

Harnessing the edge: why telco providers should consider a horizontal platform approach



5G is accelerating deployments of edge computing, as communications service providers (CSPs) look to rearchitect their network infrastructure, grow the capacity of their networks, and add new services. As technology evolves towards containers and cloud-native architectures and applications, there are key architectural considerations for CSPs to address

It's all happening at the edge

| Three use cases for edge when it comes to 5G

- Enhanced mobile broadband for consumers
- IoT and machine-to-machine communications
- Communication where maximum reliability and low latency are essential

| Advantages of edge computing

- Automation
- Zero-touch provisioning
- Multi-cluster management to manage edge deployments at a large scale
- Smaller footprint for better use of physical resources

| To meet different needs, edge computing needs to support

- Hybrid workloads of virtual machines
- Containers
- AI/ML workloads in microservices architectures

The case for a horizontal platform approach

| Features of an open horizontal cloud

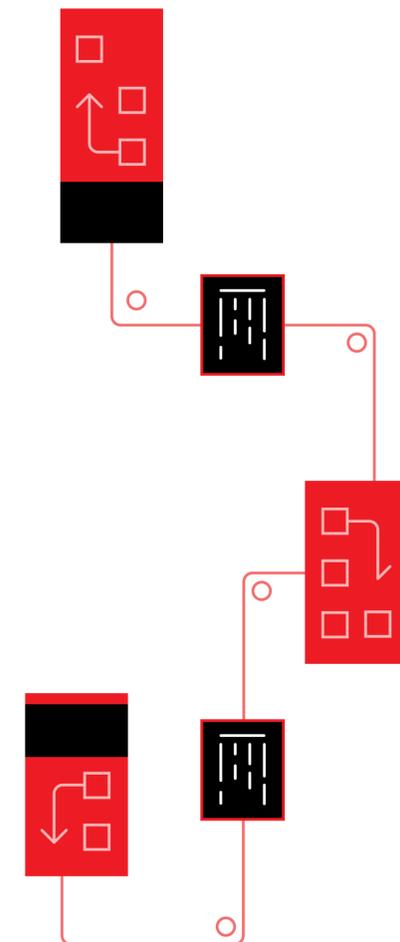
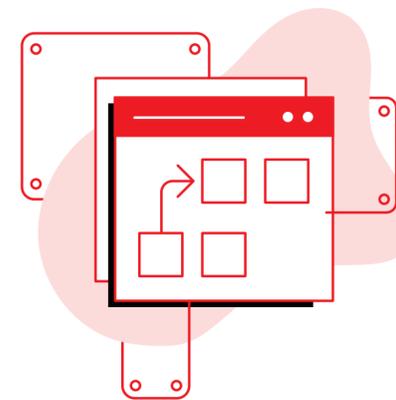
- Service providers' applications are built and distributed on a common platform that is independent from the underlying hardware
- It is compatible and resilient across the network architecture, from the cell site to the mobile edge
- Network and user functions are connected to the edge and are scalable
- It enables better positioning of CSPs to generate improved performance and cost efficiencies

| Performance advantages

- More easily optimised in real time
- Improved ability to move applications across different locations in a network according to situational changes
- Easier for operators to relocate workloads closer to the end user
- Improved latency and reduced bandwidth needs towards the core

| Cost benefits

- Reduces total cost of ownership by 30%
- Enables easy automation of applications
- Multi-vendor approach gives providers greater flexibility
- Access to available, smartly distributed ecosystems



By embracing an open hybrid cloud model that's horizontally integrated across both core and distributed sites, CSPs will be able to manage, execute and automate the applications needed to run these solutions efficiently and cost effectively across deployment environments. This lays the foundation for future services and business innovation