Mphasis' innovative self-funding transformation model quickens client ROI

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SUMMARY & KEY INSIGHT

Many global enterprises have been showcasing significant growth in their digital transformation journey with respect to moving workloads to the cloud and configuring a multi-cloud infrastructure for easy accessibility to gain advantages such as ease of consumption and improved speed to market. As a result, the enterprise network arena, which has been historically legacy systems driven, is being considered as a key element to expedite digital transformation. The traditional networks present a myriad of manual components, which create roadblocks to the ambitious visions for hardware reduction. To address these challenges Mphasis enables its customers to shift to an API-driven environment, which can be interfaced programmatically and can provide feedback to an overarching orchestrator and automator.

BRIEFING NOTES

Vamshi Rao and Thomas Benjamin, associate vice presidents from Mphasis's networks team, briefed ISG analysts recently about the company's offering in the network space. Mphasis has approximately 13 years of experience in managing large network infrastructure. It is serving more than 55 global clients across industries, 25 to 30 percent of which are software-defined WAN (SD-WAN) and software-defined network (SDN) engagements. It has a stable presence in the network market, with more than 160 network design engineers and SMEs supporting over 450,000 devices globally. The company presents proven expertise in managing large and agile network infrastructure for Fortune 500 customers across verticals.

Equipped with home-grown solutions and an expansive partnership ecosystem comprising solutions from Cisco, Juniper, F5, Check Point, Riverbed, Aruba, Brocade and others, Mphasis positions itself to manage and transform enterprise network estates of various scales. Figure 1 depicts the 35,000-foot point of view of a typical network transformation execution undertaken by Mphasis.

Figure 1: Mphasis Operational Transformation Approach for Enterprise Networks **Deployed Basic & Traditional Net Ops** AI/ML Driven Network Automation Stage 3 Stage 1 Stage 2 Stage 4 · Baseline the inventory , Ticket reduction Proactive resolution Policy based automation Al , ML and analytic based Bring down P1 and P2 volu bandwidth and utilization Best practices capacity · Redundancy checks · Reduction in IT Opex Consolidate the devices logs Health checks Improve uptime and MTTR and events · Problem management Operational dashboards Capacity management Automate Optimize through Robotic, Machine Eliminate Learning and Network Optimizes the network Analytics capacity, inventory, spend Consolidate Eliminate redundant and utilization process, request, tickets and reports Consolidate the Inventory bandwidth, SOPs, standards and process

Source: Mphasis

Some of the key attributes Mphasis showcased in such engagements are described below.

Foundational automation facade to maintain high uptime: The Mphasis value proposition spans from improving the customer's overall infrastructure availability up to end-to-end network transformation. Its self-service automation capabilities promise uptime improvement by at least 10 percent through autoresolution of incidents and tickets. The automation capabilities enable faster provisioning of firewall rules, creating a domain name system (DNS) or dynamic host configuration protocol (DHCP) records based on applications requirements, and help customers to reduce P1s and P2s by 10 percent, which results in less outages and critical incidents.

Outcome-based engagement to expedite customer ROI: Mphasis orchestrates network transformation for clients with the help of a home-grown framework (Build Framework) and a strategy enabling zero downtime deployment. The agile methodology empowers the internal API and script-based tools to onboard applications on SDN, SD-WAN and the policy servers much faster. The dynamic approach helps Mphasis to offer solutions that deliver immediate results and ROI in critical enterprise business processes and operations.

Powering self-healing network features with in-house proficiency: Mphasis strives to deliver the much-awaited self-operating network with its automation and analytics prowess. To achieve this, Mphasis tends to use intent-based networking along with internal technologies such as its proprietary policy servers which are under development. The combined capability of these technologies can be directed to deliver an autohealing or self-healing feature to the customer's network. This could be in the form of provisioning additional bandwidth or additional services.

Investments to make the network service ready-to-consume: Mphasis has made significant investments in establishing its own SD-WAN and SDN proof-of-concept labs. To represent itself as a one-stop-shop for all network transformation or network automation requirements for clients, the company has also invested in developing applications for quality of service (QoS) optimization along with auto provisioning capabilities. Its network telemetry capabilities can collect information from various data sources through a set of automated communication processes. The information is transmitted to one or more pieces of receiving equipment for making analytical decisions. Some of the other investment areas that drive the company's network prowess include standardized design and configuration to support IoT devices at the edge. Mphasis also has a package of services it created to put network-as-a-service (NaaS) functionality on a platform like AWS or Azure for consumption.

In-house tools to ace technology convergence with agility: Mphasis uses its multitudinous in-house offerings to fast-track enterprise network transformations by modernizing their technology stack. Its unified service transformation platform, NextSTEP, cuts the capital investment needed for the core network by bringing together cloud, diverse data models, business rules, artificial intelligence (AI), automation and robotic systems. The intertwined impact of these technologies ramps up the digital stack for the enterprise, heightening user experience and business process management efficiency. Furthermore, the internally developed NetFig tool applies automation to expedite the configuration, conversion and implementation of equipment from primary OEMs such as Cisco, Juniper and Arista. Mphasis provides an end-to-end service spanning niche downstream activity, such as upgrading operating systems across the client devices in case the network is not patched or there are existing security bugs. Mphasis' proprietary NetIOS takes a detour from conventionally upgrading the OS, and instead, identifies the version that is running to make a deployment recommendation to the customer. The client is thus retained as the nerve center of the operational activities, while Mphasis powers an automated shroud of guidance.

GUIDANCE

Enterprises are considering the financial impacts on their business from adding to their technology stack to have applications prioritize the bandwidth they need to run. Consistently, there is physical infrastructure that needs to be provisioned in case more raw bandwidth is required. A software-defined network resolves this bottleneck by re-routing the required bandwidth to balance the priority of the functions to be executed by the different applications. SDN and network functions virtualization (NFV) can be looked upon as a disruptive formula to deliver agility, flexibility and programmability to align with the needs of the increasingly critical applications. Enterprises, however, are sometimes hesitant about the complexity and market hype around SDN, necessitating a philosophical bend of mind to understand the different stages and generations of SDN technologies available today. The challenges that concern enterprises are architectural complexity, vendor restrictions, troublesome migration, application mobility and portability constraints, multi-tenant requirements and lack of analytics-based actionable insights.

Mphasis' consultative modus operandi addresses this effectively, fluidizing the end-to-end transformation approach without instances of network outage. Accordingly, Mphasis has developed its enterprise transformation portfolio to keep the customer in the center of the ecosystem. Its foundational Front2Back™ Transformation approach amalgamates cloud capabilities for scalability and Al to provide hyper-personalization. The company's decentralization-oriented approach of "shrinking the core" is aligned with the hardware reduction blueprint that most global enterprises envision.

The company has developed a workforce conversant in digital technologies (for example by upskilling in Python, NETCONF, etc.) and a top-notch technology infrastructure. Its newly established Hi-Tech Wireless Chamber in Bangalore, India is an example. The lab provides a competitive edge over other service providers in its class with respect to having internal facilities to support radio frequency (RF) shielding for IoT, 5G and Wi-Fi testing provisions. Mphasis' network transformation strategy typically has been productized and directed towards delivering ease of consumption through network-as-a-service models hosted over AWS and Azure. The vendor-agnostic attributes are sharpened by the integration layer Mphasis introduced between applications and networks. It enables clients to consolidate intelligence by shifting the control logic from a physical to a virtualized cloud environment.

Overall, Mphasis is a one-stop-shop for all major platform and technology solutions like Cisco, Juniper F5, Checkpoint, Riverbed, Alcatel-Lucent, Aruba and Brocade, and offers a range of innovative solutions services to drive network transformation for global enterprises. ISG Provider Lens considers Mphasis an impactful player in the service provider fraternity with the ability to drive digital network progression with multifaceted transition toolsets and consultative modus operandi.

SUMMARY FACTS

Headquarters: Bengaluru, India

Revenue: US\$1.1 billion total revenue (2019)

Network Services portfolio: SDN framework, Unified communications and collaboration (UCC)

Markets: North America, Europe, Asia Pacific, Africa, Oceania

Industry groups: Telecommunication

RECENT ISG RECOGNITION

Rising Star in Managed SD-WAN Services and SDN Transformation Services (Consulting & Implementation) quadrants in the ISG Provider Lens $^{\text{M}}$ Network - Software Defined Solutions and Service Providers 2020 in the $\underline{\text{U.K}}$. report.

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