Edge computing market overview

Information from STL Partners

Edge Computing Practice

STL PARTNERS

STL Partners helps our clients innovate, grow, and stay ahead of existing and new competition in a digital world

Research

Consulting

Events

STL has built a centre of excellence around edge computing and been advising businesses on this for over 4 years

Unrivalled expertise and experience…

Supported 5 major telecoms operators to develop a commercial strategy for edge computing

"STL brings edge expertise. They understand that landscape across telco and other ecosystems."

Head of Commercial & Partnering - Global MNO

"We worked closely with STL in true partnership to deliver high quality, actionable insights that were not available elsewhere."

Head of Cloud Edge - European MNO

"The consulting team produced high-quality output that could be repurposed in a wide variety of ways."

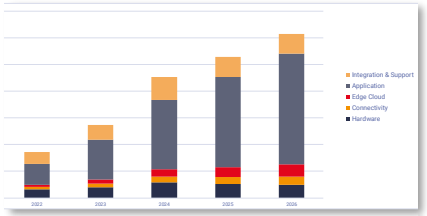
Product Manager - global software company

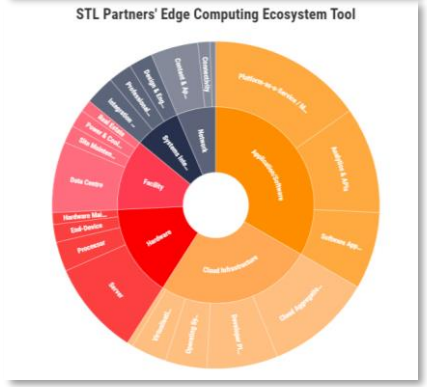
Advised global telco on hyperscaler partnership negotiation worth €0.5M

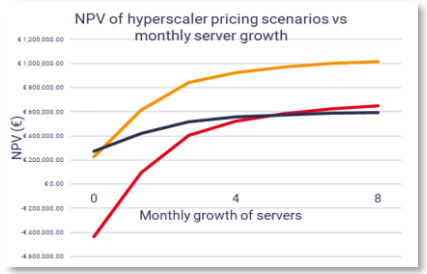
Interviews with over 100 enterprises and solution providers across different industries

Team of experts: leading industry analysts and consultants, IoT practitioners & cloud specialists

…and an industry-leading edge knowledge centre







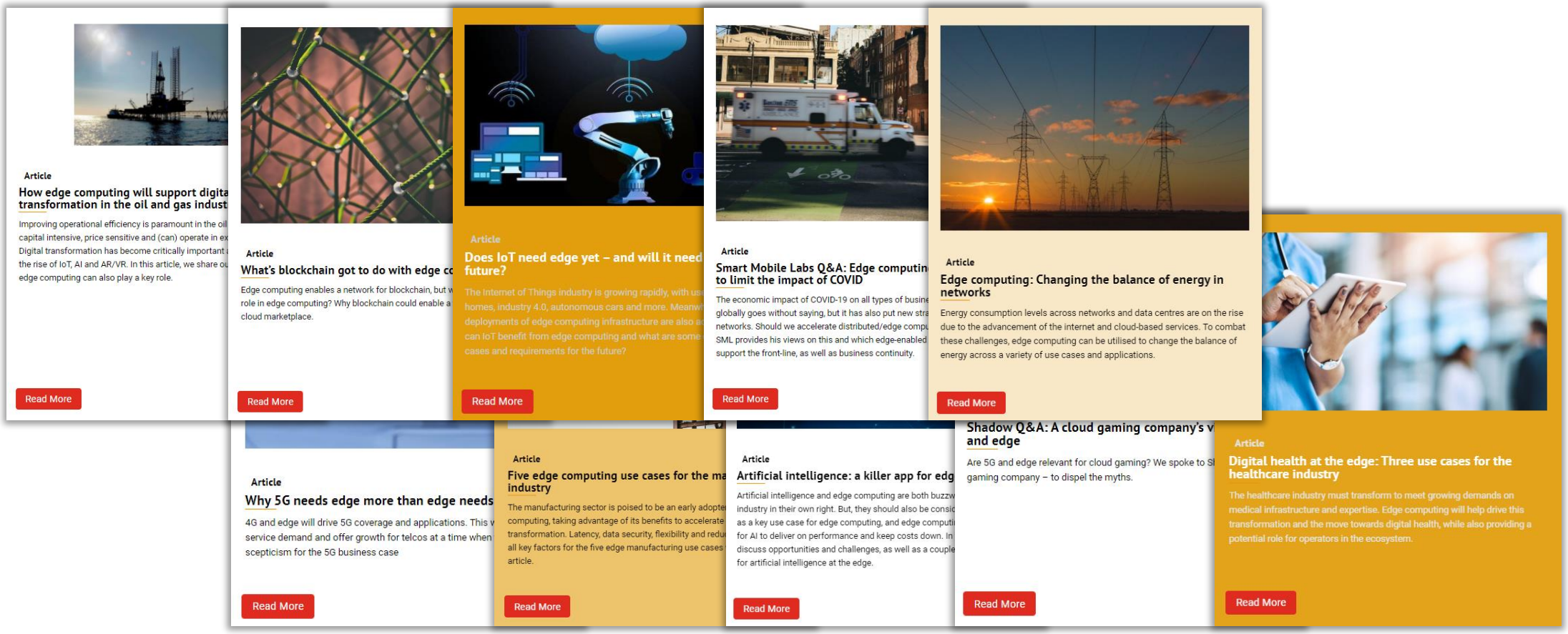
Database of 50+ use cases for MEC, private networks edge and on-premises edge

Interactive model for forecasting the edge computing market

Ecosystem tool mapping 200+ vendors across the edge value chain

MEC site ROI model & hyperscaler negotiation tool

Our edge hub provides a central source of insight for the industry

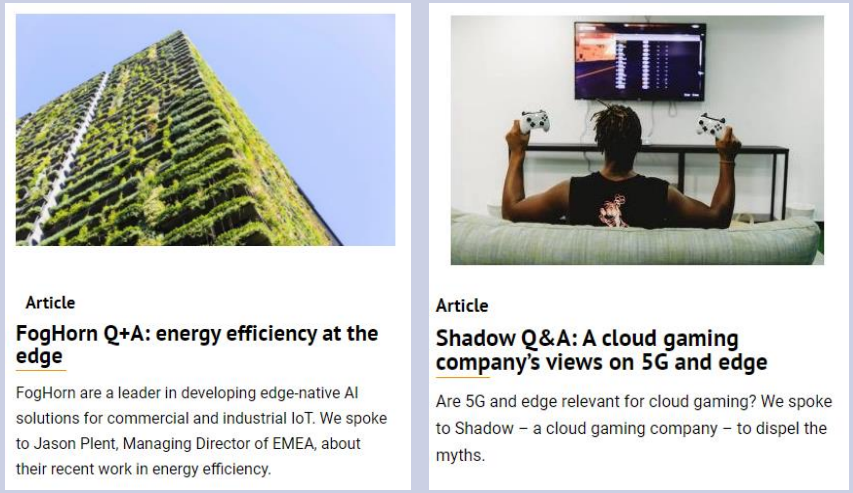


STL Partners Edge hub is read by those looking for edge-related articles, reports, webinars and case studies

STL Partners Edge hub

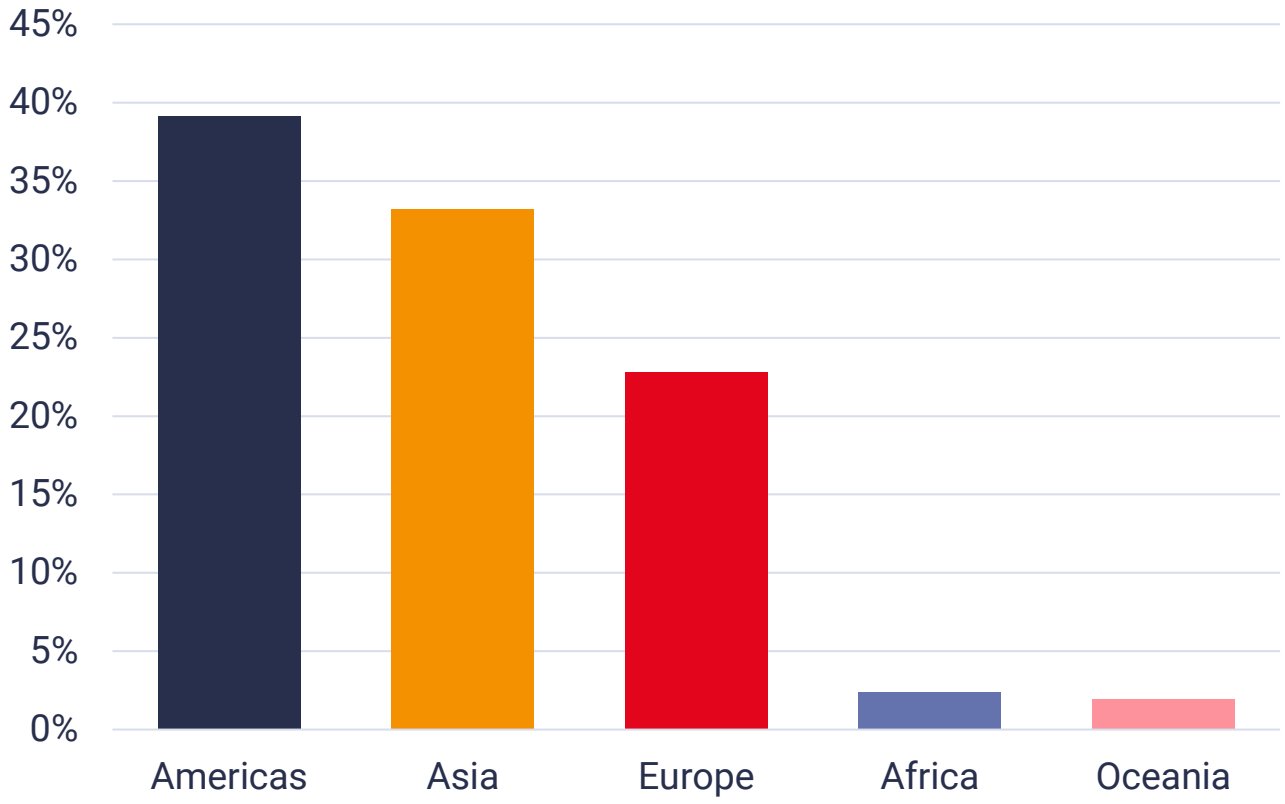
Time period: 1 Jan 2021- 31 Dec 2021

Total page views: **193K**



Example of company focused articles

Edge hub readership by region



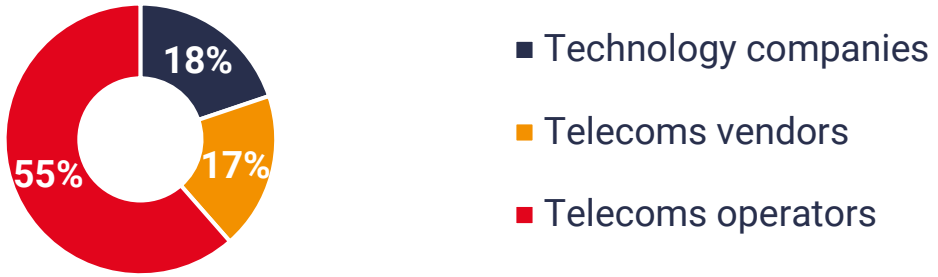
STL also has a monthly edge computing newsletter, read by more than 9,000 industry executives

Subscribers (Jan 2022): **9.1K**

Regular features in the newsletter include:

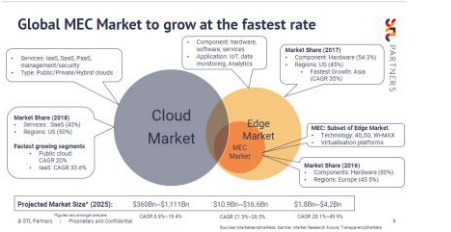
- **Edge computing in the news:** summary of the most interesting edge-related announcements
- **Startup in the spotlight:** featured start up that is one to watch over the coming years
- **Featured articles and resources:** a round up of STL's new edge content including webinars, videos, articles, reports etc.

Edge newsletter readership by company type

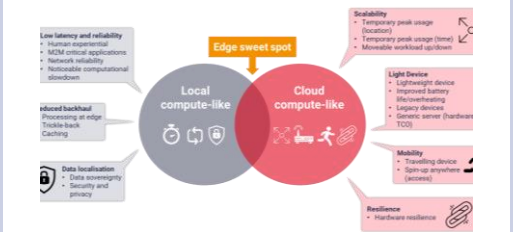


Edge newsletter readership by region

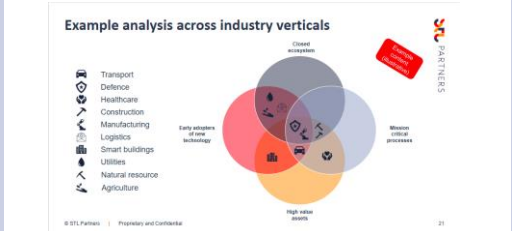
In Consulting, STL has worked with clients across different industries to support them on their commercial strategy



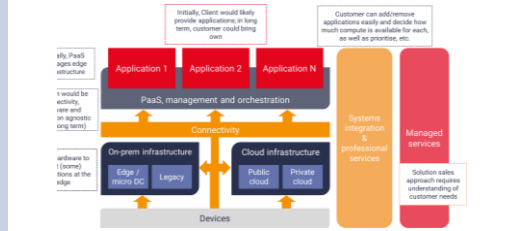
Backhaul vendor: Delivered a series of masterclasses and helped the company define its edge commercial strategy



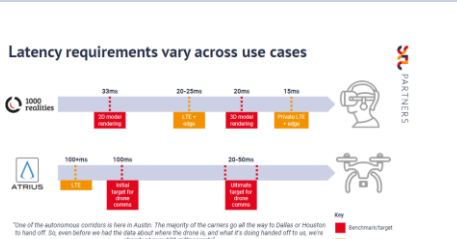
Software company: Evaluated proposition and partnerships strategy for edge computing in manufacturing and oil & gas



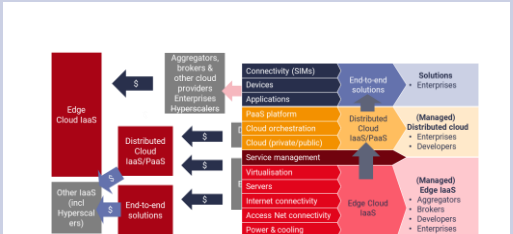
Global SI: Private networks go-to-market strategy, business models and partnerships approach in Europe



European operator: On-premises edge go-to-market strategy and use case prioritisation

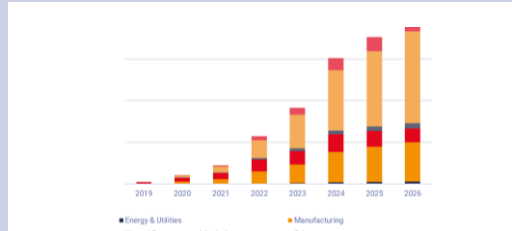


Edge platform company: Built credible thought leadership to engage developers and operators



Global operator: Modelled edge cloud costs and revenue streams when partnering with hyperscalers

Global technology company: Identified and modelled five potential telco business models for edge



Global operator: Sized the market for the full value chain for potential edge solutions across different markets

We can support you in addressing the following key questions

1. How can you create a compelling story to accelerate telcos' ambitions in edge computing?

- What and where is edge computing?
- Why is edge computing interesting for telecoms operators?
- What are the opportunities?
- What are the use cases?
- What is required at the edge?

2. What is the current state of the industry and ecosystem?

- What are their current vendor strategies?
- Who are the key players in this space and how advanced are their propositions?
- How are telcos deploying edge compute in their networks and what are their roadmaps?
- What does the roadmap and timeline look like?

3. How significant is the edge computing opportunity for you?

- What is the size of the market, depending how you look at it (edge computing vs. MEC vs. telco edge vs. industrial edge)?
- How significant is the opportunity for your market and your business?
- What are the potential sources of value you will bring to the edge compute market?

4. What should you be offering to support your customers pursuing an edge compute strategy?

- What are the use cases for edge computing?
- What are the specific infrastructure / platform requirements that are needed to support these use cases?
- Is there a need for new business models?
- What are different industry segments' views on edge computing?
- Who are the operators' key customers?

STL Partners' Consulting advises companies on their strategies and puts them to action by engaging customers effectively

STL Partners Areas of expertise

- 5G
- Artificial Intelligence
- Blockchain
- Digital service innovation
- Edge Compute
- Digital healthcare
- IoT
- Telco Cloud

STL Partners Services

1 Planning for growth

- Assess the strategic opportunity – customers, competitors, partners, ecosystem structure, market analysis and landscaping, M&A targets
- Case studies from within and beyond telecoms
- Prioritise strategic opportunities – sizing, role(s) for the client and competencies required

2 Developing a winning business model

- Develop and prioritise use cases based on customer needs, competition, market dynamics, commercial value, attractiveness to client, ability to implement
- Define key products and services for the client
- Build a detailed business case – costs, market sizing, ROI, commercial models, partnerships

3 Building a successful Go-To-Market strategy

- Develop implementation plans with roles, responsibilities and timing, pricing strategies
- Build key partnerships– channel strategy, partner scouting, engagement, and facilitation
- Enable sales and empower teams through sales tools, playbooks, customer proposition development

4 Engaging with customers

- Clarify needs & 'hot buttons' of the client's customers
- Build and promote thought leadership through bespoke research programmes
- Develop and deliver engagement programme for lead generation, including webinars, private events

In Research, we have an Edge Insights Service

Executive Briefing Service: Stay ahead of the game

- All important trends and market drivers for strategists and decision makers addressing telecoms
- Including the Coordination Age, B2B2X business model strategies, and Monetising IoT, AI and Automation, 5G and edge

c.20 new reports per year plus back catalogue and analyst access

Re-orientate to society as your customer

Recharging Consumer Revenues: New models and innovations

- Lift the top line
- Build brand relevance
- How to compete and partner in B2B2C models in entertainment, transport, lifestyle, fintech, etc.

Growing Enterprise Revenues: Going beyond connectivity

- What is B2B success?
- How to enable new B2B2X partners
- Private networks, IoT, data monetisation
- Healthcare, transport & logistics, energy

Navigate technology and ecosystem disruptions

Network Futures: Adapting to a new era

- New networking technologies and players
- Deployment scenarios and business models
- Regulation & competition
- 5G, Wi-Fi, fibre, private networking, etc.

Telco Cloud: Unlocking the core and enabling growth

- Why telco cloud and the move to cloud-native matters in the 5G era
- How to make it happen
- How to measure success
- Includes industry-leading database of deployments

Learn to grow again

Transformation: Driving measurable innovation

- How should leaders and managers *really* change?
- Developing 'systematic team learning'
- The art of partnership
- How to track that it's working

8-10 new reports per year plus back catalogues

NEW

Edge Insights Service

Directional insights on the edge opportunity for the telecoms industry

- The telecoms industry's role in developing edge business models
- Updated analysis of 50+ edge use cases
- Updated analysis of key players in a fast-changing ecosystem
- How to partner with hyperscalers

Includes use case and key player databases, relevant reports, and access to STL Partners' edge specialists

Edge Insights Service

Who is it for?

- Technology companies (in infrastructure, platform and applications) going to market and/or innovating on edge computing and MEC solutions
- Telecoms industry strategists, 5G and edge teams, product and technology

What are the benefits?

- Rich understanding of the edge computing opportunity
- Practical guidance on which use cases to target, who to partner with and how to develop edge business models

Edge Insight Service: Pursuing a new opportunity

Product and service details

STL Partners' Edge Insights Service provides a combination of five tools to support telecoms operators and technology companies in developing their edge computing strategies

1. Research reports

- Access to all STL Partners thought leadership reports that focus on edge computing: strategies, use cases and business models
- Including existing back catalogue

2. Use case directory

- Over 50 edge computing use cases across 16 verticals
- Details on key drivers, potential partners, industry mapping
- Case studies on real world implementations

3. Ecosystem tool

- Interactive tool charting over 200 companies
- Analysis of company's edge products, and role in the value chain
- Deep-dives on companies' strategies and partnerships

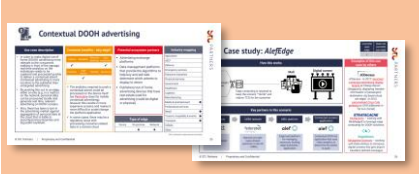
4. Market sizing forecast

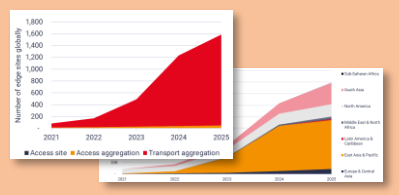
- Size of edge computing market (in revenue) from 2020-2030
- Broken down by vertical, use case, type of edge, country
- Forecast updated every 6 months

5. Edge capacity forecast

- Total capacity in network edge data centres
- Broken down by application, country and type of edge
- Forecast updated every 6 months

Sample content



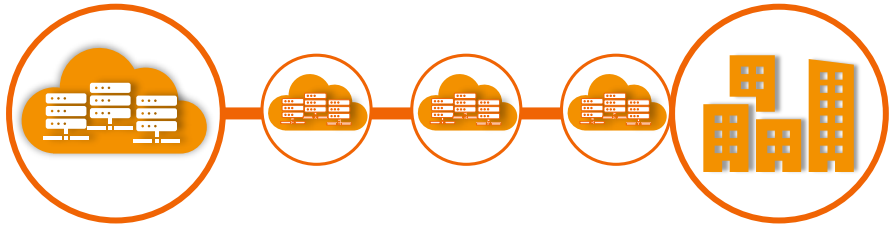


All subscribers can access our analysts on demand via quarterly analyst calls

Edge Computing: How to pursue the new opportunity

The challenges…

- Monetising edge computing
- Building horizontal / vertical strategies
- Engaging enterprises / developers and accelerating adoption



… And the opportunities

- Establishing new business opportunities beyond connectivity (and infrastructure)
- Enabling new use cases and applications
- Using edge to grow enterprise revenues

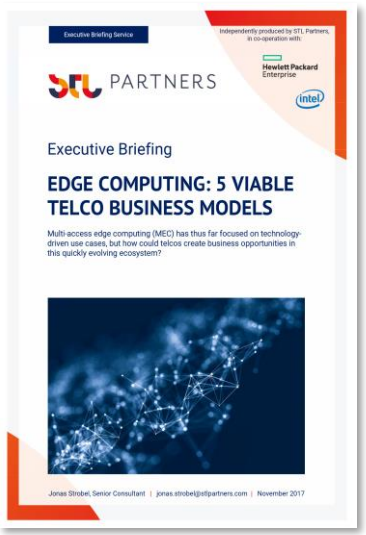
Recently published reports

Edge computing revenue market sizing tool
Telco edge capacity forecast tool
Building telco edge: Why multi-cloud will dominate

Unique assets and tools

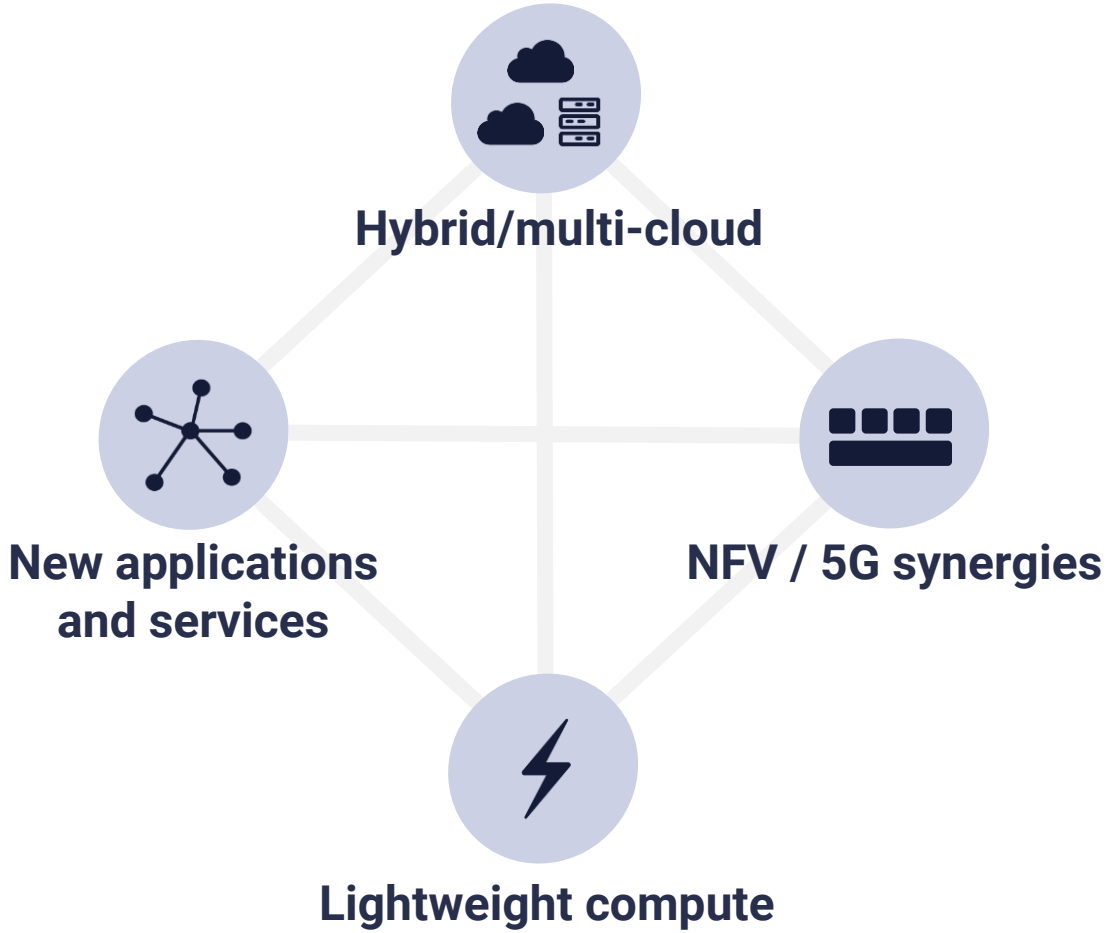
- **Edge use case directory**: Pack of 60+ use cases in 16 industries
- **Edge ecosystem tool**: Interactive tool for evaluating products of more than 200 companies across the edge computing value chain
- **Market sizing models**: Revenues across 20 use cases (demand side) and edge capacity forecast by type (supply side)

Recently published reports on edge computing



Edge Market Overview

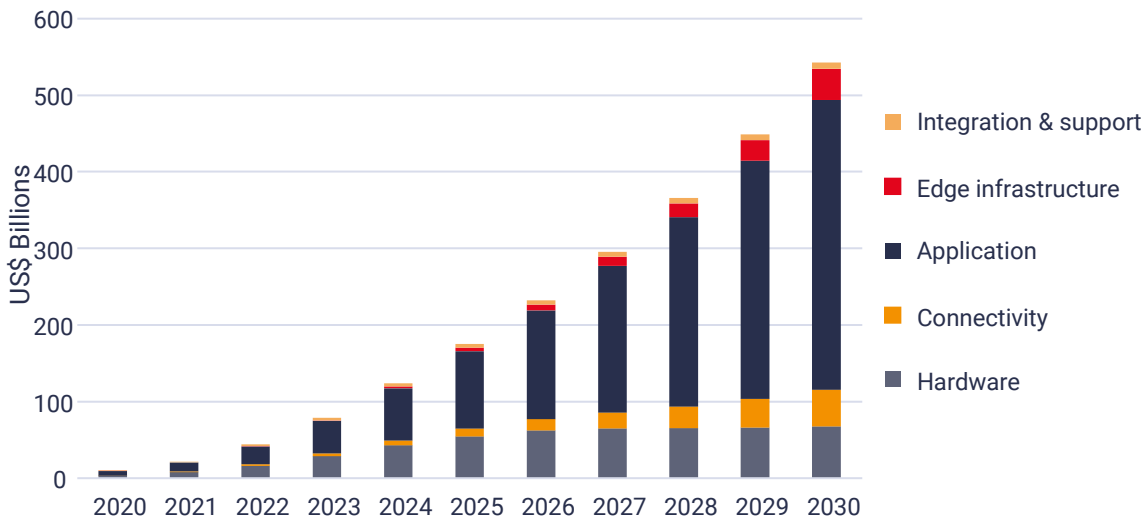
Time is ripe for *Distributed* Cloud – Can businesses play a role with Edge Computing?

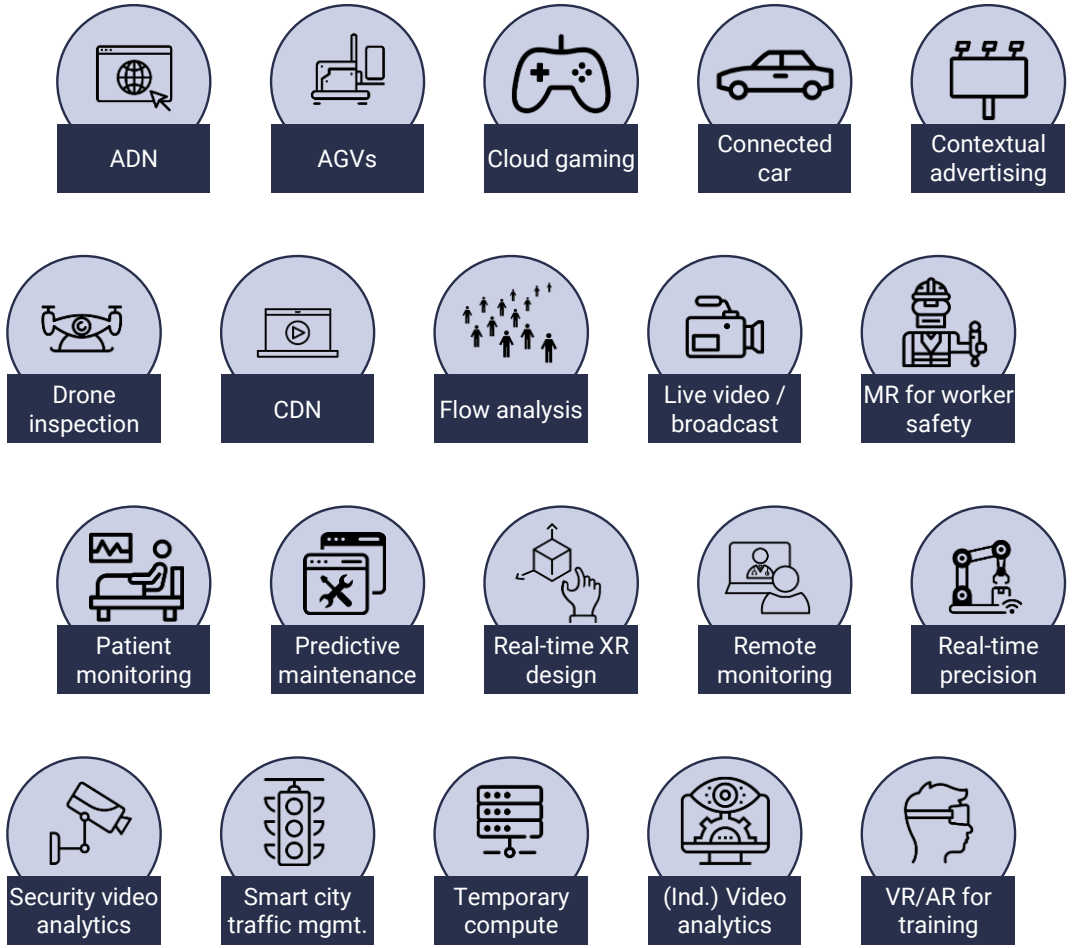


A stronger role for businesses to meet future demand for more distributed cloud?

20 use cases are set to generate an edge market that is forecasted to be almost USD 180Bn by 2025

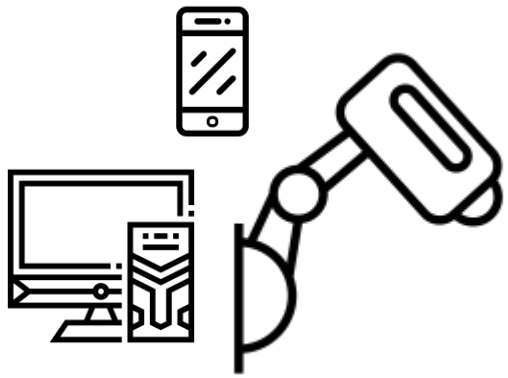
Total edge computing addressable revenue by value chain component, 2020 – 2030



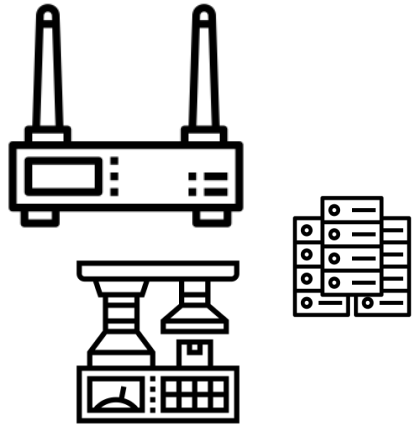


Source: STL Partners

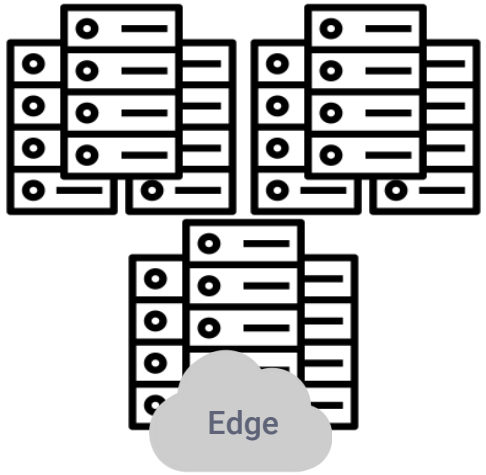
Edge computing removes the dichotomy and allows developers to access cloud benefits closer to the end-user



On-device



On-site



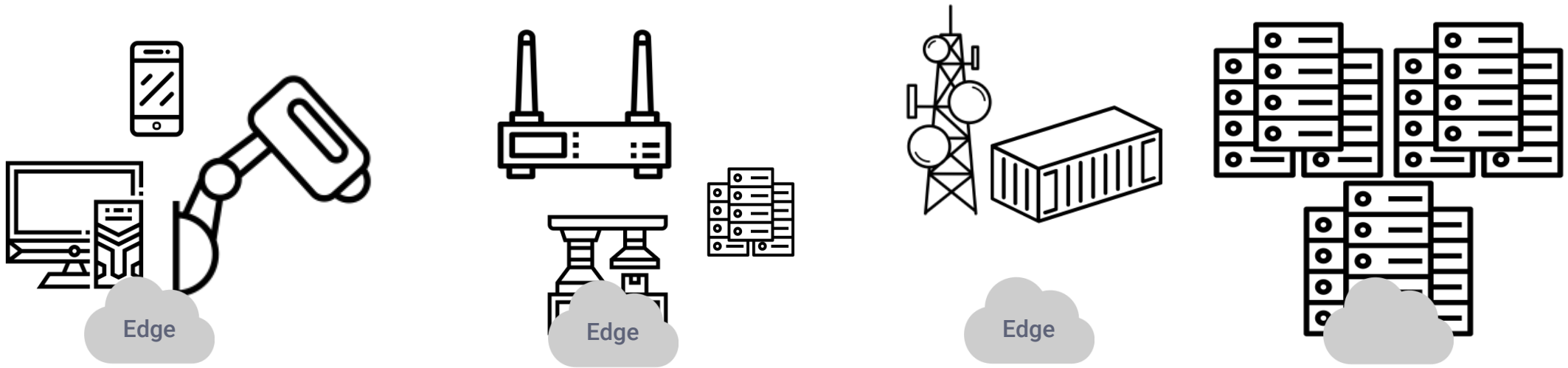
Cloud

Reliability
Low latency
Data privacy

Edge

Flexibility
Device agnostic
Mobility
Compute power

Edge can also be in mini data centres in the mobile network – combining the benefits of edge with 5G



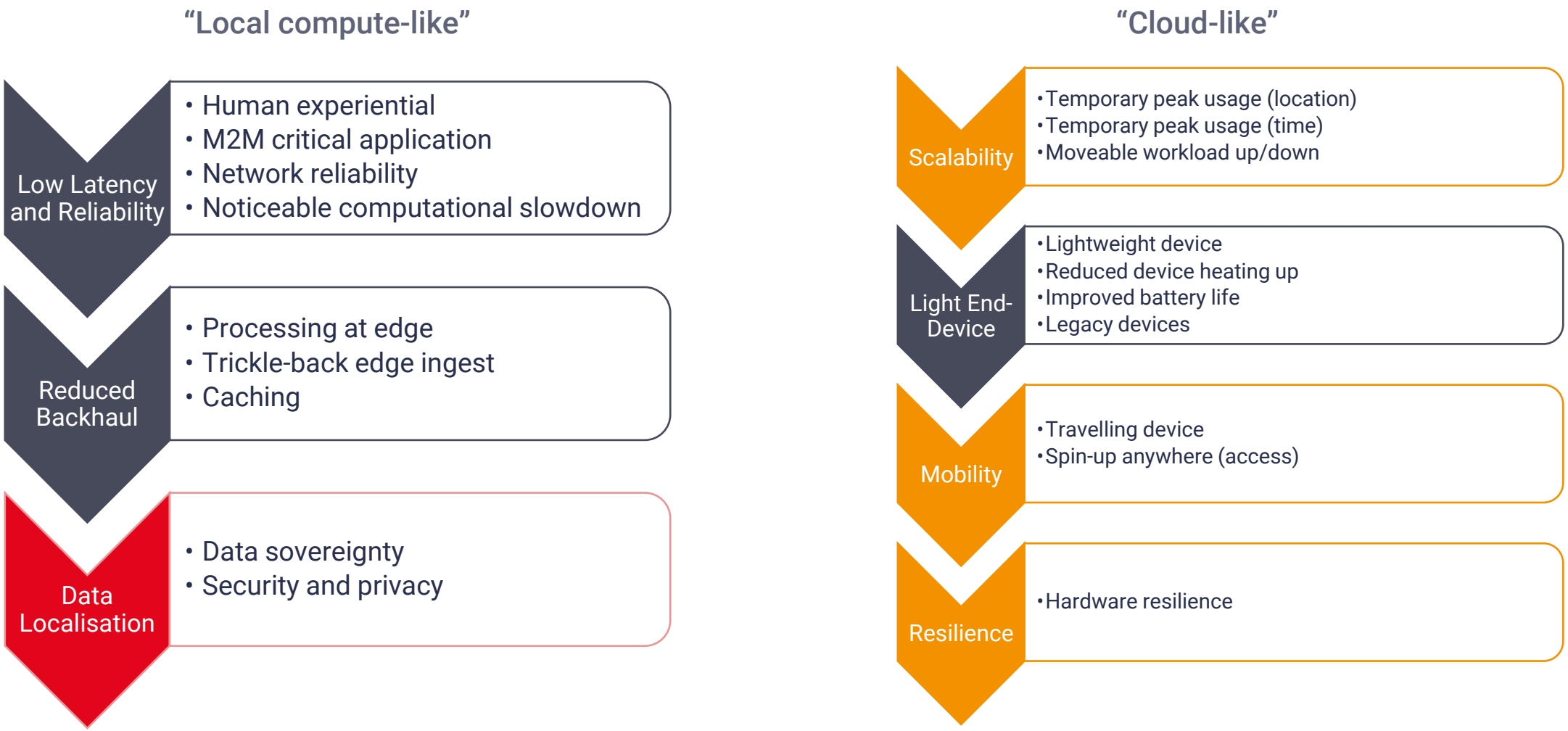
On-device | On-site | 5G/Mobile Edge | Cloud

Reliability
Low latency
Data privacy

Edge

Flexibility
Device agnostic
Mobility
Compute power

The value proposition: Edge computing delivers more than just latency for application users



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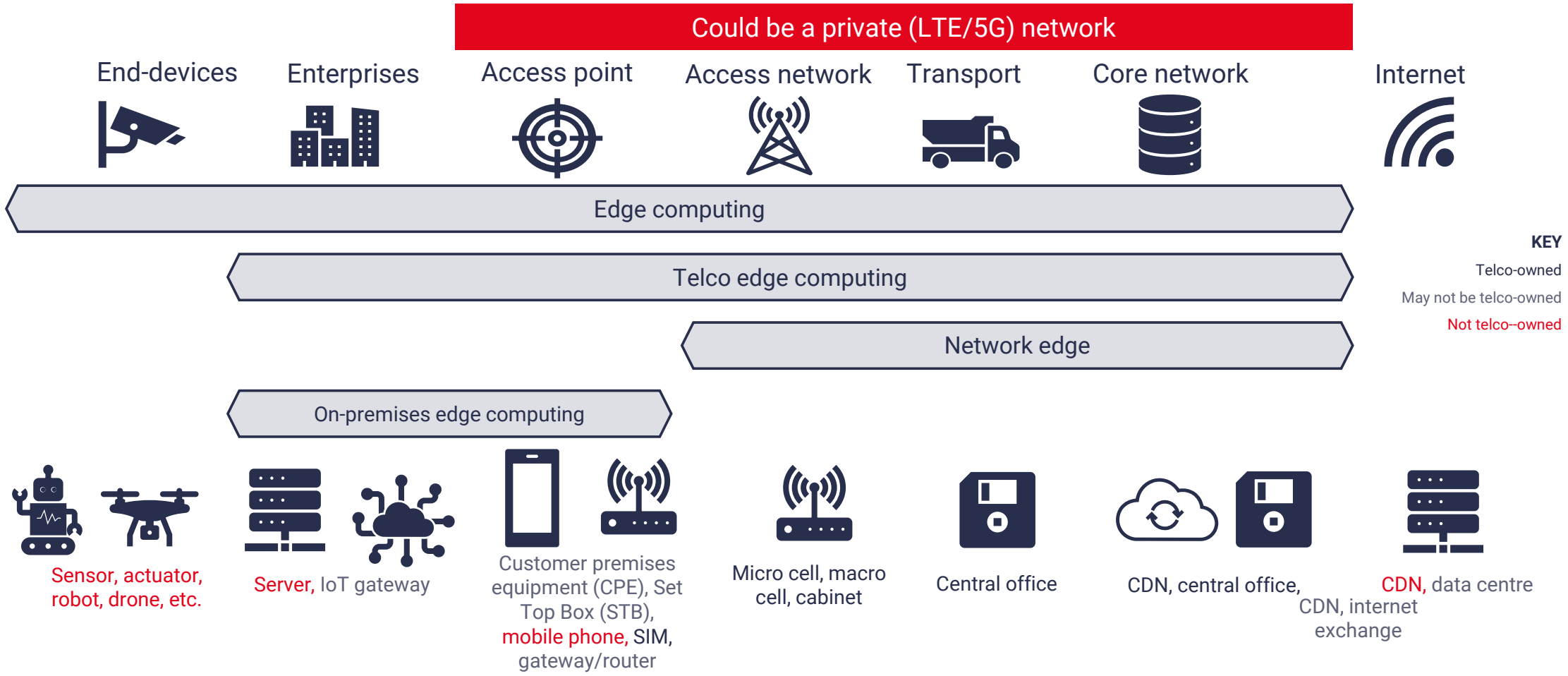
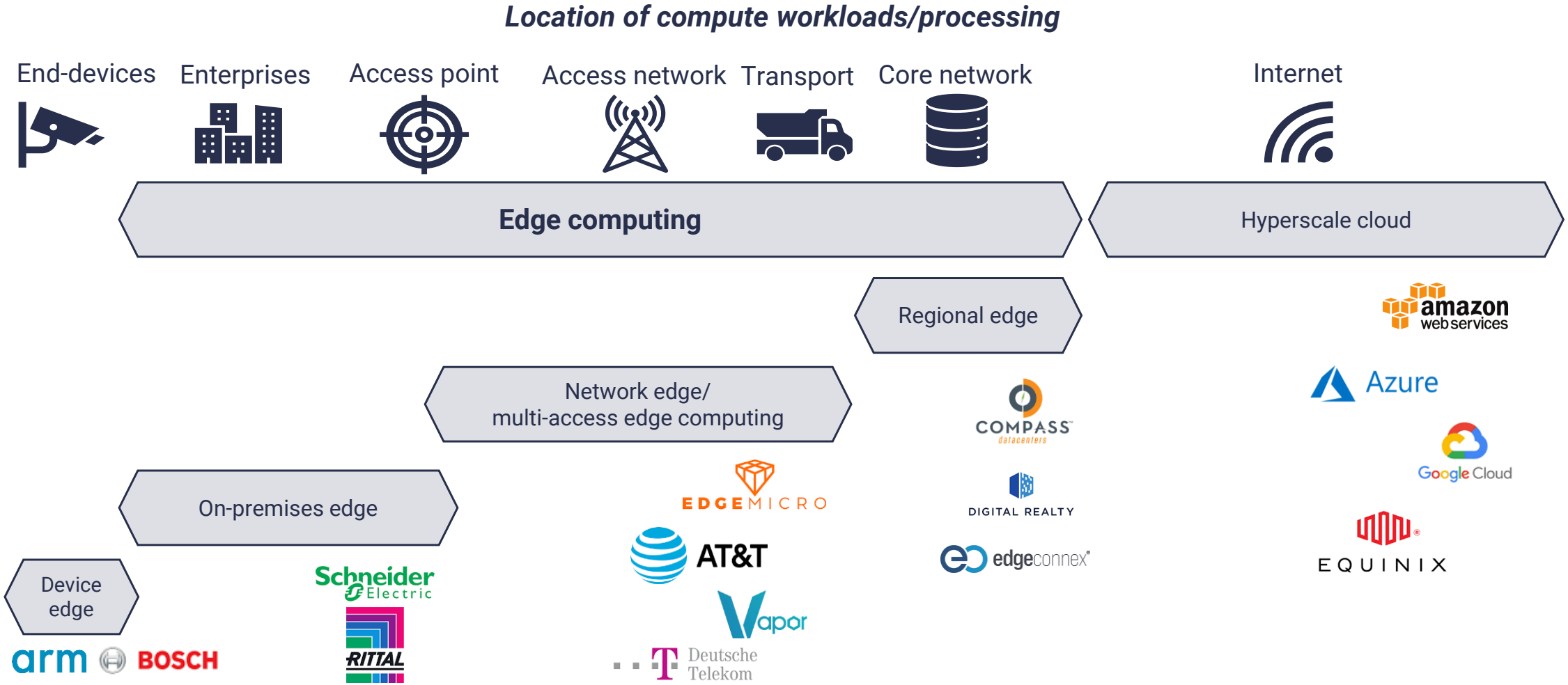
Key: MEC primarily | Priv. network / on-prem edge primarily | Both

There are different types of edges depending on the location



Similarly, different companies across industries are tending to focus on a wide range of of edges



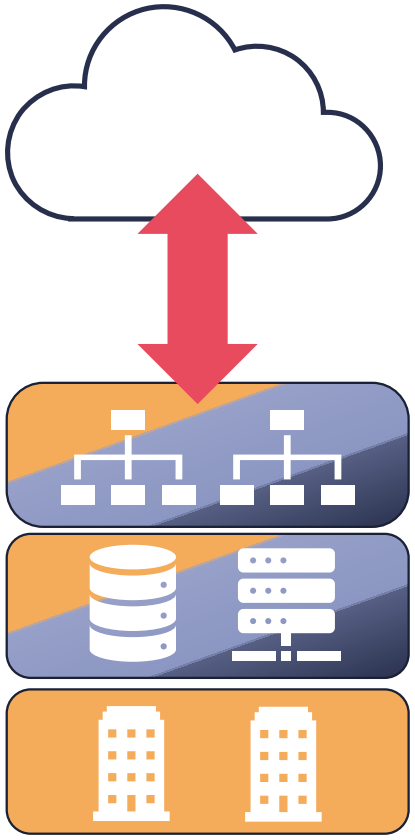
But who will build the network edge? We have three potential scenarios...

Cloud
Public or private

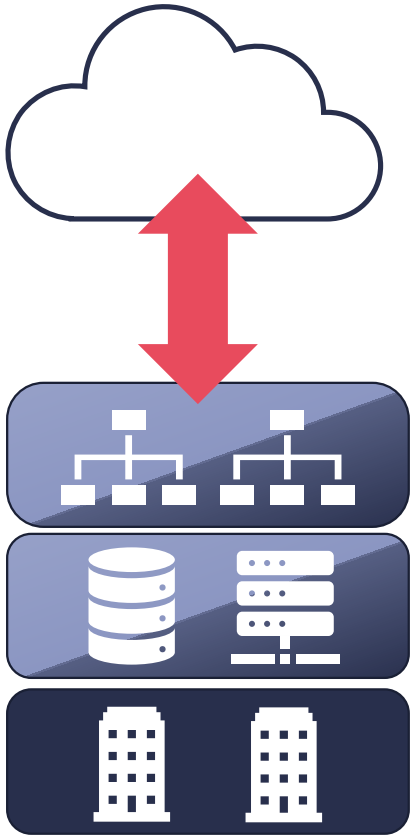
Edge platform
Virtualisation, infrastructure management, developer tools

Edge node
Physical nodes and infrastructure

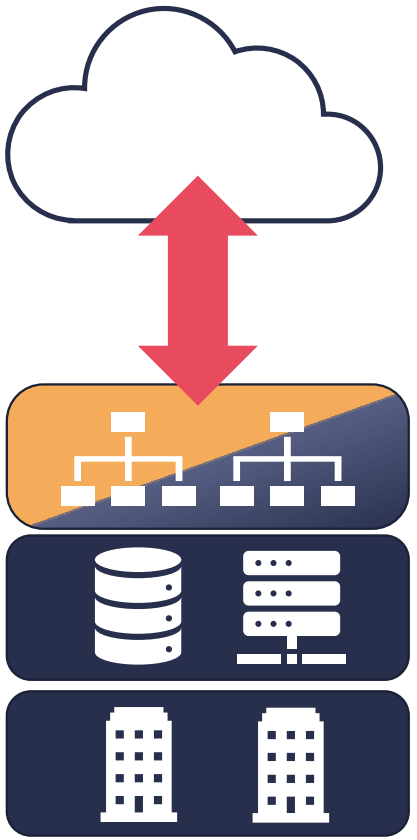
Edge host
Data centre facility, management and operations



Scenario 1:
Edge hosting provided by 3rd parties



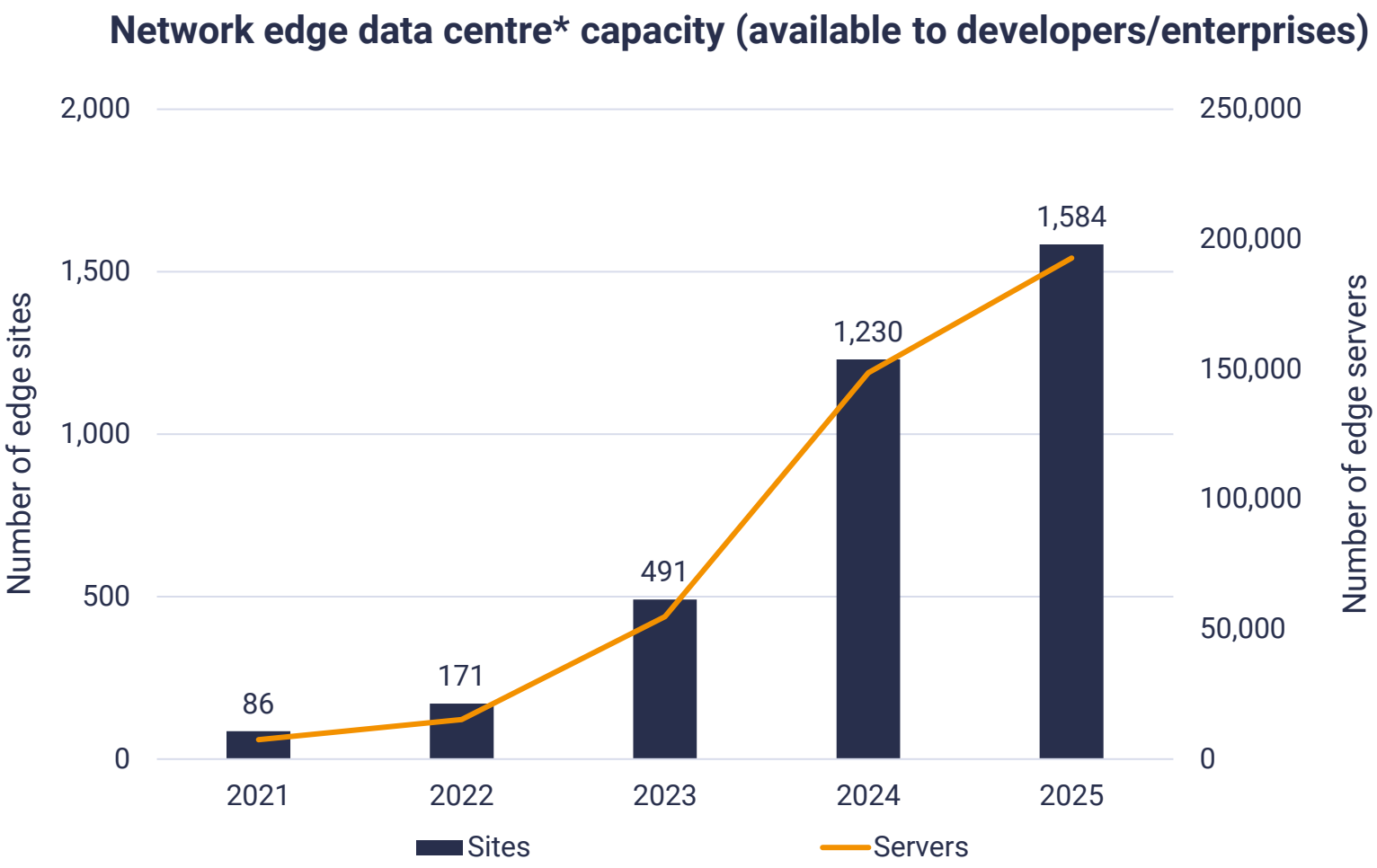
Scenario 2:
Edge nodes provided by hyperscalers and telcos partnerships



Scenario 3:
Edge nodes provided by telcos

Key: 3rd party | Hyperscaler | Telco

There are forecasted to be over 1,500 network edge data centres built by telecoms operators by 2025



*Network edge data centres refer to edge data centres within telecoms operator facilities that are used for enterprise/consumer applications, but also host network infrastructure (e.g. core, access network)

Examples of network edge data centres in 2021

Verizon

- 13 edge zones in the U.S.
- Partnership with AWS
- **Use cases**: AI-powered facial recognition software, AR/VR

SK Telecom

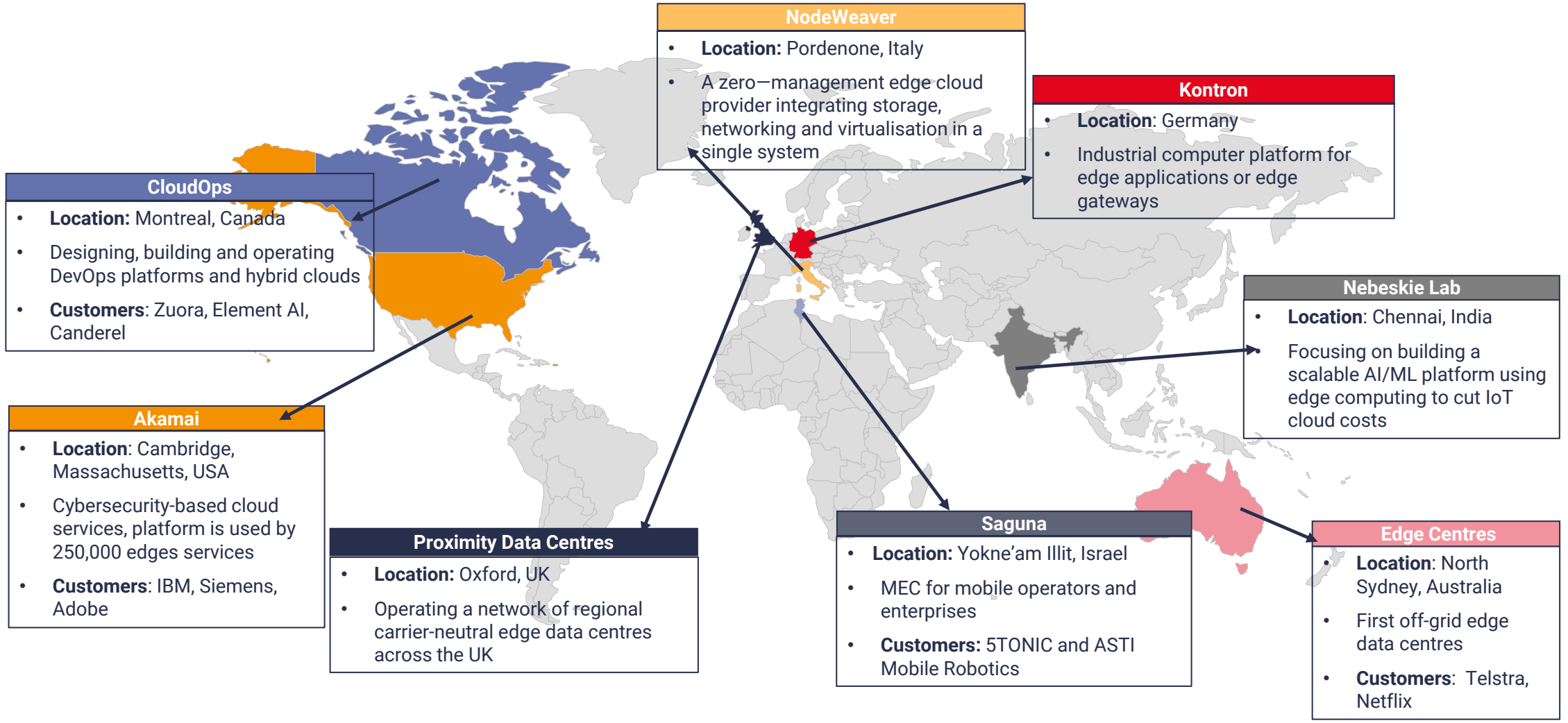
- 1 live zone, plans to build 12 MEC in 5G networks across the nation
- Partnership with AWS
- **Use cases**: VR/AR and video game streaming, virtual mobile interface

KDDI

- 2 edge zones to date
- Partnership with AWS
- **Use cases**: video analytics, real-time asset inspection, AR, drones, AI-powered media editing

Source: STL Partners

Likewise, non-telco players are providing edge services across the world



NodeWeaver
- **Location:** Pordenone, Italy
- A zero—management edge cloud provider integrating storage, networking and virtualisation in a single system

Kontron
- **Location**: Germany
- Industrial computer platform for edge applications or edge gateways

CloudOps
- **Location:** Montreal, Canada
- Designing, building and operating DevOps platforms and hybrid clouds
- **Customers**: Zuora, Element AI, Canderel

Nebeskie Lab
- **Location**: Chennai, India
- Focusing on building a scalable AI/ML platform using edge computing to cut IoT cloud costs

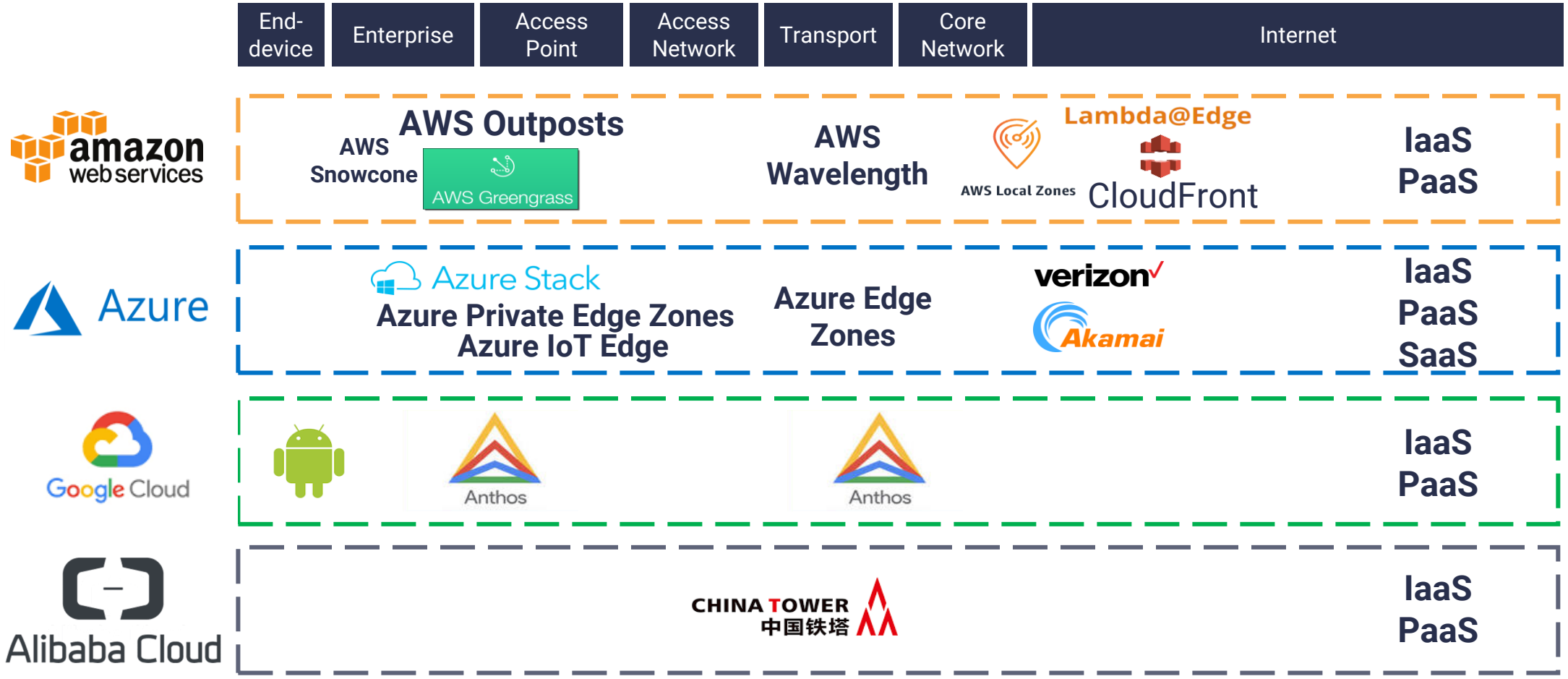
Akamai
- **Location**: Cambridge, Massachusetts, USA
- Cybersecurity-based cloud services, platform is used by 250,000 edges services
- **Customers**: IBM, Siemens, Adobe

Proximity Data Centres
- **Location:** Oxford, UK
- Operating a network of regional carrier-neutral edge data centres across the UK

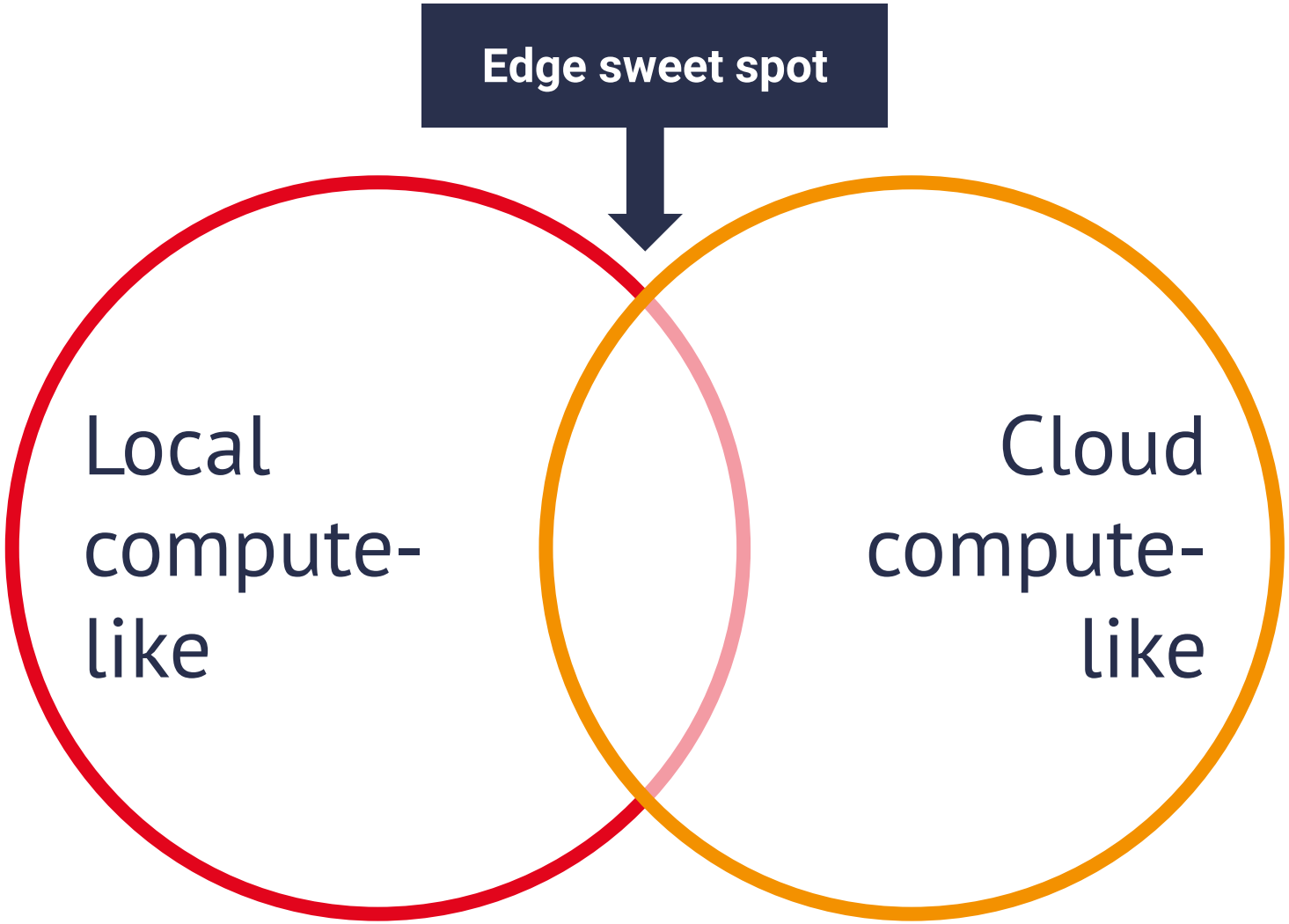
Saguna
- **Location:** Yokne'am Illit, Israel
- MEC for mobile operators and enterprises
- **Customers:** 5TONIC and ASTI Mobile Robotics

Edge Centres
- **Location**: North Sydney, Australia
- First off-grid edge data centres
- **Customers**: Telstra, Netflix

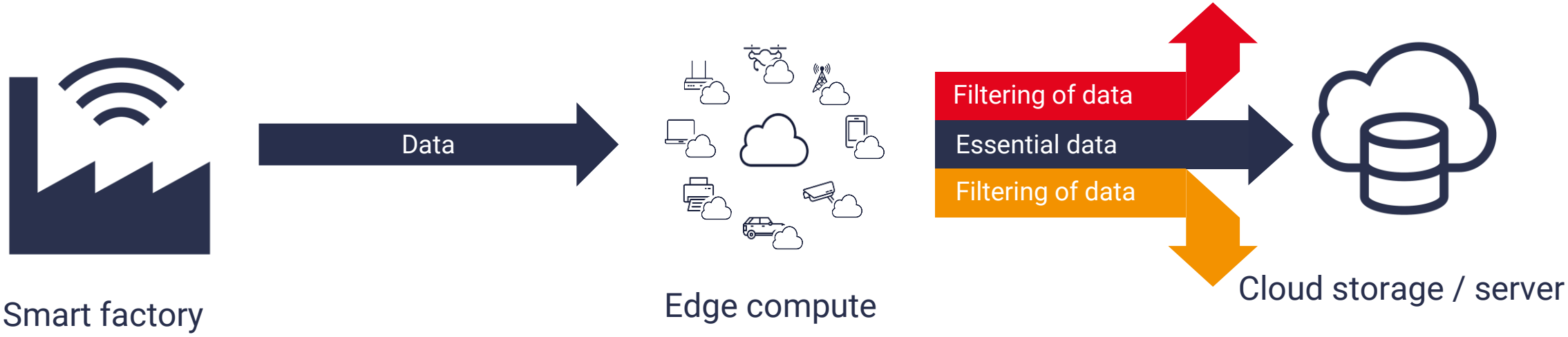
The demand is not only driven by hyperscale cloud providers that are increasingly pushing towards the edge



Demand for edge cloud is driven by use cases in the “edge sweet spot”

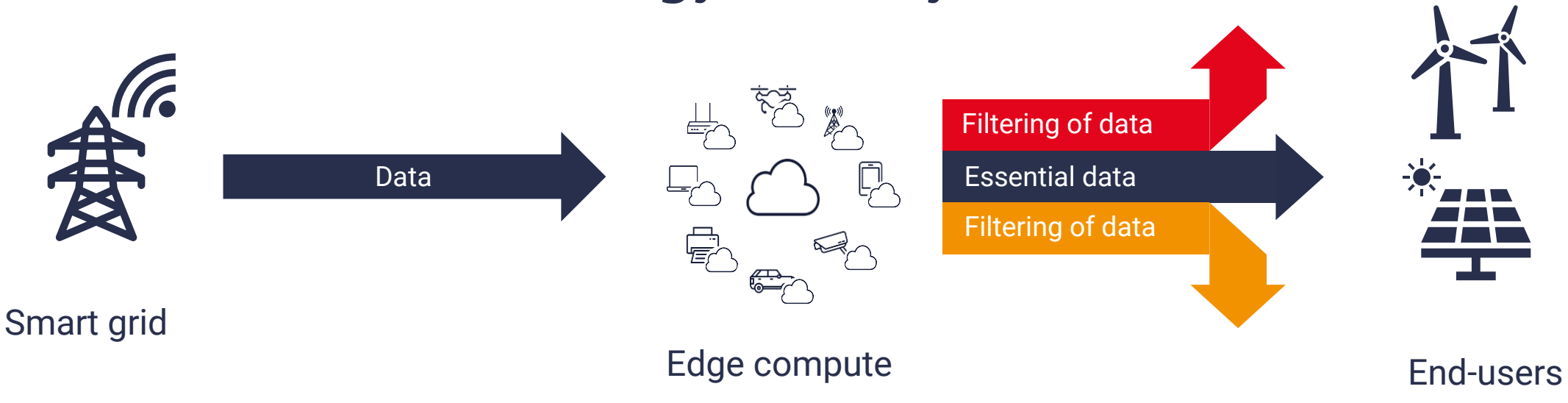


One of the examples is manufacturing and IoT industry



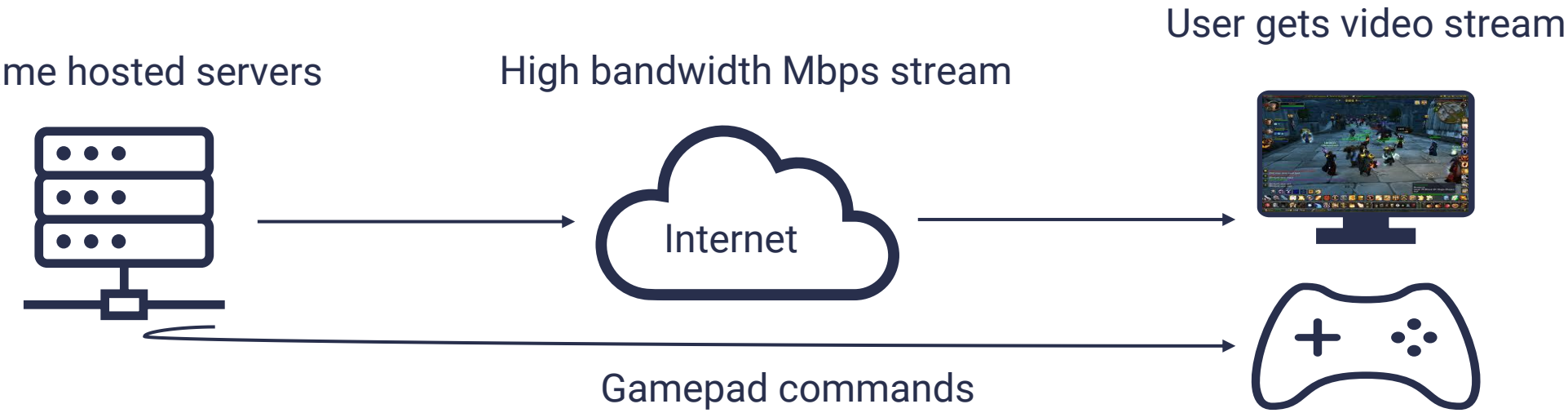
- Smart factories have thousands of connected IoT devices that send packets of data back to data management platforms
- Edge computing can enable processing and filtering of IoT generated data closer to the devices
- This optimises bandwidth by ensuring that only data needed for longer term storage or analysis is streamed to a centralised management platform

Similarly, there is an increasing use of edge computing within the renewable energy industry



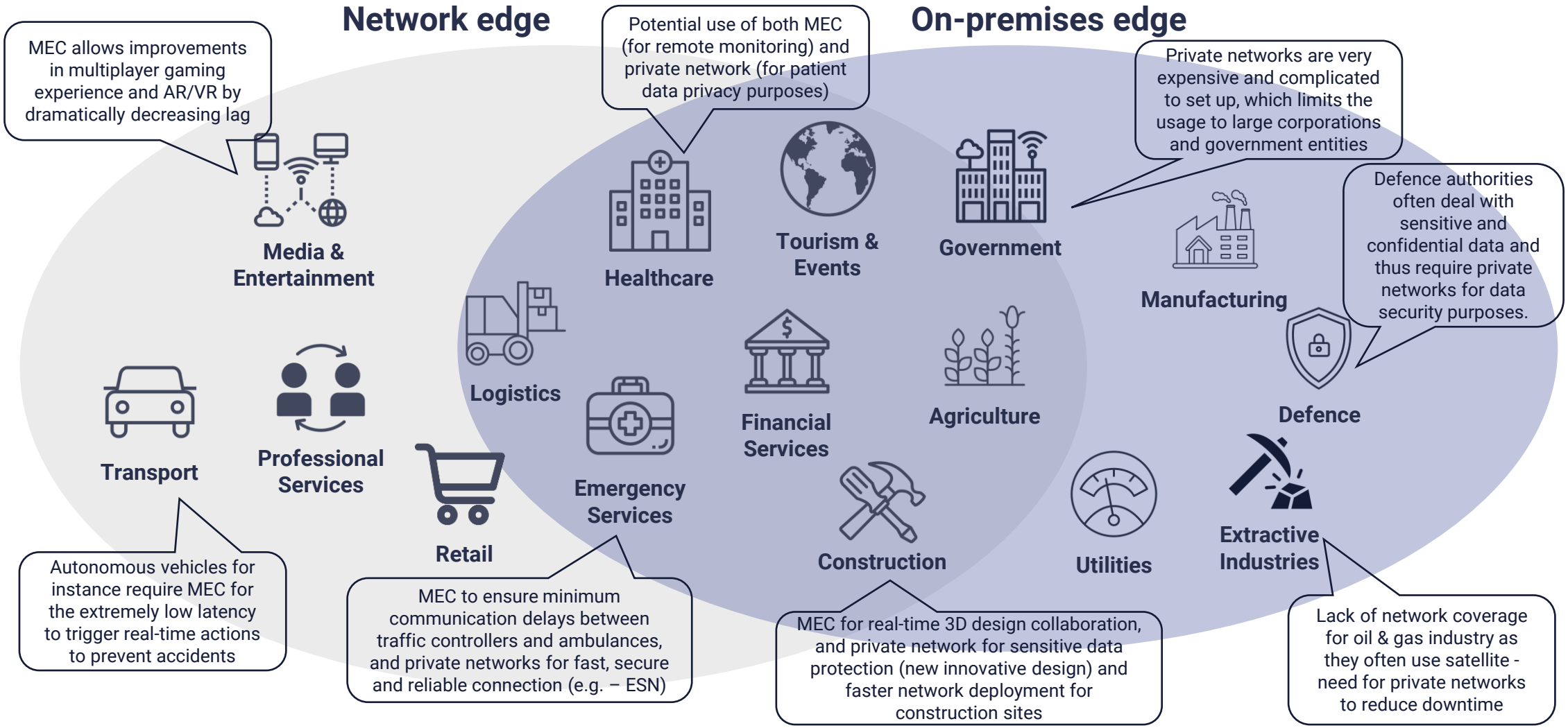
- Smart grids have to deal with a large volume of information to make sure that sustainable energy management is efficient
- Edge computing can enable faster processing of data, which is filtered reducing the security risks
- This provides end-users with undisturbed service and real-time insights about their energy management

And, of course, gamers and gaming platforms will benefit from edge computing, too

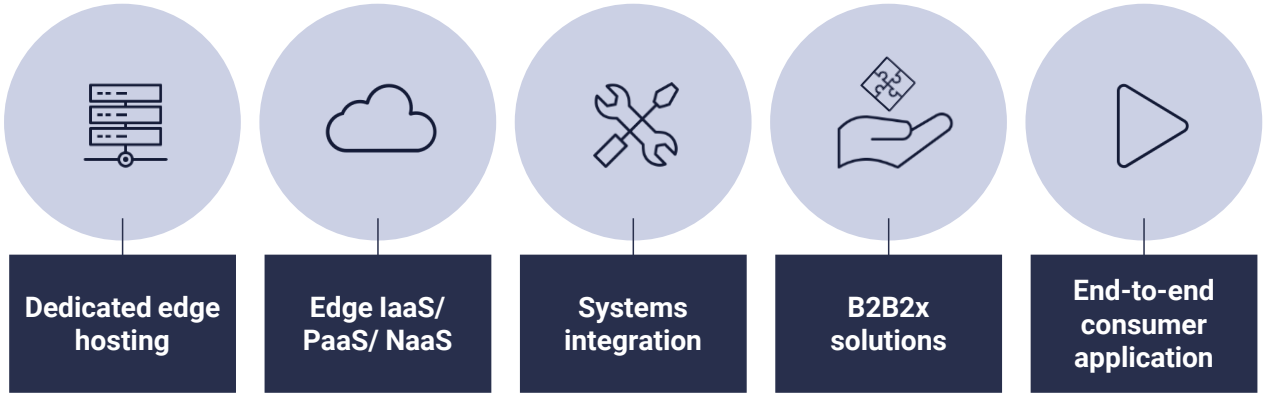


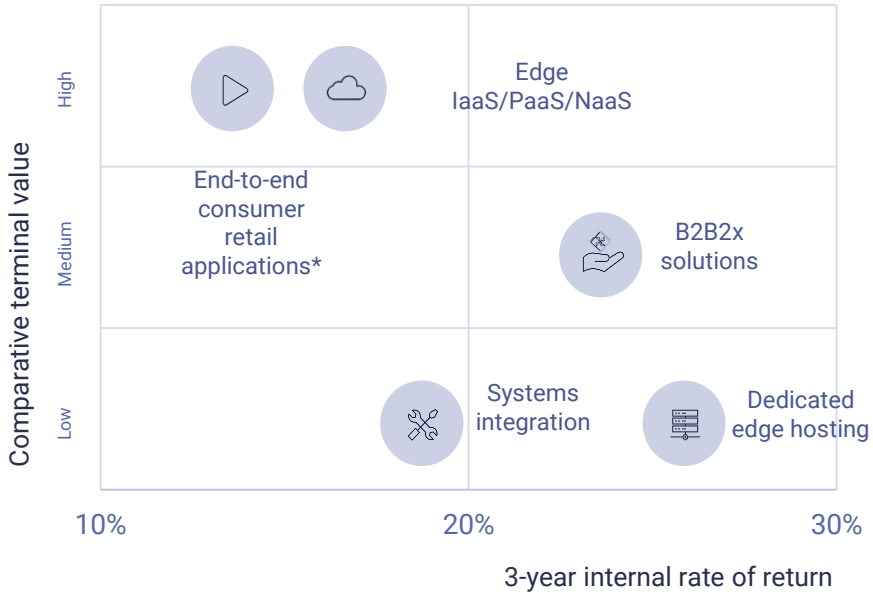
- A new kind of gaming which streams a live feed of the game directly to devices, (the game itself is processed and hosted in data centres) is highly dependent on latency.
- Edge computing can enable faster processing of data, which is filtered reducing the security risks
- Cloud gaming companies are looking to build edge servers as close to gamers as possible in order to reduce latency and provide a fully responsive and immersive gaming experience.

However, not every type of edge is suitable for every industry



But, the possibility of various business models when monetising edge computing is attractive





* Relates to a 5-year period

Available in our report *'Edge Computing: 5 Viable Telco Business Models'*

If you are interested in understanding how STL Partners can support you...

Contact us!

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