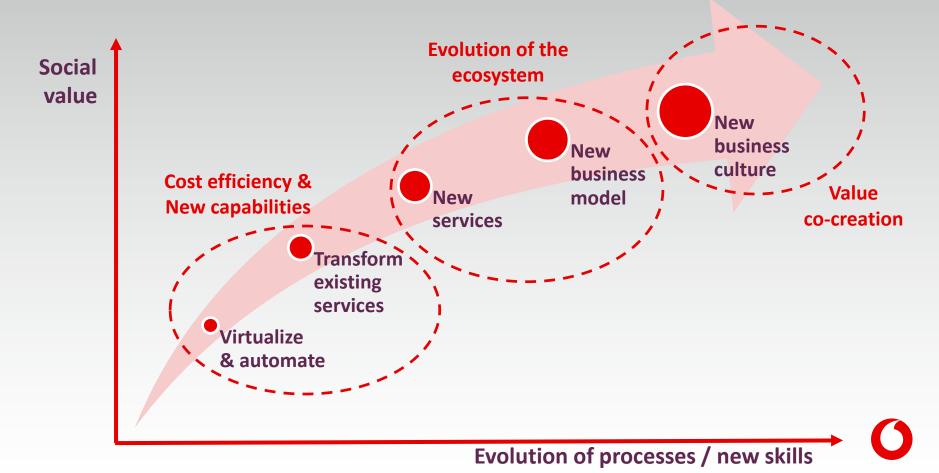


## The journey towards a transparent network that creates social value







# Reinvent



## **#5Gamechanger**

Launched 5G and Vodafone Unlimited Plans
July 3<sup>rd</sup> 2019 with a world first haptic suit
demo over 5G

Launched 5G Roaming in Germany, Italy & Spain

Announced a 5G innovation centre at Wasps Ricoh Arena

Announced world's first fan-assisted referee (FAR) system with games live-streamed over 5G

Exclusive partnership with Hatch – the world first's cloud-based mobile gaming platform built for 5G





**Making our Innovation Accessible** 

Overall purpose of Vodafone Innovation Hub





#### **Enable Start-ups Cooperation**

Work with the SMEs to enhance our digital experience



New Vodafone products and services

Create demos, pilots and services launches



5G Local & Global Awareness

% of overall 5GNews associated to Vodafone

Partnering up with the start-up ecosystem will provide us with a time-to-market advantage and to help boost our 5G development





#### **Making our Innovation Accessible**

## Health and wellbeing



**Q** use cases

Remote surgery

Connected ambulance

Remote patient monitoring

## Security and surveillance



5 use cases

Disaster recovery

Services for public security and emergency

Energy, smart grid, smart city



3 use cases

**Smart City and smart campus** 

**Smart Energy** 

Automotive and mobility



4 use cases

Cooperative urban crosstraffic

Assisted driving - platooning

Industry and manufacturing

12 use cases

Collaborative robotics for Industry 4.0

Assisted maintenance with AR and drones

Last milelogistics wt autonomous vehicles

Education, learning, entertainment



use cases

**Education 4.0 with Augmented Reality** 

Remote events with Virtual Reality

Digital divide

usecase

Fixed Wireless Access - FWA





#### The Future relies on...

**Network Sharing** 



Standardisation

Single Rural Network

Beacon |||

**Digital Operations** 



Zero touch operations & deployment

Predictive & automated solutions

Digital Squad within Networks

**Programmable Networks** 



Virtualized & software driven networks

Programmability & orchestration of resources

**Global Service Platforms** 



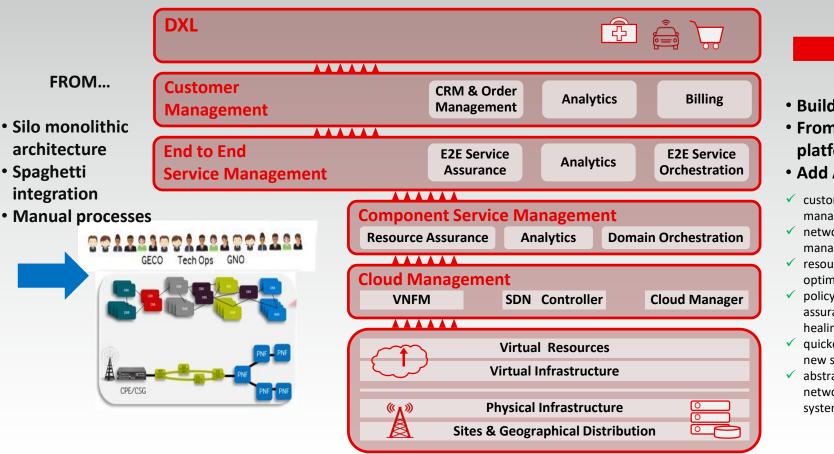
IoT

One Number

**Delivering Technology for the future** 



## Journey to a Programmable Network-as-a-Service

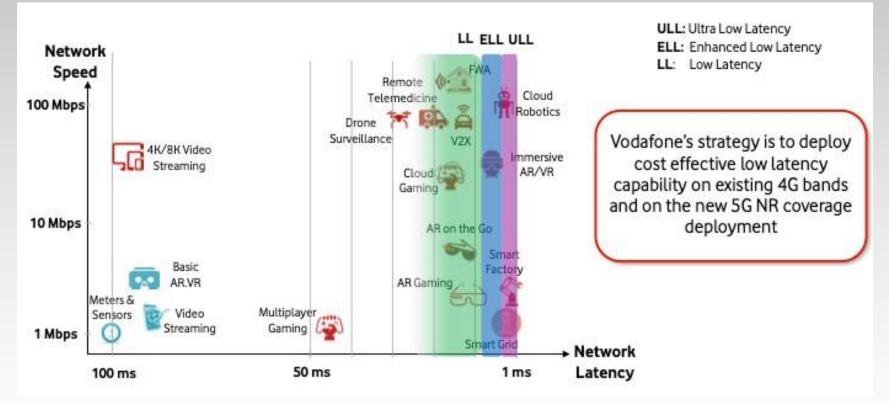




- Build NaaS
- From monolith to platform & APIs
- Add Automation:
- customer service lifecycle management
- ✓ network services lifecycle management
- resources use optimization
- policy-driven, real-time assurance and autohealing
- quicker onboarding of new services and VNFs
- ✓ abstract complexity of networks for business system consumption



### **Speed and Latency Enable New Applications**





## Why Edge Computing





Role of EDGE COMPUTING



