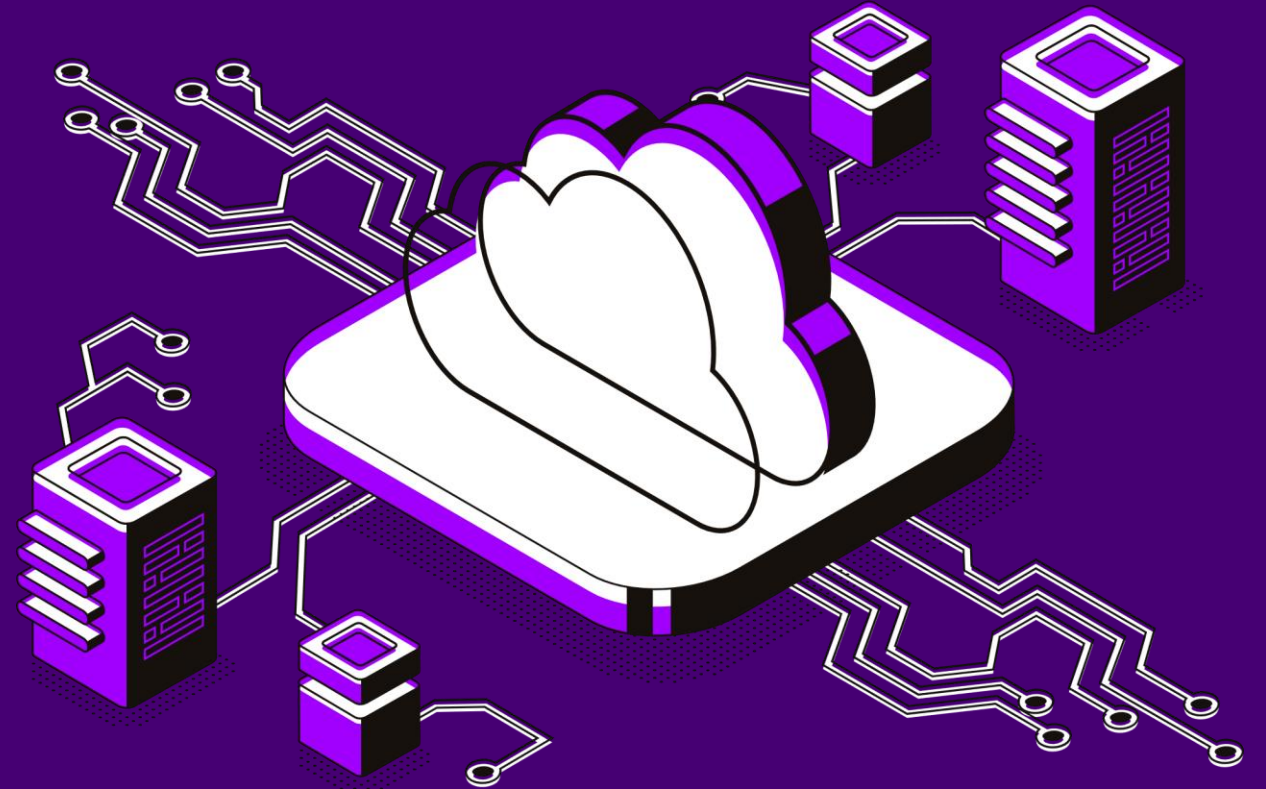accenture

ACCENTURE
5G on the Edge

Teemu Nordman
Cloud First – Intelligent Edge

Typical challenges on IoT solution which can be solved by 5G and Edge computing

Many companies are already using IoT and have huge amount of data collected from multiple sources on the field, but companies have failed on realizing the data value

It's not trivial to provide data access to every employee, so that the data is easily accessible from one location and can be used on everyday work and decision making

The working environment can be scattered and combination of old and new. Scaling traditional IoT solutions can be challenging, and many companies get stuck on point solutions failing to realize the value of scale

Companies struggle to find the right deployment pattern that allow adaptive solution topologies, end-to-end management in global scale, and easy device onboarding without deep technical expertise

Innovations that used to be exclusively in the public cloud can now be found in multiple locations — that span from public to edge — and everything in between.
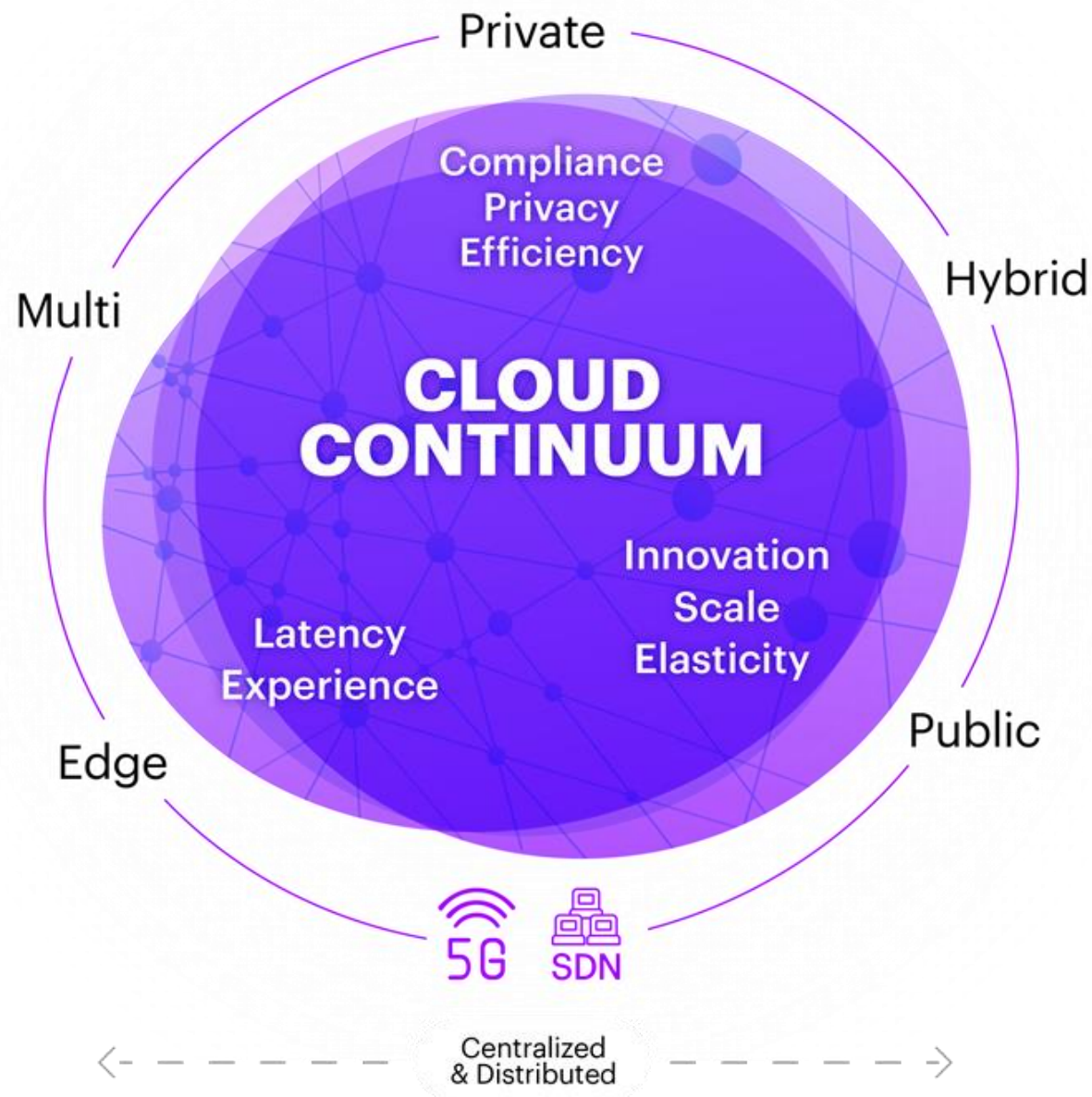
Edge, where 5G, Cloud and Enterprises meet

The application of Edge computing has expanded far more than IoT and will create new insights, decision and experiences, enabled by the cloud backbone across various industries

Intelligent machines & real-time productivity	Optimized close to consumption	Experience with extended reality	Privacy & security by default	Always on and untethered
Process data incredibly fast to enable robots and sensors to make split second decisions and perform tasks smarter, **faster and safer**	Digital production-consumption will be optimized for highest experience and **lowest cost**	Digital twins, healthcare, workforce, entertainment enabled thru **rich experiences**	Improve reliability and **protect privacy** by processing sensitive data on the Edge	Decision making and processing **independent of connectivity** for mission critical and remote applications

Opportunity Areas

Intelligent machines & real-time productivity	Optimized close to consumption	Experience with extended reality	Privacy & security by default	Always on and untethered
1. Loss Prevention 2. Smart Signage 3. Assembly Line Quality Assurance	1. Content Delivery 2. Healthcare imaging or DNA sequencing 3. Offshore Oil Well	1. Smart Health 2. Mixed Reality Gaming 3. Intelligent Workforce	1. Wearable Devices 2. Ethical and Trusted Customer Analytics 3. Regulated Data	1. Point of Sale 2. Autonomous Operations 3. 24/7 mission critical services

All ecosystem players acknowledge the need for industry edge solutions, but the approach to get there is different
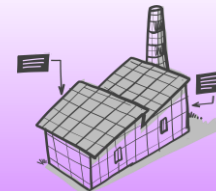
Use cases

Retail buying experience	Autonomous vehicles	Smart health	Ethical & trusted customer analytics	Smart factory	Asset tracking	Worker safety solutions

Accenture Edge Industry Solutions

Industrial Systems

Hybrid cloud infra solutions getting extended to the edge to realize vertical use cases

Hewlett Packard Enterprise   CISCO   EQUINIX   SIEMENS

Platform

MAAGs are building cloud-out to the edge extending their platform models which developers are already familiar with

Microsoft Azure   aws

Connectivity

CSPs are building 5G with edge infrastructure

Telia   telenor   elisa   TELE2

Helsinki edge innovation lab – showcase for vertical use cases

Accenture is setting up a 5G Edge innovation lab to demonstrate and innovate Edge use cases together with the partners and customers.

Lab will consist of two separate Edge environments, a **far-edge solution** which is located to Accenture lab and a **carrier edge solution** which is located to telecom operator data center. Both are connected to public cloud platform where the applications can be remotely deployed, monitored and configured.

Each customer have different requirements and understanding these requirements is a pre-requisite to build the best possible solution for the specific customer. Accenture Edge lab provides an easy and flexible environment to demonstrate the solution on the different Edge locations from far-edge to public clod and anything between.