SECURE, SOFTWARE-DEFINED INFRASTRUCTURE FOR THE **AGILE ENTERPRISE**

HIGHPOINT

AGILE BUSINESSES NEED AGILE IT

WHETHER THE GOAL IS RESPONDING TO THE THREAT OF DISRUPTION, DIFFERENTIATING FROM THE COMPETITION OR SIMPLY DRIVING GREATER EFFICIENCIES, ORGANISATIONS OF ALL TYPES ARE LOOKING TO DIGITALISATION TO TRANSFORM THEIR BUSINESS.

Harnessed effectively, the digital world delivers significant benefits: Speed and agility enables organisations to accelerate innovation and to quickly respond to customers' online preferences. Business applications that deliver the best possible end-user experience increase productivity and digitally connect the organisation, and its data empowers the business with a wealth of actionable intelligence.

To truly leverage the benefits of digitalisation requires a fundamental change in the way IT infrastructure is planned, designed and operated. Traditional approaches do not provide the agility or flexibility to support rapidly advancing digital ways of working and manual configuration and management are unable to keep up with the pace of change. An Agile Enterprise needs an environment that is driven by business demand, where operations are automated and intelligence is used continuously to optimise performance.

Secure Software-Defined Infrastructure from HighPoint is designed specifically to deliver this environment:

- **Software-Defined Data Centre** - Delivering seamless, hybrid multi-cloud environments with true workload mobility.
- **Software-Defined Access** - Consistently applying policy and continually adapting to the needs of your business and end-users.
- **Software-Defined WAN** - Intelligently managing inter-site connectivity and bringing end-users closer to the applications and data they need.

A FUNDAMENTAL SHIFT IN THINKING

TRADITIONAL APPROACHES TO INFRASTRUCTURE FOCUS ON DELIVERING A STATIC SET OF CAPABILITIES...

At a set of point in time requirements are gathered and a network architecture is designed and implemented to meet these requirements. This architecture is then preserved in order to minimise the cost of operation until requirements change significantly and a re-design becomes unavoidable.

The Intent-Based Network delivers a paradigm shift in the way that core-to-edge enterprise networking is designed and deployed. Rather than focusing on 'How' the network should work, the starting point for design is 'What' the network needs to deliver to the business – the "Intent".

The intent-based approach translates the required business outcomes into policies that are consistently applied across the entire estate, automating the configuration of components and continually monitoring, analysing and optimising performance. User access, security and quality of service are centrally managed to ensure that the best customer experience is delivered at all times, across any device, regardless of location.

The Intent-Based Network delivers significant advantages:

Increased Business Agility

The network is responsive to a rapidly changing digital environment – new applications or services can be deployed at speed, providing the business with the flexibility and elasticity it needs.

Improved Operational Efficiency

Time spent designing, configuring and testing your network is vastly reduced. Traditional manual tasks are automated, removing the risk of human error and delivering greater levels of service availability and performance to users.

Better Compliance & Security

Security is integral across hybrid infrastructure environments, ensuring that centrally managed policies are enforced consistently, regardless of geographic location and access method.

THE SOFTWARE-DEFINED DATA CENTRE

WORKLOAD MOBILITY, LOWER PUBLIC CLOUD COSTS AND THE ABILITY TO RAPIDLY SPIN UP RESOURCES INDEPENDENTLY OF ORGANISATIONAL GOVERNANCE AND PROCUREMENT FRAMEWORKS, ARE EXTENDING THE BOUNDARIES OF TRADITIONAL DATA CENTRES AND LEADING MOST ORGANISATIONS TO OPERATE HYBRID, MULTI-CLOUD ENVIRONMENTS.

This presents complex challenges: how to balance and switch workloads seamlessly across clouds, how to ensure consistent security policies and postures across multiple cloud environments and how to capitalise on the inherent elasticity of the available resources. Agile Enterprises need software-defined data centres that simplify, automate and secure critical on-premise and cloud application and data environments seamlessly.

Software-Defined Data Centres deliver an intent-based environment by translating defined business outcomes into a set of centrally managed, portable policies that are applied to and travel with workloads wherever they reside. This enables the Agile Enterprise to leverage a true hybrid cloud environment for applications and data, utilising a combination of on-premise, co-located and public cloud offerings as appropriate for maximum efficiency and flexibility, all with the confidence that a common set of segmentation, security and availability policies are applied consistently throughout the hybrid multi-cloud.

Management and orchestration of workloads across the hybrid cloud is achieved seamlessly through a single management console, allowing monitoring, configuration and visibility of applications and data stores that are dispersed across multiple cloud environments.

The clients we have helped to embrace Software-Defined Data Centre fabric have seen key benefits:

Reduced Costs

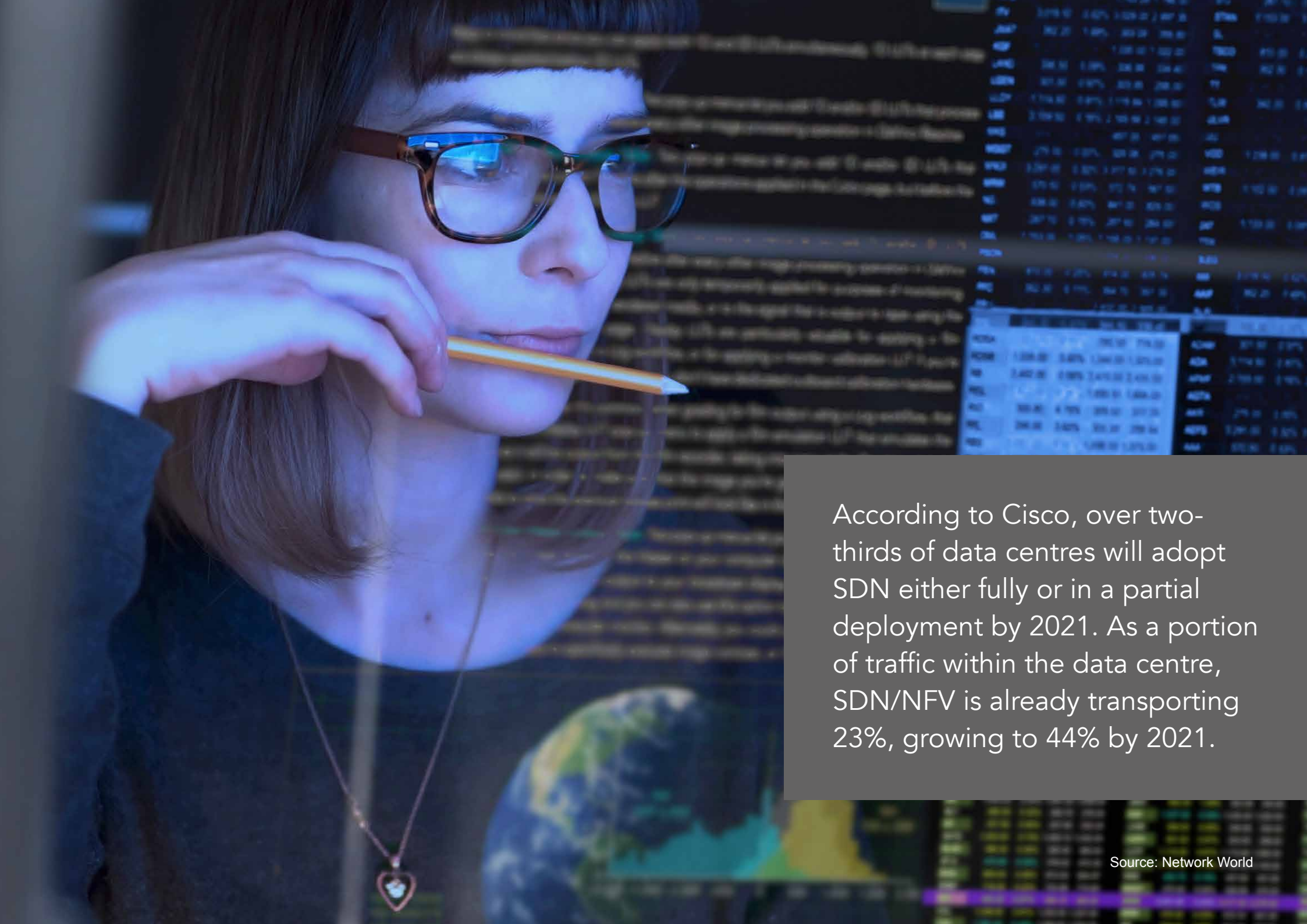
Significantly lower operational expenditure by optimising the usage of public and private cloud resources.

Increased Business Agility

Simplify and accelerate the deployment of applications across multiple hybrid cloud environments.

Enhanced Application Security

Enforce security for corporate applications and data through centrally managed, consistently applied policies that travel with the application.



According to Cisco, over two-thirds of data centres will adopt SDN either fully or in a partial deployment by 2021. As a portion of traffic within the data centre, SDN/NFV is already transporting 23%, growing to 44% by 2021.

Source: Network World

SOFTWARE-DEFINED ACCESS

AN INTELLIGENT DIGITAL BUSINESS ARCHITECTURE IS BASED ON INTENT AND IS RESPONSIVE TO THE CHANGING DEMANDS OF THE BUSINESS.

In a digital business, requirements evolve rapidly, and traditional network implementations cannot keep pace with these changes. In order to effectively support the Agile Enterprise, the network must be redefined:

Proprietary, hardware-centric deployments must be replaced with open, programmable software-defined solutions supported by strong automation capabilities.

Security must evolve from a traditional overlay approach to become integral to each component and capability provided by the network, providing context-based security at all times according to centrally defined and managed policies.

Real-time analytics and continuous network optimisation must be employed to ensure the best possible customer experience at all times across all devices from any location.

The result is Software-Defined Access delivering intent-based access.

Reduced Management Overhead

Centralised, policy-based management automates the provision, orchestration, configuration and management of your core-to-edge network and beyond into the cloud.

Increased Business Agility

Through an intent-based network that is able to rapidly adapt to changing requirements and deliver on business need.

Reduced Security Risk

By controlling access based on centrally managed policy and enabling a holistic and context-based approach to security.

IDC says that intent-based networking "represents an evolution of SDN to achieve even greater degrees of operational simplicity, automated intelligence, and closed-loop functionality."

Source: Network World

SOFTWARE-DEFINED WAN

THE ADOPTION OF THE CLOUD COMBINED WITH A GEOGRAPHICALLY DISPERSED WORKFORCE AND GREATER DEMAND TO ACCESS DATA AND APPLICATIONS IS PUTTING THE TRADITIONAL WIDE AREA NETWORK UNDER TREMENDOUS PRESSURE.

Simply increasing bandwidth is not the answer. Organisations need to place more intelligence into their wide area network, increasing visibility, control and management to ensure they securely deliver the best possible experience to each user, regardless of where they are on the corporate network.

Software-Defined Networking in a Wide Area Network (SD-WAN) leverages all of the principles of Software Defined Networking (SDN) and overlays this onto your existing inter-site connectivity. By separating the physical infrastructure from the controlling application, you are able to apply greater intelligence to how traffic is routed across your network, dynamically applying policy and context to the WAN.

SD-WAN enables digital and cloud transformation by providing flexibility and choice on how users access the applications, workloads and data they need without compromising security. It allows you to define the 'Intent' for WAN use, to automatically apply these policies to each location and dynamically manage traffic flow to deliver the best possible user experience.

Increased Business Agility

Through increased control and central management, the ability to rapidly deploy new sites or add new services across the network.

Improved Performance

Through policy-based management that ensures the fastest and most reliable connection is utilised, delivering the best possible end-user experience.

Reduced Security Risk

Through the ability to make security an integral part of the WAN and remotely deploy the most appropriate security measures at each site.

According to IDC, the SD-WAN Infrastructure market grew 65% in 2018 to reach $1.37 billion world-wide and is forecast to grow at an annual rate of 31% to reach $5.25B by 2023.

Source: IDC

HOW CAN HIGHPOINT HELP?

WE HELP OUR CLIENTS TO BECOME AN AGILE ENTERPRISE BY ASSISTING AND GUIDING THEM THROUGH THE STEPS OF DIGITAL TRANSFORMATION.

We see the big picture, making sure that the steps that our clients take today lead them to the destination they need to reach tomorrow. We also have the detail covered, with specialists in each of the key areas of digitalisation, allowing us to inject expertise on individual transformation projects to reduce risk and expedite value.

Digital Strategy

HighPoint's Digital Strategy methodology analyses the technology, commercial and cultural factors of your particular business areas to provide realistic and achievable goals for Digital Transformation tailored specifically to your organisation.

Transformation Programme

HighPoint's Transformation Programme services combine the latest in advanced technology expertise with many years of experience in successfully delivering complex change for enterprise clients. We ensure that your local or global business-critical technology transformation programme remains on track and delivers the full benefits of digitalisation to the business.

Technology Acceleration

HighPoint's Technology Acceleration methodology puts your team side by side with our highly experienced engineers throughout to maximise knowledge transfer, build practical skills quickly and ensure confidence in rapidly deploying advanced capabilities into production.

Agile Operations

HighPoint's Agile Operations team will help you deliver the agility that comes with self-service provisioning, supported by automated orchestration of development, test and production environments according to centrally defined security, geo-location and availability policies directly into the hands of your business units that need them without compromising the security of the business.

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