Towards 6G

What's needed in terms of software technology evolution?

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Imagine a seamless reality

A safer and more sustainable world

- Massive amounts of small zero-energy sensors and actuators of various rates
- Joint communication and sensing
- Real time and very low latency
- Secure and reliable communication

A personal concierge cloud

- Security, privacy, processing in cloud
- Automatic personalization of surroundings
- Personal intent management

A more authentic communication between people

- Advancements in devices (AR glasses, contact lenses, haptics…)
- High bandwidth and cell density (when used at scale)
- Edge compute and spatial mapping

2030 scenarios

The Internet of Senses

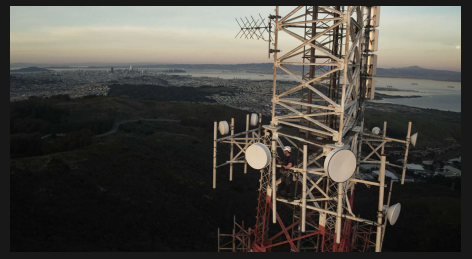
Connected intelligent machines

Connected sustainable world

Digitalized and programmable physical world

Human and society needs

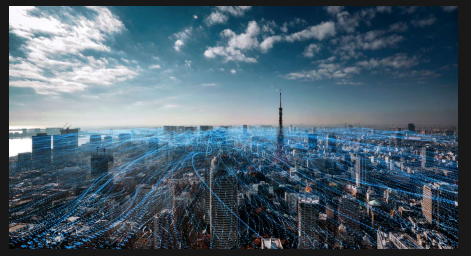
Limitless connectivity



Trustworthy systems

Cognitive network

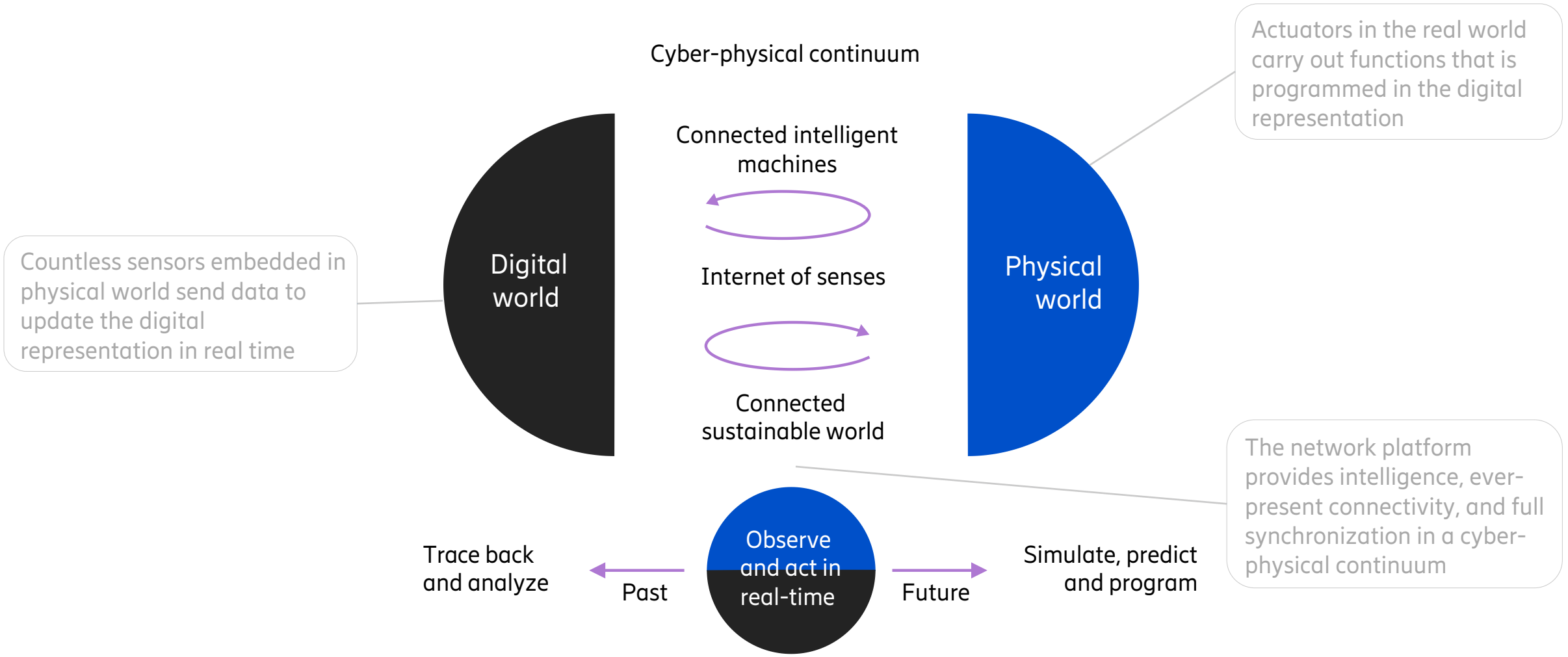
Network compute fabric



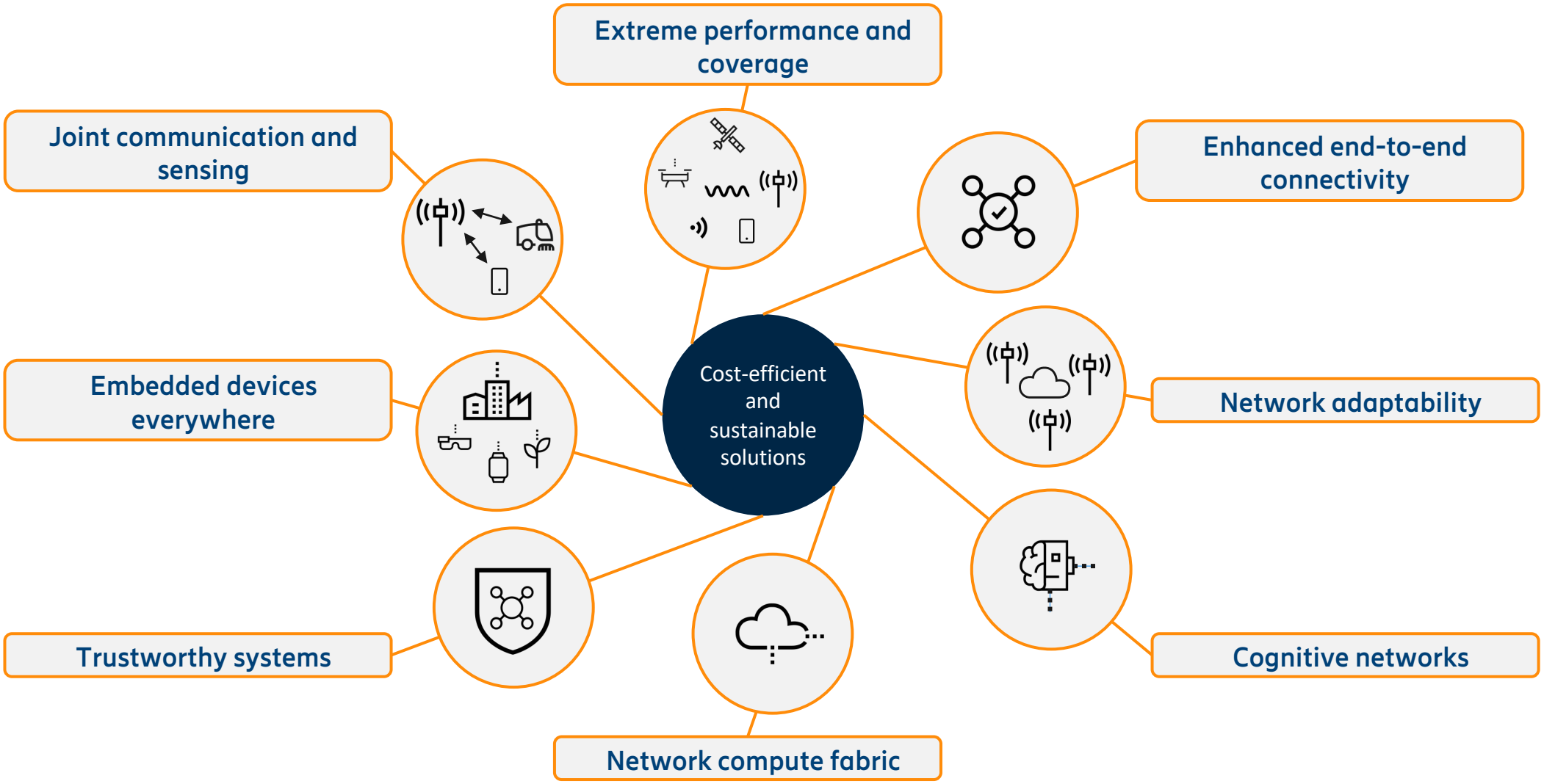
6G network platform

Fundaments of a 6G network platform

Connecting a cyber-physical world



6G technology areas



Software enablers needed

Software to support CI/CD Operations and software life-cycle

Automated DevOps and DataOps Pipelines

Software technologies to support Run-Time

Software solutions to enable AI and self learning

Software for resilient and secure end-to-end systems

Software enablers for data driven development

Heterogeneous multi-layered distributed software systems

Software tools for code Design, test design, analysis and quality assessment

Core and emerging software and compute paradigms

Tools to aid development efficiency and simplify implementation of complex software systems

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