Believe in *greatness*

Richard Garratt, VP Data Center and Cloud

dimension data

accelerate your ambition

If an 11 year-old can.....

Accelerate your ambition

Unleash the power
of data with

Respond smarter
and faster with

Evolve your employee
experience with

Risk less, achieve
more with

Create powerful
connections with

**Digital
infrastructure**

Hybrid cloud

**Workspaces
for tomorrow**

Cybersecurity

**Customer
experience**

*Digital Business is built on Hybrid IT
Your Innovation Platform*

New research confirms the shape of *hybrid IT is shifting*

And the challenges you face are changing

Today, only **25%** of workloads are run on on-premise non-cloud. In two years' time, it will be only **20%**.

Overall, clouds account for **62%** of workloads, non-cloud for **38%**.

Over the next two years:

On-premise private cloud will grow from **18%** to **20%,**

Hosted private cloud will grow from **15%** to **17%,**

Public cloud will grow from **14%** to **15%.**

Over 1/3 of companies said automation was the most challenging aspect of cloud deployment.

accelerate your ambition

You want to accelerate your
digital business outcomes

Organisations are
hybrid already

Hybrid IT is about
services integration

You need your technology to move at the
same variable speed as your digital business

State of IT Industry 2017-2018

Dramatic improvements in technology choices over the last few years

Physical IT	Cloud Stacks	Purpose-built Clouds	Hyperscalers

Dedicated Infrastructure

- Cloud stack orchestration
- Flash storage
- Container / open support
- Hyper-converged
- Data management and big data

Clouds

- Multiple clouds
- Purpose-built clouds
- SaaS management tools
- Move to APIs to avoid lock-in
- Hosting + Cloud

Network

- Refresh data center network
- Re-locate closer to cloud
- Hybrid WAN
- High speed, low latency access
- SDN: automated real-time flexibility

Security

- Monitoring tools
- Security posture enforced across all domains
- Micro-segmentation
- Controls and policy deployments

Hybrid IT challenges we *hear from our clients*

Rising resource costs: cloud, network, and shadow IT

Increasing security and governance risks

Business continuity plans different for hybrid IT

Legacy application issues

Skills shortage

Network latency and performance issues – inconsistent user experience

Roadmap to business outcomes not clear

Vendor lock-in due to closed APIs

Does speed or cost drive your business?
The questions you need to ask to make the best choices

What limits your speed?

Network

Security

Application architecture

Ability to move new to production

Culture to adopt

Technology

Process to adopt technologies

Skills and budget

Risk management

What drives your cost?
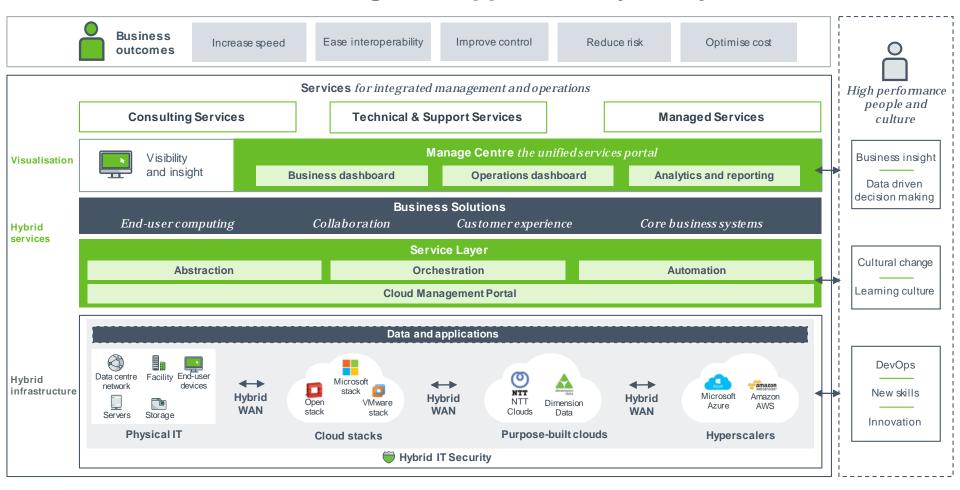
Operations efficiency

Cost shifting

What are the constraints?

Governance of data

Availability

Industry rules/ compliance

Location of users

How do you overcome these challenges to achieve business outcomes?

We can help you get
the business outcomes you need
from your hybrid IT

We take an integrated approach to your hybrid IT

Business outcomes	Increase speed	Ease interoperability	Improve control	Reduce risk	Optimise cost

High performance people and culture

Services *for integrated management and operations*

Consulting Services	Technical & Support Services	Managed Services

Visualisation

Visibility and insight

Manage Centre *the unified services portal*

Business dashboard	Operations dashboard	Analytics and reporting

Business insight
—
Data driven decision making

Hybrid services

Business Solutions

End-user computing   *Collaboration*   *Customer experience*   *Core business systems*

Service Layer

Abstraction	Orchestration	Automation

Cloud Management Portal

Cultural change
—
Learning culture

Hybrid infrastructure

Data and applications

Data centre network   Facility   End-user devices

Servers   Storage

Physical IT

Hybrid WAN

Microsoft stack

Open stack   VMware stack

Cloud stacks

Hybrid WAN

NTT Clouds   Dimension Data

Purpose-built clouds

Hybrid WAN

Microsoft Azure   Amazon AWS

Hyperscalers

🛡 **Hybrid IT Security**

DevOps
—
New skills
—
Innovation

We have a *practical, multi-speed approach to hybrid IT*

1 Get visibility and control

2 Implement strategic solutions

3 Automate and optimise

Hybrid IT outcomes

for digital business

Speed matched to business with required governance

Optimised consumption and capex

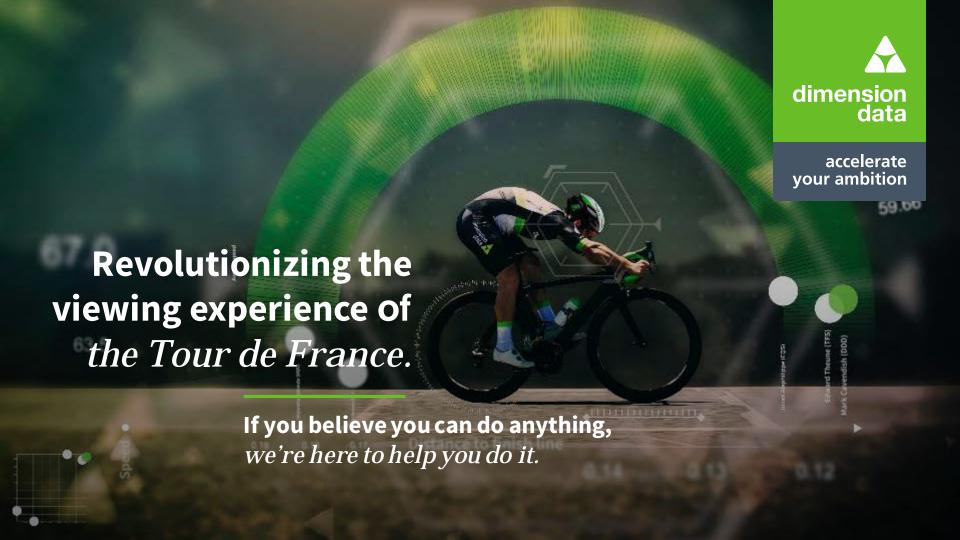*Align adoption* with digital transformation
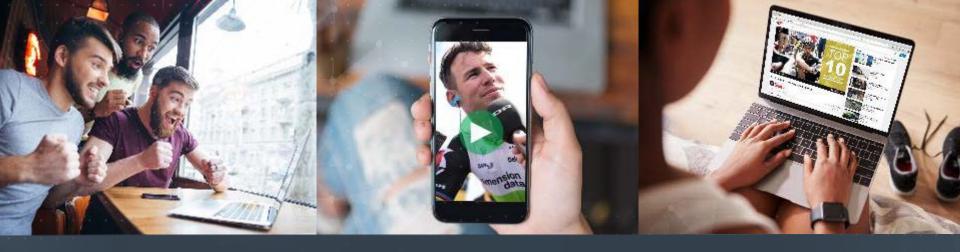
Rapid ROI on projects

Flexible environment for future

↓

Technology

↓

Application model

↓

New business model

For decades,

race organizers, rights owners, and TV networks
have had an unchallenged hold on broadcasting content.

____

Digital is changing this

dramatically.

What fans *expect today*

letourdata
@letourdata

Follow

Froome's final descent:
Average speed: 62.5km/h.
TOP SPEED: 90.9km/h!
#TDFdata #TDF2016

Froome's surge to the finish
Descent from Col de Peyresourde

Col de Peyresourde   Bagnères-de-Luchon

C. Froome (SKY)
N. Quintana (MOV)

#TDFdata

Froome (SKY) hit a top speed of

90.9km/h

gaining 13"

on the descent of
col de peyresourde (stage 8)
to claim the *Yellow Jersey*

The stories behind the
sprint finishes...

At the end of a long day in the saddle, it's all in the
strategy, power, energy, experience, and timing
to see who has what it takes.

Using data to track the impact of *weather conditions* on the race

Irrevocably

changed the way media are reporting on cycling

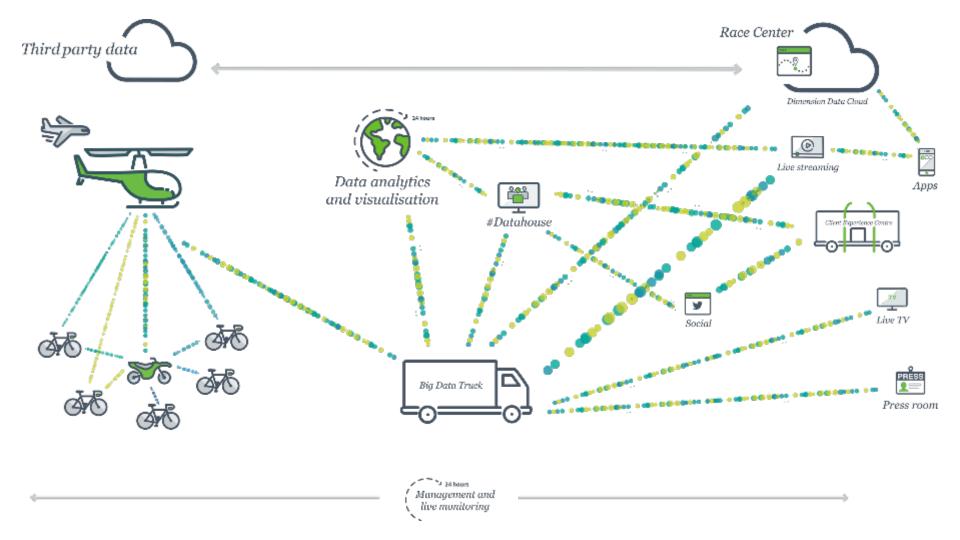**Broadcasters request** *custom data and insights* for TV and social media

Data tweets appear in **online webcasts**

Telemetry data and @letourdata tweets appear on **TV broadcasts (Eurosport)**

Internet of Things

Reaching the next generation of fans in ways that *keep them engaged*

Third party data

Race Center

Dimension Data Cloud

Data analytics
and visualisation

#Datahouse

Live streaming

Apps

Client Experience Centre

Social

Live TV

Big Data Truck

Press room

24 hours
Management and
live monitoring

Growth of audience from 2014 vs 2016 for A.S.O.

1.4 M downloads of the official app

VS

1.1M downloads in 2014

36 M unique visits in July 2016

VS

30M visits in 2014

55 M video views on 5 digital platforms

VS

6M views in 2014

6 M on social media (addition of the different platforms)

VS

3.2M fans in 2014

2.4 M fans
(+20% vs 2015)

2.6 M followers
(+60% vs 2015)

City of San Jose Pilot

Solution and Benefits

City of San Jose Quick Stats

- Single Park
- 41 Cameras
- 50 Traffic Sensors
- 180 Mbps of Data Input
- 3 Micro Datacenters

Dimension Data and NTT Solution

- IoT Consulting, Design
- Smart City Dashboard
- Enterprise Security
- Data Lake Architecture
- Micro-Services Architecture
- Cognitive Network
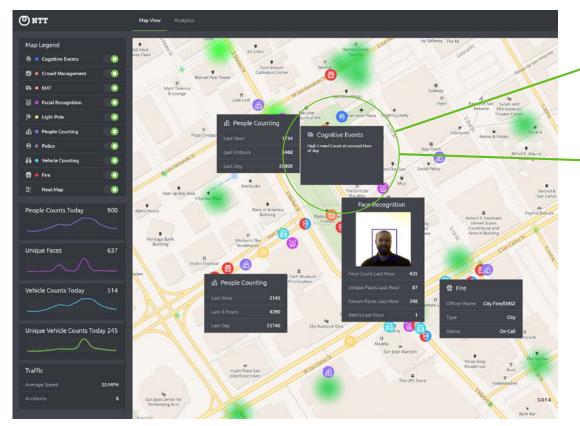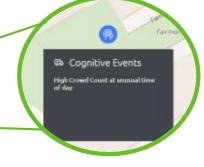- Dynamic Data Center Architecture

Business Value

- NTT Provides Cognitive Analytics (AI) for trending and prediction
- Customer addresses all the data and alerts from the Dashboard
- Services automatically optimize to solve problems

Analytics and Alerting Dashboard

The *Cognitive Engine* analyzes the data produced by solution and provides alerts and insights into the events.

Chasing Amber Alerts and Making the City Safer

The services automatically optimize to solve problems

When the city receives an Amber Alert

- The Micro Data Centers at the edge reconfigure themselves to support License Plate Recognition from all Sensors
- A report is produced to give an insight into the last time the vehicle was seen and its travel patterns
- Officials are alerted as soon as the system sees the vehicle
- Within minutes 100's of "eyes" are added to watch for this vehicle that never blink