

# The IT Network Infrastructure Revolution in Healthcare

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Authors:

**Adriana Allocato**

Research Manager, Health Insights

**Silvia Piai**

Research Director, Health Insights

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# ACCELERATION OF IT NETWORK INFRASTRUCTURE MODERNISATION IS CRUCIAL TO STRIVE AND SURVIVE IN THE FUTURE OF HEALTHCARE

The pace of digital network modernisation has ramped up to address the emerging needs of the healthcare ecosystem, which a traditional legacy infrastructure cannot keep up with.



## VIRTUAL HEALTH

Accelerated deployment of telehealth/virtual visits, chatbot assessments and remote health monitoring

*Fuelled by COVID-19, digitally enabled remote care will drive **70% growth in spending on connected health technologies** by providers and life science companies by 2023.*

Source: IDC Health Insights FutureScape 2021



## WORKFLOW OPTIMISATION

Simplifying everyday tasks to enhance operational efficiencies: manage the virtual environments and streamline/redefine workflows with minimal disruption

***31% of EU healthcare providers consider workflow modernisation a top priority** to improve operational efficiency.*

Source: IDC Multicloud Survey, 2020 (n = 71)

Healthcare providers need to prioritise an IT infrastructure modernisation strategy.

**Legacy healthcare systems are limited** in terms of modern functionalities and connectivity and can't support innovative business and organisational settings.



**63%** of European healthcare providers' IT budgets are allocated to maintain or upgrade existing systems.

Source: IDC European Tech and Industry Pulse Survey, 2019-2020 (healthcare)



These emerging trends **need the support of high-performing IT networks able to scale on demand.**



# A MODERN NETWORK INFRASTRUCTURE CREATES THE AGILITY REQUIRED FOR DIGITAL TRANSFORMATION

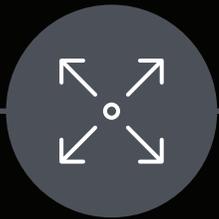
Healthcare organisations are focusing on their infrastructure modernisation to lay the foundation of a new digital healthcare ecosystem. Network modernisation will help healthcare providers deliver on their priorities and objectives. **Around 43% of European healthcare providers are investing in modern IT infrastructure.**

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*Complete visibility into the network user's experience, along with AI-driven troubleshooting tools to speed problem resolution, made Juniper Mist the right choice for Queen Elisabeth Institute.*

**Stefaan Dewulf, IT architect, KEI**

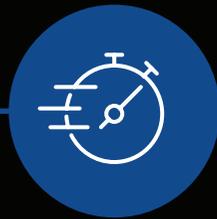
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## FLEXIBILITY

Keeping pace with a rapidly changing environment to include innovative technologies and support any service both clinical and administrative

**41%** “We will invest in technology to close gaps in our digital transformation efforts.”



## PERFORMANCE

Increasing access to clinical data at the point of care when needed to improve resilience and business continuity requirements

**50%** “Having a digitally resilient organisation will help us introduce new business model innovation.”



## OPTIMISATION

Managing a vast amount of data quickly, as well as data transition and delivery, to activate the workflow through applications for clinicians, patients and administration

**31%** of EU HCOs prioritise the modernisation of traditional workloads.



## EFFICIENCY

Simplifying network management and keeping TCOs in control, for example by reducing the number of switches in the datacentre to deliver operational savings

**28%** of EU HCOs prioritise the modernisation of datacentre infrastructure to improve operations.



## SECURITY

Moving workloads to the cloud to separate applications with different security requirements

**29%** of EU HCOs have approved security investment to meet new operational norms after COVID-19.

IDC Multicloud Survey, 2020 (n = 71)

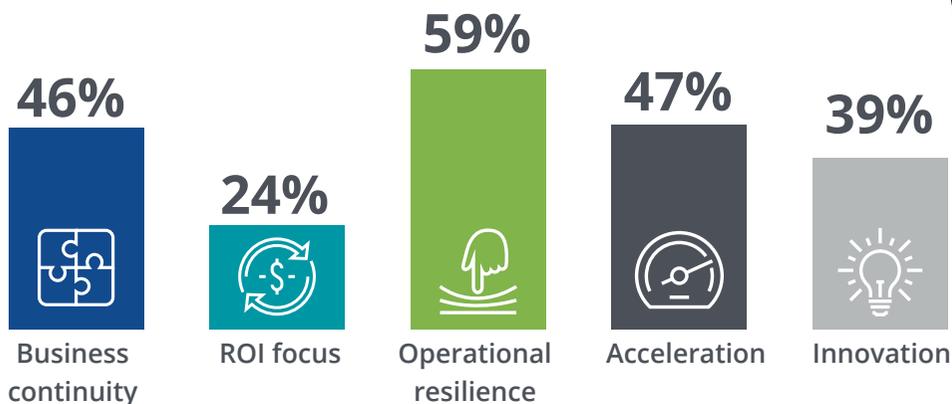
# CLOUD-BASED NETWORKING ENSURES HIGHER RESILIENCE AND BUSINESS CONTINUITY WHILE CONNECTING AND SECURING APPLICATIONS END TO END

Healthcare organisations are increasingly considering cloud when:

- Upgrading, expanding or replacing datacentres
- Modernising, transforming or replatforming key applications
- Business demands more agility or speed from IT

This is supporting every business need across the journey to resilience and digital transformation.

## % of healthcare organisations considering cloud as a key technology across the different stages of return to growth and innovation



To gain efficiencies, optimise workflows, lower the costs associated with healthcare delivery and offer personalisation in care plans to improve outcomes.



### Cloud networking for operational efficiency

34% of European healthcare providers use hybrid cloud for IT infrastructure management.

Source: IDC Multicloud Survey, 2020



### Cloud networking for workforce experience

63% of European healthcare providers have adopted cloud-based productivity platforms to improve workforce experience.

Source: IDC EMEA Future of Work Survey, 2019



### Cloud networking for patient experience

30% of European healthcare providers have adopted cloud networking for patient data specific solutions (EHR, medical imaging, medical information exchange).

Source: IDC European Tech and Industry Pulse Survey, 2019-2020 (healthcare)

# SECURITY BY DESIGN TACKLES CHALLENGE OF GETTING THE BALANCE RIGHT BETWEEN COMPLIANCE AND BUSINESS TRANSFORMATION

Infrastructures need to be fit for purpose, supporting clinical workflows and patient experience. At the same time, they need to support compliance to data regulations, keep patient information safe and build trust. To get this balance right, healthcare organisations need to adopt a new layered approach to security to enable scalability, intelligence and automation.

## Key aspects of layered network security technology should include:



**Endpoint security**  
to manage vulnerabilities for individual devices



**Containerisation**  
to prevent threats spreading rapidly once they have gained access to the network



**Identity management**  
to authenticate users and control access



**Trust management**  
to address the fact that users and resources can reside outside the network perimeter



**Secure data exchange**  
to safeguard data in motion



**A software-defined architecture** to provide the speed required to keep up with digital transformation

The nature of cybersecurity threats is changing. Hackers are using AI and ML to create more sophisticated, automated attacks. Digital transformation is further changing cybersecurity requirements, resulting in greater complexity and a perimeter that is disappearing, and all at an accelerating pace.

**Healthcare IT executives are looking for solutions to address this complexity and help them become more proactive in managing security risks. In their security strategy:**



**39%** of healthcare organisations will prioritise security automation and orchestration.



**29%** of healthcare organisations will prioritise the rationalisation of security tool environments.