

# Edge/ Cloud Innovation, Adoption, and Infrastructure Financing

Edges for Transformative Innovation 15:30-16:45

Steven Woodward, Cloud Perspectives





## Cloud Perspectives- Steve Woodward

- Standards, Governance and Compliance Internationally
- ISO/ IEC Cloud Service Connectivity, Agile DevOps, IoT Asset Management, Cloud, Edge, Data Handling & Jurisdictions, Systems, Quality Assurance, Billing, Partners, Brokers and Metrics
- IEEE and NIST Cloud Federations, Interoperability, Non-Functional Sizing Metrics
- Standards Council of Canada GDPR, Data Governance and AI Ethics committees
- Cloud Security Alliance Canadian Chapter Director
- OMG CSCC SLAs, Metrics and CMP
- Telco communities: TM Forum, ITU-T, Quest Forum, OpenStack, PTC
- Collaboration between other cloud SDOs including itSMF, AFCEA, ICEAA, IFPUG, ISACA, OWASP, IIBA, Agile and Quality Groups
- Helping providers, customers and carriers in the private and public sector

People - Process - Technology

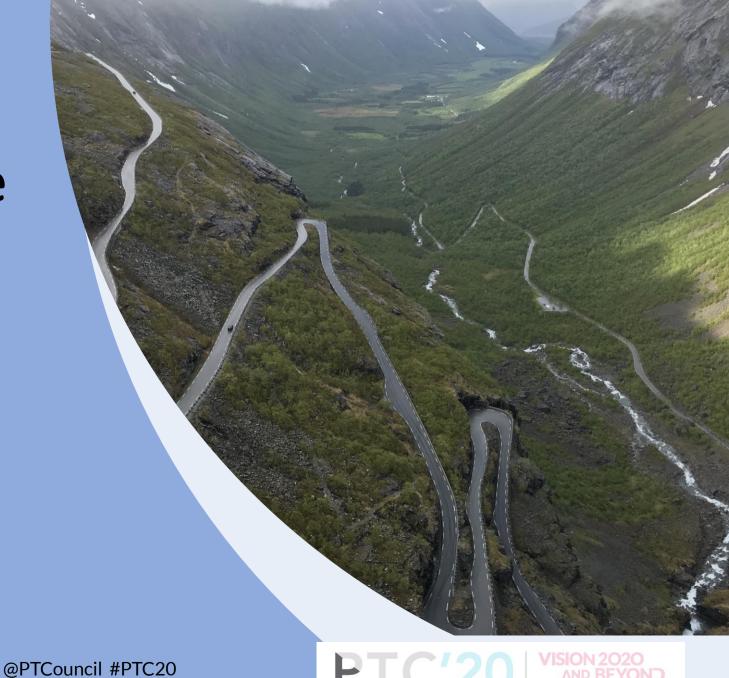






## Roadmap on the Edge

- Edge options
- Edge Considerations
- Securing the Edge
- Opportunities









## Many Options and Perspectives

Gartner defines edge computing as "a part of a distributed computing topology in which information processing is located close to the edge – where things and people produce or consume that information."

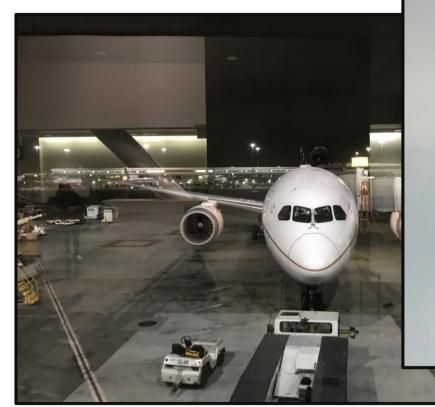
- ➤ Edge of What?
- IoT Devices
- Smartphones
- Computer
- Security/ Border Services Camera
- Set Top Boxes
- Network
- Data Centre and Cloud CSPs







# Some Edges











# Considerations at the Edge for Telcos

- No Connectivity....No Edge....No Cloud
- 5G enabler and disruptor
- Latency impacting customer experience
- Identity as the new secured perimeter
- Complex ecosystem of competitors and partners
- Complex trust boundaries

Private Edges & Public Edges

Physical and Virtual (Software Defined)



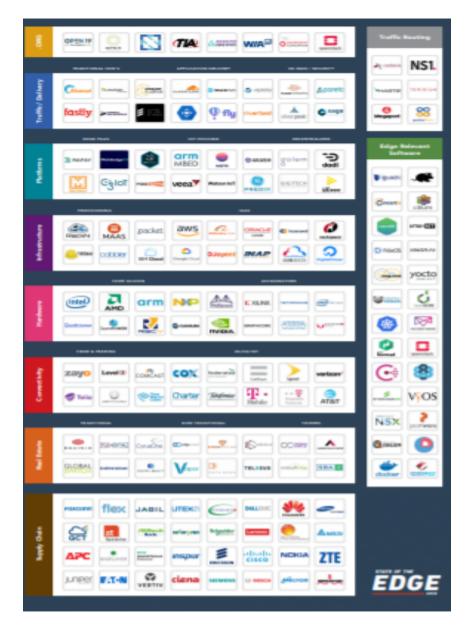






# 2018 Edge Computing Landscape

https://www.stateoftheedge.com/projects/landscape/



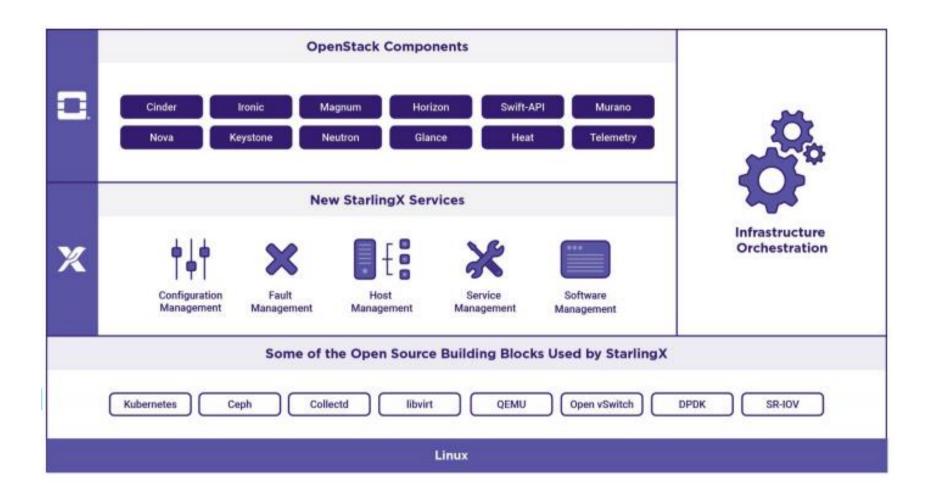








## OpenStack StarlingX- Edge Platform









## Securing the Edge

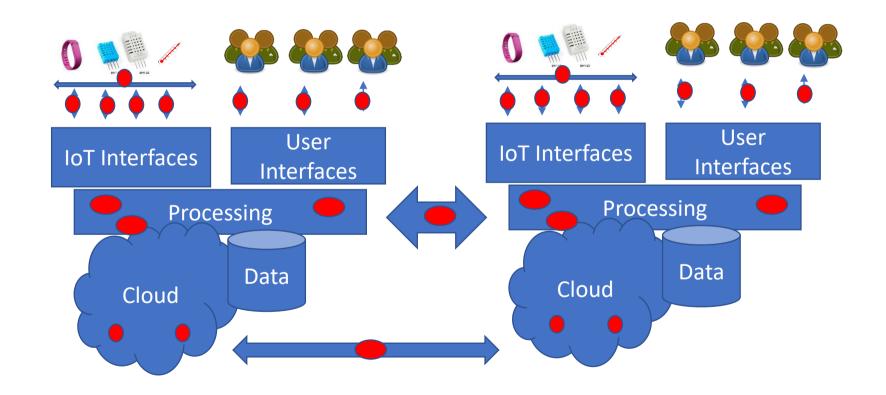
- IoT devices insecure
- Layers of additional exposure
- Identity defined secured perimeters
- Architecting for segmentation and isolation
- Data packets often crossing multi-geojurisdictions







# Telcos Understand Resiliency, Connectivity, Complexities and Exposure Points

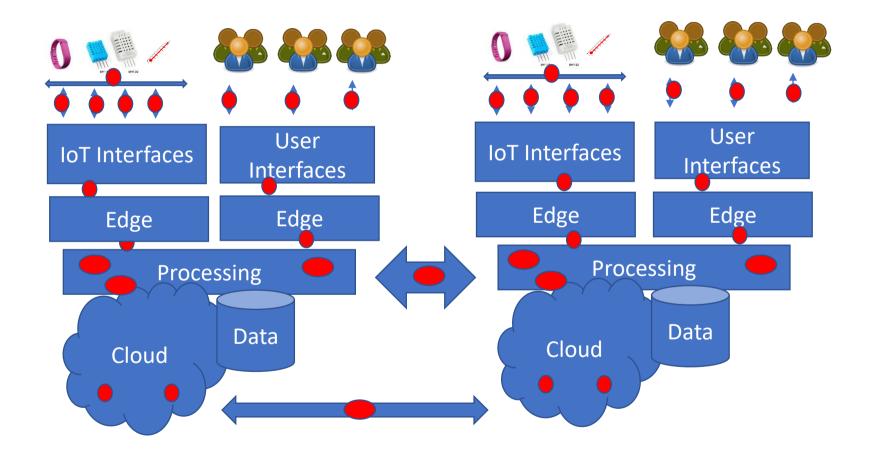








### Edge Fit Varies and Increases Complexities









#### Opportunities

- Telcos have significant infrastructure and experience
- Experience with billing/ service usage models
- Know connectivity must be architected, planned and secured (many options)
- Know the highly resilient and secure connectivity business
- Tremendous demand for software defined network connectivity expertise services

