Maximizing IoT Value for Telco Service Providers

Device Management & Application Enablement to Address Today's Operational Expenditures (OPEX) & Average Revenue Per User (ARPU) Challenges

Telco Operators face a number of challenges today around shrinking ARPU, increased Opex to support devices across multiple business lines, and high levels of customer churn. As IoT continues to increase in scale across a wide variety of markets, including consumer smart home, Telco Operators are realizing their need to harness this massive scale to improve their business through new revenue generation and cost reduction. As the need for Operators to leverage IoT grows, the necessity for device management and application connectivity is a growing concern, and to-date only Ayla Networks delivers a ‘pure play’ commercial IoT software platform with the required security, scale, and functionality to solve the needs of Telecom Operators today.

The Challenges

Telco Operators are undoubtedly entering a new world of opportunities with the increasing scale of IoT and connected products. However, the reality they face is also one of mounting challenge to evolve a long-term strategy to keep business pace with this rapidly changing world of IoT. The core challenges faced by the Telco industry are becoming more prevalent and complex across the industry and can be summarized in four core areas: stagnant ARPU, NPS & customer churn, & high OPEX for support services and Device Management across business lines

The Ayla Virtualization Platform

An Agnostic Approach to Device Management and Application Enablement

With the Ayla Virtualization Platform, Telecom Operators are able to leverage core technical capabilities around device management and application enablement to help solve the major challenges they face today. Virtualization allows any physical device to be digitally represented in the Ayla Cloud, enabling a ‘digital twin’ that sets the schema for

Benefits

- Drive new B2C and B2B revenue through connected home solutions and data-driven business applications
- Remotely monitor & diagnose deployed devices to minimize support costs
- Consolidate management of multiple business lines into a single, flexible platform
- Leverage predictive and pre-emptive support to increase customer satisfaction
- Analyze performance of customer devices to pro actively support and reduce customer churn
- Faster time to market & value
data ingest and device management. This virtualization can be enabled on devices running Ayla’s Embedded Agents (with direct communication to the Ayla cloud) and devices that communicate to other 3rd party clouds. Once virtualized, devices can be managed in the Ayla Dashboard using a wide breadth of tools designed to monitor, support, and grow IoT device deployments. These tools include log analysis, OTA updates, user management, data analysis, data streaming, and much more.

As a ‘device agnostic’ platform, Ayla does not restrict on the type of device and is able to support multiple transport protocols including HTTPS, CoAP, and MQTT. In addition, Ayla supports multiple connectivity paths through Embedded Agents running on WiFi or Cellular connected IoT devices (including gateways) with connection to the Ayla Cloud. With device virtualization and connectivity in place, data is freely ingested within the cloud platform and transported to Ayla’s application enablement layer that powers purpose-built business applications such as customer care and field service portals.

Telecom Operators leveraging Ayla’s Virtualization Platform can realize strong success around solving their core challenges in the following ways:

- **Drive new B2C revenue** by connecting, managing, and selling high-value smart home solutions (e.g., security, elder care) through a singular device virtualization platform.

- **Drive new B2B revenue** by developing and selling vertical applications (e.g., fleet management, asset tracking) that leverage network device connectivity through a singular device virtualization platform.

- **Reduce complexity and support Opex** by consolidating management of multiple business lines/systems (e.g., VoIP, video) and new connected home solutions (e.g., security, elder care) into a singular device virtualization platform.

- **Reduce customer churn** by analyzing performance of customer devices (e.g., video, VoIP, security, elder care) and pro-actively resolving issues through a singular support application.