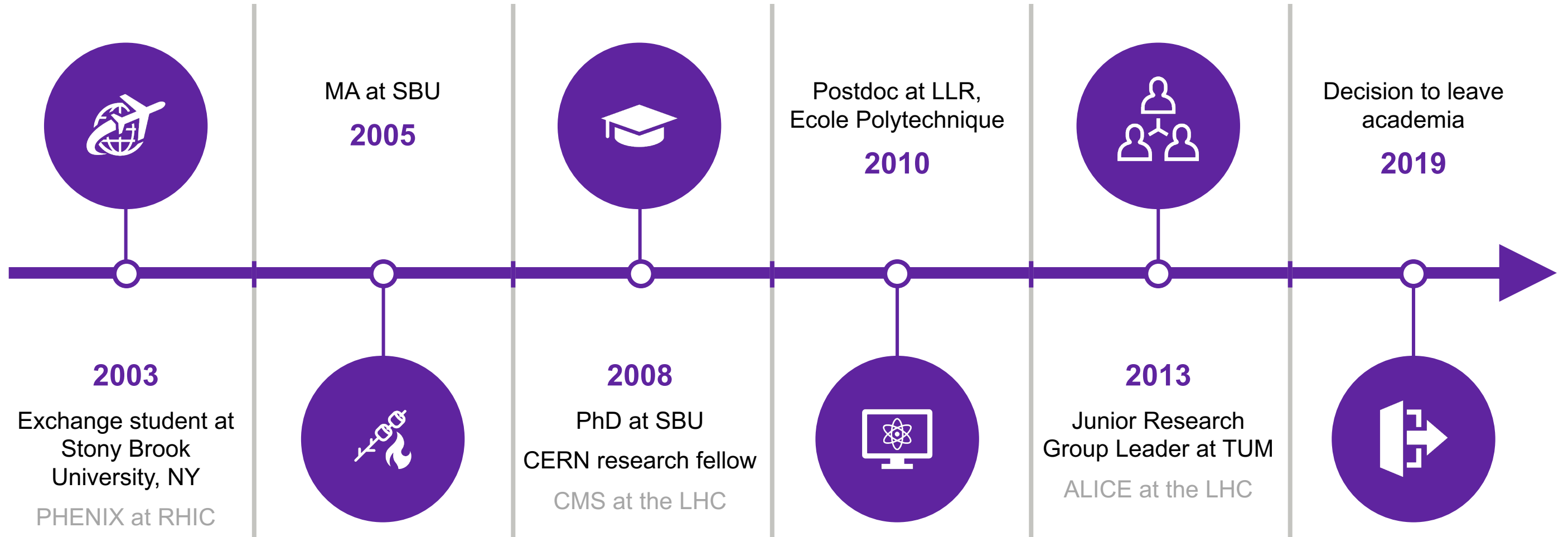


19 years in physics, and then...?

**Torsten Dahms,
Solution Architect**

My scientific career

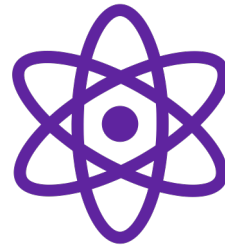


My scientific career



Was a great and exciting time full of opportunities

RHIC run 4
(first high-statistics Au-Au run)
Start-up of LHC
Feel lucky to have been part of this
Worked with great people
I've enjoyed every bit of it



Many “first” measurements

thermal photons in heavy-ion collisions
 $b \rightarrow J/\psi$ in heavy-ion collisions
 $\psi(2S)$ in heavy-ion collisions
 $Y(nS)$ in heavy-ion collisions
low-mass dileptons vs multiplicity in pp collisions

...



My career in numbers

2 colliders
3 experiments
5 PRL
23 papers
66 talks
>140 h-index

Why did it end?

Received offer for a tenure-track researcher position in 2019

Many sleepless nights later, I declined the position

Why?

- Another relocation (5th in 15 years)
- Still nothing permanent
- ...
- It just did not feel right



And then?

Started to look for jobs outside academia

No clear idea what I wanted to do

- Something with “data science”, “big data”...

Browsed LinkedIn, Xing...

- Got intimidated by the job requirements

Reached out to former colleagues who had recently left

- Personally, there was a huge uncertainty as all I knew was “academia”

Asked friends for connections to recruiters

How I found my job

Had been in contact with a friend and former colleague

Was telling me about his latest project and that they were looking for more people to hire

- They've had hired plenty of CERN physicists in the past

Arranged a phone call with his boss and project lead

- Informal chat about what I did and what they are working on

Met the team a few weeks later

- No “tech” interview, no questions to test my knowledge
- It was anyways clear, I had no idea about their tools yet

We are an IT services market leader delivering excellence for our customers and colleagues.

We use the power of technology to build better futures for our customers, colleagues, environment and communities. We help our customers deliver business impact and are an employer of choice.

#WeAreDXC

DXC at a glance

\$17.7B

FY21 revenue

200+

partner ecosystem with best-of-breed partners

240+

customers in the Fortune 500

60+

years of innovation delivering mission-critical systems for customers

130,000+

employees worldwide

#152

in the 2021 Fortune 500

100

earned top score:
2021 Disability Equality Index

70+

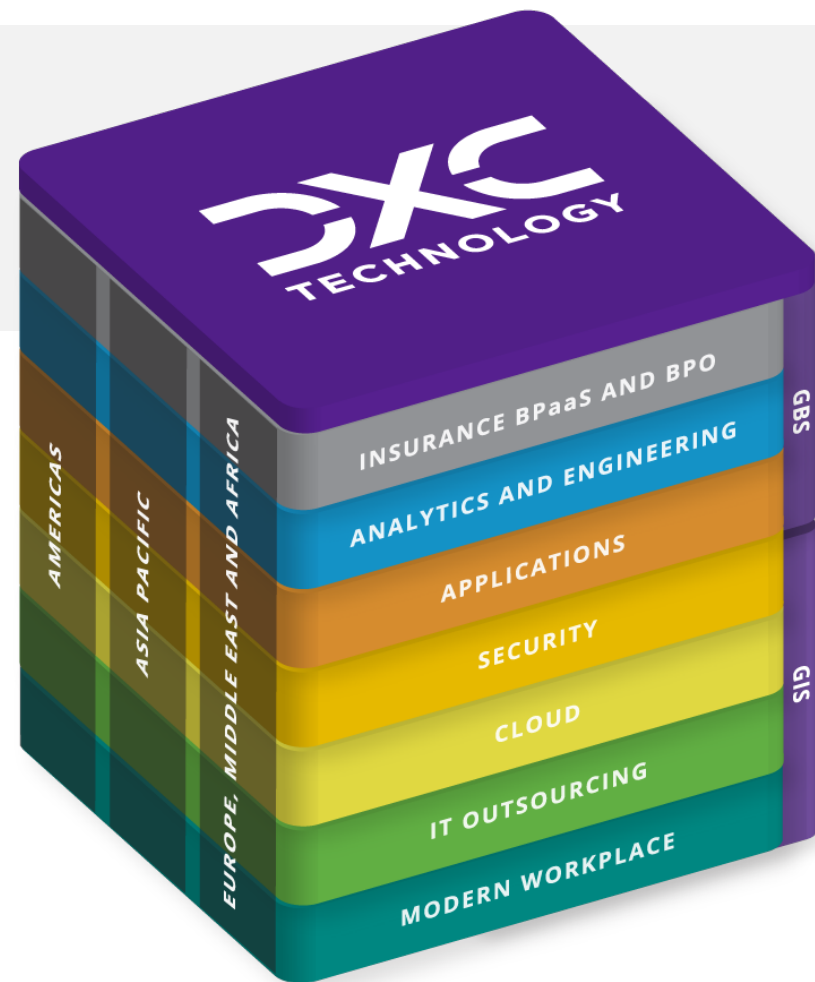
countries

65,000

workloads migrated to the cloud every year

Realize new benefits and opportunities

Transform your business with the Enterprise Technology Stack



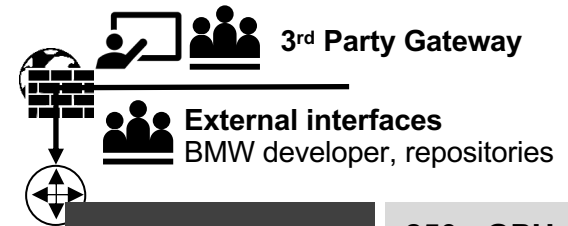
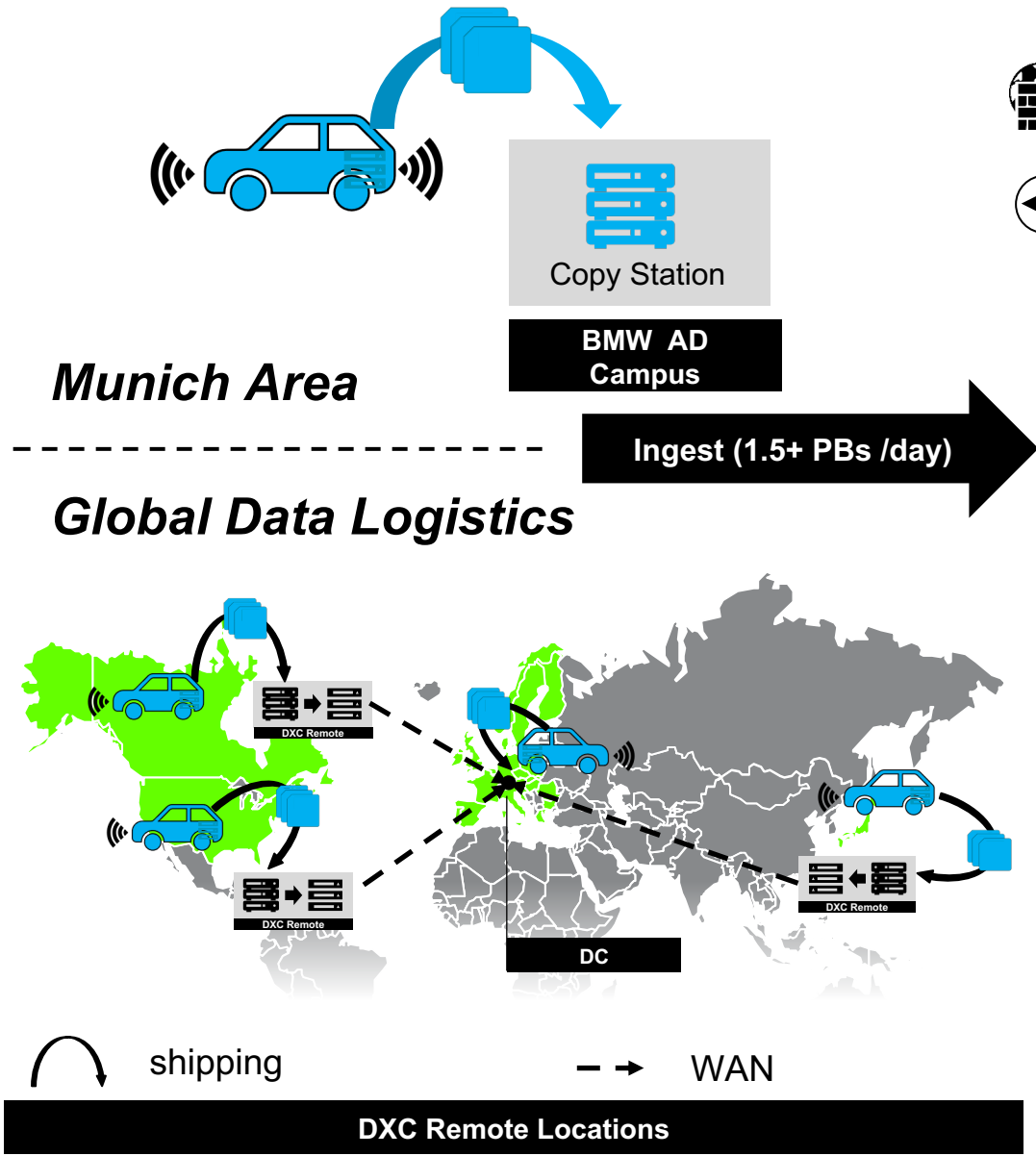
DXC Technology delivers the IT services our customers need to modernize operations and drive innovation across their entire IT estate.

- We help customers create a rich workplace experience, simplify and optimize on-premises IT, and achieve a secure, high-performance cloud environment to realize positive business outcomes.
- Our services weave cyber resilience throughout the enterprise, help customers reimagine business with transformative applications, and enable data-driven decisions, automation and state-of-the-art engineering.
- DXC business process outsourcing helps customers transform operations to a digital business model.

GBS: Global Business Services
GIS: Global Infrastructure Services

D3 Platform

- Converged AD Platform** hosting distributed data storage, processing, computation on **MapR Hadoop based Data Lake**
- Volumes** – Abstraction layer between user and data – Data life cycle, capacity management, high levels of **data locality**
- Simplified built-in **Security Concepts** – Authentication, Authorization, Encryption, Auditing, multi tenancy – **Erasure Coding/Replication** on volume level
- Kubernetes, Docker** based fully automated data (and) computation platform – **NoOps** model – Simplified cluster configuration and management



Gateway Zone

250+ GPUs | 90+k cores

Red Hat Innovation Awards 2020

*Closed Loop
Open Loop
Deep Learning
CI / CD*

Containerized Computing Platform

Self Service container orchestration

Kubeflow TensorFlow jupyter ANSIBLE RED HAT OPENSIFT NVIDIA

MAPR SuperConverged Big Data Platform

Data Locality Zone

200+ PiB usable Storage | 30+k cores

Data Density Storage Zone

Spark elasticsearch APACHE DRILL HIVE Apache Zeppelin Apache Airflow redhat Hewlett Packard Enterprise AT&T

On-Premise Managed Infrastructure in DC

Applications Development Teams

Expert Service Desk

HiL Stations

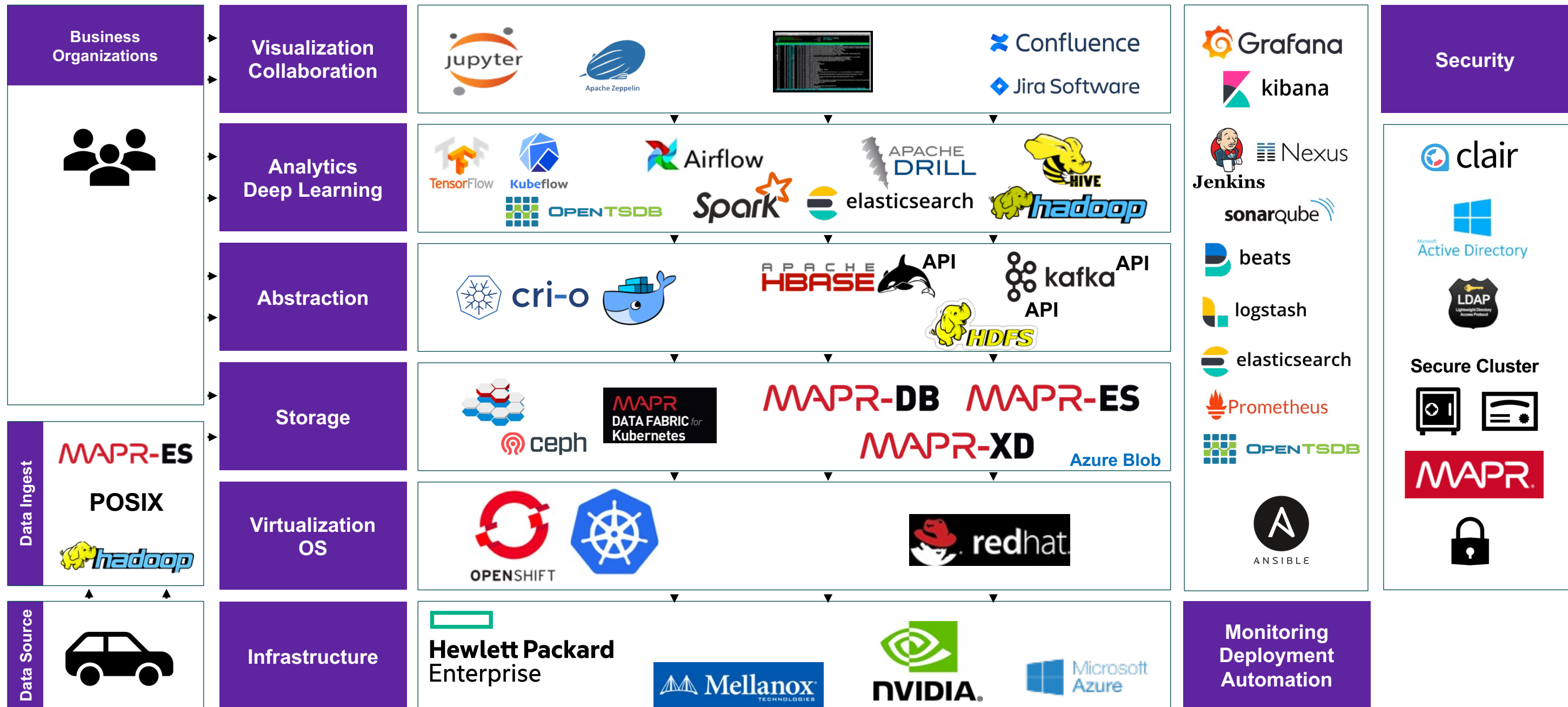
BMW Campus

Cloud Backup

Cloud

PBs / day

Technology Stack



What I do at DXC

Solution Architect, Delivery Analytics

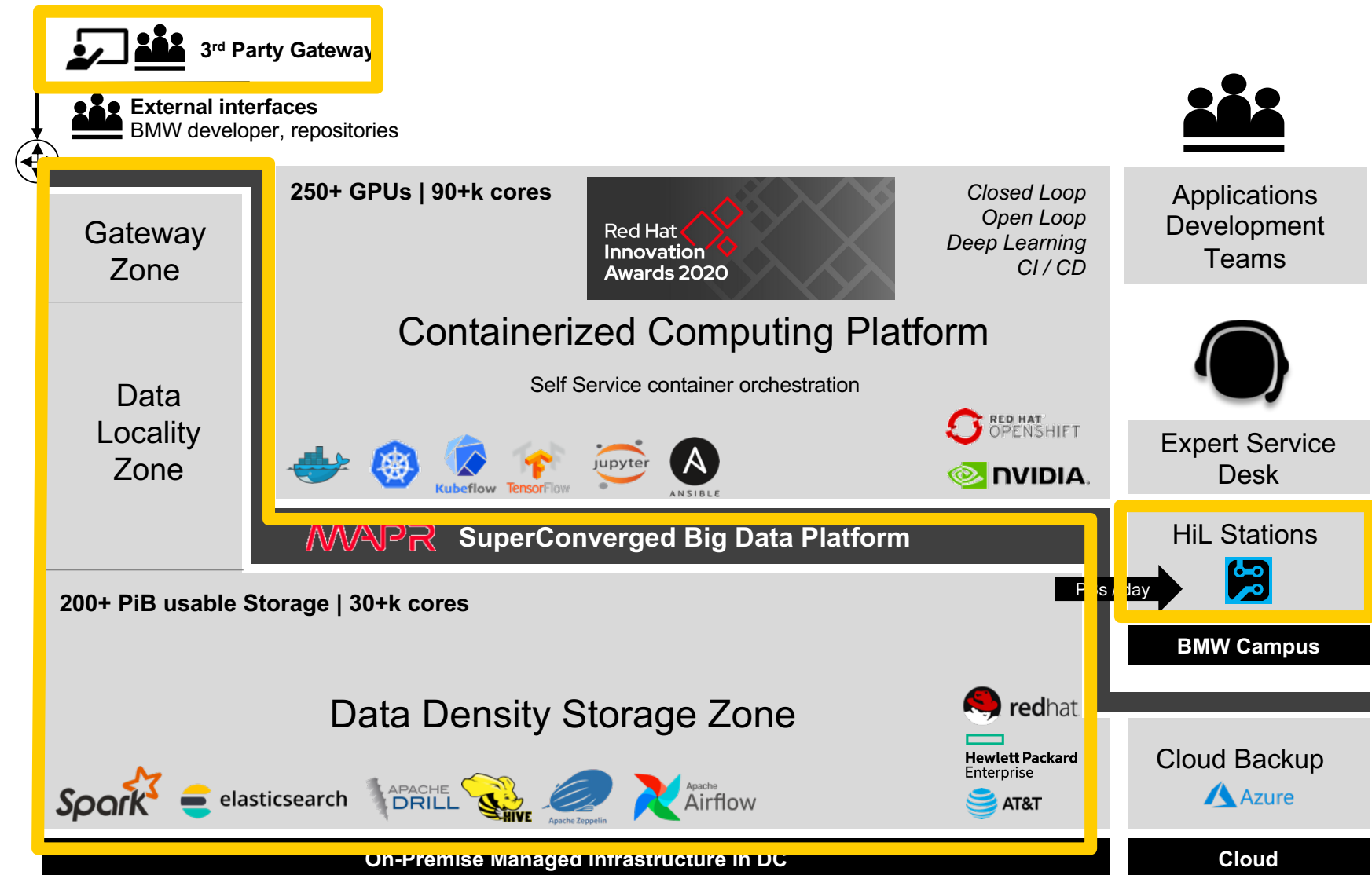
Lead architect of the D3 data platform

Responsible architect for

- Contact for sensor suppliers
- CI/CD toolchain
- Partner Gateway service
- Identity and Access Management

Part time involved in other projects

- Proof of concept for cloud-based SDP (automotive)
- Technical stream lead for cloud-based SDP for global automotive OEM
- HPC project bid, ...



Daily work

Meetings, meetings, meetings...

- It's easy to fill your day with 24h of calls

Customer communication

All aspects of platform operations

- Automation, documentation...
- Customer incident handling
- Team management
- Upgrade planning
- Design and develop new solutions to meet customer requirements

Learning new tools (hard but important to make time for it)

Staying up to date on latest developments in the area of big data, cloud computing

Similarities & Differences with academia

Similar

Working in an international (global) environment

Working in diverse teams

Agile work environment (depends on customer)

- i.e. you do not know the result when you start

Present your results in talks and documents

Explain your results to audience with varying expertise

Meet deadlines

Flexible work hours

Many meetings are virtual (already pre-Covid)

Exposed to new problems every day

Different

Everything you do has a financial impact

- No time/money for “hyperfine-tuning”
- Overtime gets compensated/accounted for
- Detailed (human) resource planning

6 months probation vs 5 years tenure track

Faster visible impact

What makes HEP physicists interesting for DXC

Analytic skills

Used to analyse big data samples

Deal with complex problems

Ability to work independently

IT experience



Get in touch

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<https://dxc.technology/>

Questions and answers

