

# Creating the world's largest connected stadium

Together with A.S.O., we're connecting

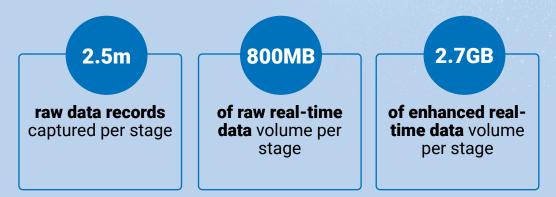
3,400km of people, operations and assets.

This is enabled through IoT, Edge Compute, Managed Network and Cloud Services, and NTT Smart Platform.

# Data at the core, enabled by cloud

The digitization of the Tour de France began in 2015 by capturing data from the cyclists.

That process has moved on considerably to digitizing the entire event, creating the world's largest connected stadium.



Creating a digital twin

The event uses a broad range of IoT sensors, integrated into a common platform and mapped against a geo-location model of the stage.

This enables:

real-time visibility of key locations and assets monitoring of crowd density or congestion COVID-19 contact tracing real time updates of caravan and race arrival times

Sensors on each rider, covering every second on the saddle, 98% of the time.

Sensors deployed to gather data across multiple facets of the race, including: VIP entrances, crowd, A.S.O. media and trucks, cyclists, weather and in-race cars.

**77.4%** of organizations are investing in the internet of things (IoT). 2020 NTT Hybrid Cloud Report

## **Services Innovation**

### AlOps -

Trialling AlOps on the Tour de France observability platform data to grow knowledge, test ideas & technologies.

### **NTT Services** Portal -

Our client portal helps demonstrate technology operations as well as event operations and rich media content delivery.

### **Edge Compute**

- Implementing containerized edge analytics at the event to support the real time provision of race data and visualization to officials traveling in the race convoy.

# **Connecting 'things', securely**

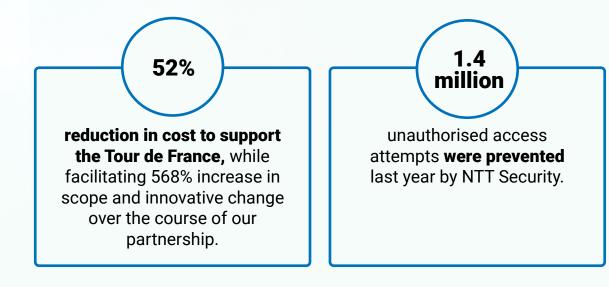
Creating a digital twin of the race connects more 'things', as well as more applications and platforms accessing services hosted in the cloud (public, private or hybrid).



NTT Managed Network Services provide a software defined network to keep everything connected.



The **Tour de France** platforms are monitored by our **Managed** Security Services.



# A holistic view

A real-time view of the Tour de France is presented air astana through an operations dashboard and event applications for people working on the event to access, no matter where they are.

53 data records e.g. gradient, weather, time gaps transmitted per second, per rider

160 million data records processed per stage

300m machine learning training data records

Visit the NTT Tour de France web page for further insights into how we're helping to create the world's largest connected stadium.

### **Together we do great things**