

REINVENTING THE NETWORKS

THE 21st CENTURY CHALLENGE

The opportunities, challenges and threats facing IT departments today look very different from what they were just a few years ago. In a very short time since the 21st Century began, the trend broadly termed as "Digitalization" has made the consumer king and has transformed the 21st Century Enterprises' expectations from IT. The 21st Century Enterprise is driven by certain characteristics such as "Experience-Centric", "Service-Oriented" and "Outcome-based". As enterprise embark on a Digital journey and look for revenue models in unchartered areas such as IOT, these tenets become central to the new business model. But to be able to offer experience-centric, service-oriented and outcome-based services, all aspects of IT need to be realigned to the new normal.

As businesses reinvent and transform themselves, only the enterprises that can compete through technology innovation, acceleration and flexibility will survive. As platforms such as Dockers and Containers redefine application hosting and programming undergoes innovations such as "microservices", the network needs to be open yet secure, agile yet scalable, and easy to administer yet flexible enough for real time business changes.

WHAT'S DRIVING THE CHANGE

It's not only about volume

New technologies such as cloud, BYOD, and big data analytics—are redefining how business gets done today, the network plays a vital part in enabling these technologies, which have aggravated the demand for bandwidth, throughput and zero latency, anywhere, and whatever be the device. BI Intelligence forecasts that 40,000 Exabytes of data will be generated globally by 2020. Hybrid IT and the Internet of Things (IoT) are ratcheting up these network pressures even further. This brings with it humongous possibilities to transform business model and so are the challenges associated with supporting and managing the corresponding data explosion and unpredictable network connectivity.



By 2018, 40% of IoT-created data will be stored, processed, analyzed, and acted upon close to, or at the edge, of the network.



Within 2 years, 90% of all IT networks will have an IoT-based security breach, although many will be considered inconveniences.



Gartner says that by 2020, more than 20 billion objects will be connected to the Internet of Things. In a recent Future-Scape report, IDC predicts that: Within 3 years, 50% of IT networks will transition from having excess capacity to handle the additional IoT devices to being network constrained with nearly 10% of sites being overwhelmed.



There is no doubt that network automation, scalability, and security form key success factors for Digital (r)evolution. Enterprise networks, the platform that business run on, need to transform for enterprise IT to be able to offer these new capabilities.

At HCL we future proof your network infrastructure with our end-to-end portfolio of network services. Our network services encompass strategy, design and implementation across a range of network requirements: Software defined DC & WAN, unified communications & collaboration and network automation.

HCL's NEXT GENERATION NETWORKS FRAMEWORK

| Consumers | Real time work is cloud Real time work is cloud Real time Business Dashboards Real time Business Dashboards Real time Business Dashboards Real time Business Dashboards Real time Business Dashboards Real time Business Dashboards | Operations Services |
|-------------------------------|--|---|
| Consumption Platforms | Image: SharePoint Im | Applications Performance Security Services |
| Platform Hosting | Public Clouds Private Clouds Legacy Data Centers Partner FEDRATED CLOUDS | Dynamic Provisioning |
| Intelligent Infrastructure | SOFTWARE DEFINED DC LANSOFTWARE DEFINED CAMPUS LANINTELLIGENT ANALYTICSRecords ControllerEngagement ControllerAnaltyics PlatformServicesWorkload IntelligenceDistributed ComputeIntelligent CollaborationUser Behaviour CapturesDevice Behaviour Captures | DDI Management Route Management |
| | SOFTWARE DEFINED WIDE AREA NETWORK | Capacity Planning |
| Hybrid Network Functions | Branch Routers Layer 3 Switching Dc Lan Core Campus Lan Core Wireless Access Hard Phones | Governance & Reporting |
| | Load Balancers Soft Phones Collaboration Core Dc Routers Lan Access Video Endpoints Virtual Network Functions Specialized Hardware Commodity Hardware | Monitoring |

HCL's SOLUTIONS FOR NEXT GENERATION NETWORKS

| A framework to facilitate enterprise movement towards transport (MPLS /Internet) agnostic defined accession Each & agile network with software defined accession Evolution that a 'Network Service Node (NSN)' module that enables secure and direct connectivity to public clouds, laying the foundation of a hybrid cloud Evolute HCL Evolve helps interconnect multiple UC collaboration platform where any IP telephony endpoint irrespective of the make can fully leverage its available audio and video functionalities SENSUS A framework that takes into consideration a broad range of engineering and architecture parameters in the lifecycle of services for SON keeping overall synergies and holistic IT approach in mind NetBot A solution to automate the complete operational file year elements in the very fabric of NetBot Introved staff efficiency & increased ROI into the very fabric of NetBot Bind spot elimination, Network agility Bind spot elimination, Network agility | | TRANSPORT INDEPENDENT SITE |
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| Image: With the second seco | | towardstransport(MPLS/Internet)agnosticdefined ecosystemarchitecture. It has a 'Network Service Node (NSN)'- Flexibility to connect to network & cloudmodule that enables secure and direct connectivity toproviders |
| Solutions and give an endpoint agnostic collaboration platform where any IP telephony endpoint irrespective of the make can fully leverage its available audio and video functionalities - Single pane of glass we based GUI and workflow structure Image: SENSUS - Pay as you grow Image: Sensus - Network agility A framework that takes into consideration a broad range of engineering and architecture parameters in defining the right SDN strategy. This include the entire lifecycle of services for SDN keeping overall synergies and holistic IT approach in mind - Network agility NetBot - More and the complete operational lifecycle of network devices from provisioning to policy based change management, compliance and security administration. Automation is integrated - Improved staff efficiency & increased RO RO Reduced risk & business loss Blind spot elimination, Network agility - Blind spot elimination, Network agility | | EVOLVE |
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| lifecycle of network devices from provisioning to policy based change management, compliance and security administration. Automation is integrated Reduced risk & business loss Blind spot elimination, Network agility | | NetBot |
| | () (∕-) | lifecycle of network devices from provisioning to policy based change management, compliance and security administration. Automation is integrated- Reduced risk & business loss - Blind spot elimination, Network agility |
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WHY PARTNER WITH HCL

HCL network services is adapting its offerings to the changing enterprise business and digital needs by embracing the most relevant trends around IoT, SDN, and collaboration and communications with a differentiated positioning as a 'Network Service Integrator'

NSI framework enables enterprise manage the service providers in a consistent and efficient way, making sure that the performance across a portfolio of multi- sourced goods and services meets user's needs. While processes encompass a value chain, which has many touch points within the enterprise IT landscape, orchestrating these processes enable integration of multiple process areas and function areas across the extended enterprise to allow seamless flow of operational pipeline across multiple providers.



The company developed a long-term network practice that defines four essential growth pillars. The first two pillars — "Lead" and "Reposition" — largely consist of the network service's current business portfolio and new growth opportunities. The third and fourth pillars — "Disrupt" and "Extend" — form the basis to develop a leading position in the network transformation and virtualization business, including new opportunities around Internet of Things. The company developed a long-term network practice that defines four essential growth pillars. The first two pillars — "Lead" and "Reposition" — largely consist of the network service's current business portfolio and new growth opportunities. The third and fourth pillars — "Disrupt" and "Extend" — form the pillars. The first two pillars — "Lead" and "Reposition" — largely consist of the network service's current business portfolio and new growth opportunities. The third and fourth pillars — "Disrupt" and "Extend" — form the basis to develop a leading position in the network transformation and virtualization business, including new opportunities. The first two pillars — "Lead" and "Reposition" — largely consist of the network service's current business portfolio and new growth opportunities. The third and fourth pillars — "Disrupt" and "Extend" — form the basis to develop a leading position in the network transformation and virtualization business, including new opportunities around Internet of Things.

HCL has strong partnerships with leading technology and services vendors, which enables the company to foster innovation and offer best of breed services and solutions to its customers. At the same time, HCL strongly focuses on close partnerships with start-ups to seek new business opportunities and innovate around emerging technologies.

HCL NETWORK PRACTICE

250+ Customers Data center Networks, WAN Networks, Corporate LAN Redesigns, Voice migration and Transformations.

> **360** Degrees partnership ranging from product development, beta testing and implementation

> > 🗐 \$350 Mn

In annual revenue and growing

of working with 70+ Telcos and 25+ OEM platforms

\$10 Mn Invested in State of the art labs

SDN Certified Resources

PAC (A CXP Group company) publishes an exclusive report on HCL offerings in DACH market. HCL's unique next gen network services & carefully devised localization strategy is creating substantial value for customers in DACH market. WX7343

To know more contact us at ITO@hcl.com



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Relationship BEYOND THE CONTRACT

