

Fourth Industrial Revolution

Connected Machines
Both mental and physical work with greater **autonomy**.



Innovations based on a fusion of Technologies and that are highly connected

Degree of complexity

Evolution of technology

1G

- Analog voice only

2G

- Digital voice
- Text messages

3G

- Mobile Internet

4G LTE

- Live video streaming

5G

- Industrial applications

5G Capabilities

5G Ultra Wideband

Ultrahigh speed

Responsive network

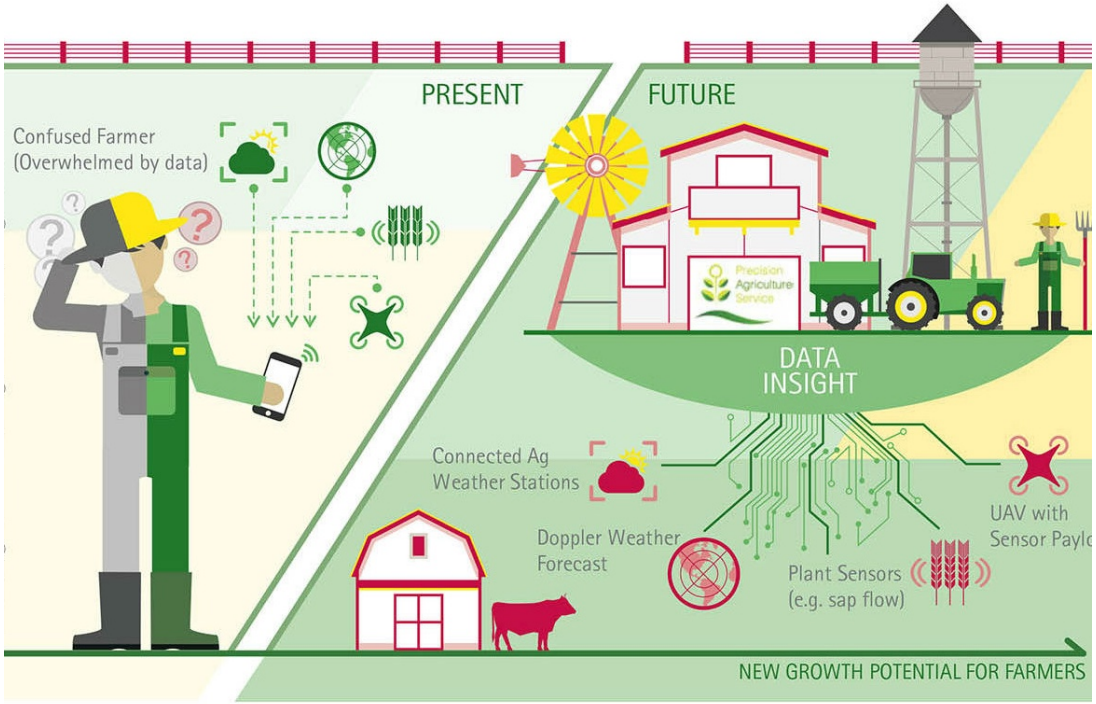
Location accuracy

Maintain device connectivity at high speeds

Billions of connected devices

Long battery life

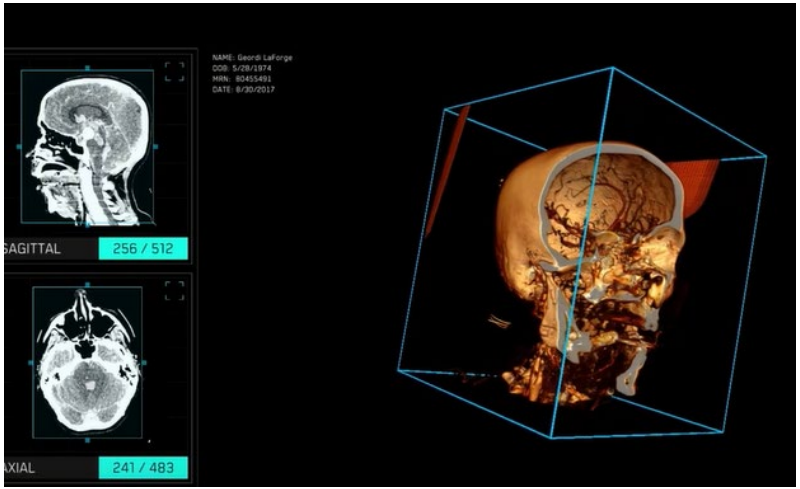
Precision Agriculture

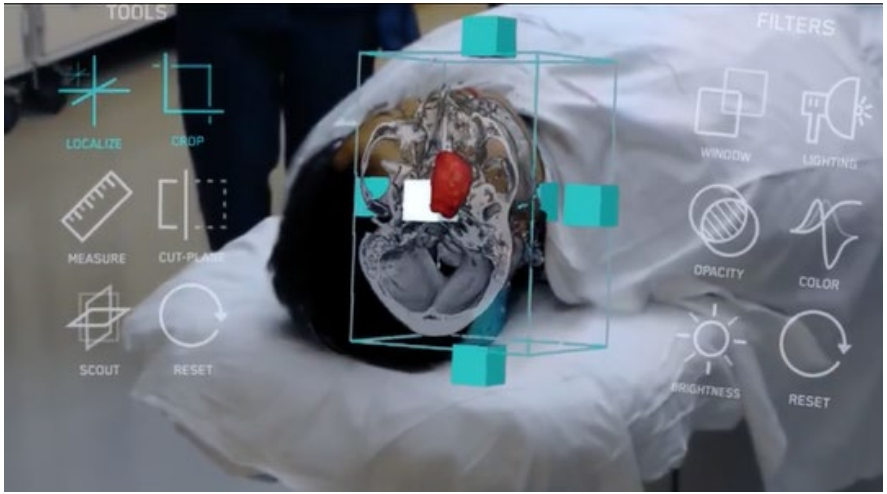


Benefits

- Efficient use of inputs – fertilizers, pesticides, water, fuel
- Improved quality and quantity of produce
- Higher yield in same amount of land
- Reduced environmental footprint
- Risk mitigation

Precision Surgery





https://www.youtube.com/watch?v=5xsg15c8sfM

5G Current Status

Millimeter-wave spectrum

Small-cell deployment

Fiber

Edge computing