

Zero Touch Network-as-a-Service with NFV: Champion Business Model Canvas

Business Model Canvas

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
<p>Wholesale providers (ENNI, bandwidth)</p> <p>Standards development organizations</p> <p>Open source organizations</p> <p>Metro and carrier Ethernet network equipment providers</p> <p>Backend support systems suppliers</p> <p>Technology evolution</p> <p>Technical support services</p> <p>Network implementation</p> <p>Technology recommendation</p>	<p>* Implement a service /network configuration system or solution that allows service continuity with no service impact during service creation /modification/deletion, automating the Network Engineers' configuration change function.</p> <p>* Tie MANO to business operations orchestration for top-to-bottom automation</p> <p>* Deploy ETSI MANO stack, as back office management, to support network virtualization for vCPE</p> <p>* (KA-01) Expose a catalog of available on-demand /self-service Carrier Ethernet Services to Business Customers, for sites within and beyond customer's direct geographical network reach</p> <p>* (KA-04) Establish a tool to request on-demand quotation and ordering of new services from the catalog described in KA-01 with delivery target date</p> <p>* (KA-02) Enhancing the provisioning process, reducing as possible the human intervention. Streamlined ordering and activation process for Ethernet services.</p> <p>* (KA-03) Performance reports and details both local and remote service provider</p> <p>(KA-05) (Improved capacity management)</p> <p>(KA-06) (Customer needs analysis, solution design, proposal elaboration and service delivery.) Note: NaaS demo is currently set for standard offers, hence the customer selects what he/she wants to purchase and specifies key parameters. There is no solution design and proposal at that layer, involved in the demo.</p> <p>(KA-07) (Sales force training, collaterals and information distribution to indirect sales channels)</p> <p>(KA-08) (Customer service, problem resolution and retention.)</p> <p>* (KA-09) Product Sales</p> <p>* (KA-10) Creation of customer-facing Quote to Cash experience.</p> <p>(KA-11) (Creation of a customer-facing Assurance portal.) (Consideration for next POC)</p>	<p>* Automated quoting to order process - fixed price for fixed service</p> <p>* On-demand self ordering of Carrier Ethernet Services, for sites within and beyond service provider's direct geographical network reach, with rapid service delivery</p> <p>* "Cloud-like" / Reduced "touch" customer experience</p> <p>* Guarantee that "It just works" (beyond public internet)</p> <p>* Continuity of service especially end-to-end and crossing operator boundaries / Avoid service impact during the service creation, modification or removal process</p> <p>* Assured quality with SLAs and proactive monitoring of the self ordered End-to-End Carrier Ethernet Services</p> <p>* Activating or modifying network configuration to change bandwidth, security, etc.</p> <p>* Improved visibility into the service delivery and engineering process</p> <p>* Faster, more accurate Quote to Cash processes</p> <p>* Easily add or change vCPE functionality (capability in demo environment, but not presented)</p> <p>* Rapid real-time implementation of virtual CPE (vCPE) functions</p> <p>* vCPE: Minimal equipment required, easy to install and use, no field service visit required, equipment arrives by mail, rapid service availability, shorter installation cycle ("Expedia-like" multi-service provider quoting and ordering)</p> <p>(Pay as you go service for bandwidth above fixed price threshold, with usage based billing)</p> <p>(Adding capability to features of existing services e.g. QoS)</p>	<p>* Contractual / SLA</p> <p>* Personal assistance</p> <p>* Self-service</p> <p>* Automated services (ordering, assurance and billing)</p> <p>(Proactive solutions)</p> <p>(Dedicated personal assistance)</p>	<p>Enterprise Customers - Segment by vertical, by size, etc. - Government would be a sub-segment here - SMB, multi-national, financial sector, insurance sector, are further examples - Different security requirements, availability</p> <p>(Consumers)</p>

* (KA-13) Automated processes will drive greater accuracy which will reduce expense tied to re-work.
 (KA-14) (Dynamic Wholesale Provider selection based on real-time Operators interaction, as opposed to using static data)
 (KA-15) (Expose assurance data through self-serve portal)
 * (KA-16) Ongoing assurance of assets ordered.
 (KA-17) (In-line end to end service testing orchestration)
 ??? Expand current relationships through new automated ordering and fulfillment processes.

Key Resources

(KR-IP) Intellectual property
 (KR-NI) Network infrastructure (UNI-ENNI-bandwidth inventory)
 (KR-IS) Information systems
 (KR-HR) Human resources
 (KR-GF) Geographic footprint
 (KR-P) Pricing

Channels

Enterprises Customers preferred to be visited by Sales executive in order to be consulted by service performance or new service offers.
 On-boarding - prerequisite - manual - qualification
 API based ordering
 Web based ordering



Cost Structure

Order accuracy and rework
 Customer maintenance and implementation
 Last Mile access (Optical Fiber OSP), CPE (Firewalls, Routers, etc) & Network infrastructure.
 Customer Care Service and Service Delivery.
 Per-circuit cost
 Operational cost
 SG&A / corporate allocation
 Last mile access
 New cost structures related to dynamic services - not yet well understood
 Cost related to on-demand services e.g. transit, cascade, activation, passed through, finalized at time of transaction
 NaaS drives significant cost reductions tied to resources currently needed to manually turn up services.



Revenue Streams

New revenue streams from existing assets
 100% of the revenue comes from the product portfolio sales (a mix of one-off, periodic variable, and periodic fixed)
 Customer Value willing to pay: Availability time, Restoration time, Customer Service Contact and Following