Capgemini

BARTS HEALTH
ACHIEVES STABILITY AND SECURITY WITH PUBLIC CLOUD

Capgemini supports deployment of the MS Azure Cloud solution, with unlimited cloud capacity and capability unlocking efficiencies, productivity gains, improving outcomes for patients, and providing a blueprint for other NHS Trusts.

Barts Health is one of the largest NHS Trusts in England. Its 18,000 staff work in five major hospitals and numerous community facilities, where they provide world-class clinical services to more than 2.5 million people in the City of London, East London, and beyond.

Barts wanted to create a secure, reliable, scalable, and agile operating environment. By doing so, the Trust would enable the rationalisation of multiple departmental legacy systems, pave the way for the adoption of new digital health technologies, applications, and capabilities, and open up opportunities in the wider integrated care system.

In line with the NHS's cloud first strategy, championed by NHS England, in 2019 Barts Health commissioned Capgemini to help accelerate the Trust's own digital transformation and transition to the public cloud. This would provide dedicated healthcare professionals and a wide range of support staff with the platform to deliver great services that improve patients' lives.

Client: Barts Health NHS Trust

Region: UK

Industry: Public Sector

Client Challenge: Barts Health wanted a fast, efficient, and seamless migration of core IT workloads into the cloud to lay the foundations for fully exploiting the potential of cloud computing.

Solution: Barts' IT team worked with Capgemini, Microsoft, and VMware to develop new Azure VMware Solution (AVS) architecture that met its precise requirements and now represents Microsoft's best practice reference architecture for all AVS deployments.

Benefits:

- Improved stability, resilience, and security of foundational platform
- Trust employees enabled to spend more time on high-value tasks
- Greater trust and confidence in 24/7 availability of core systems from healthcare professionals, enabling total focus on patient care
- Transformational increase in IT capacity and scalability providing Barts with access to the potential opportunities of the cloud

Utilising Microsoft cloud infrastructure aligned the Trust neatly with NHS England's decision to adopt Microsoft 365 as the front-end productivity solution for all health service organisations. Barts Health immediately took 18,000 licences, which, among various benefits, facilitated extensive use of Microsoft Teams during the COVID-19 pandemic.

ENSURING SERVICE CONTINUITY FOR ALL FRONTLINE STAFF

Barts Health's partnership with Capgemini embraced end-to-end cloud services to modernize the Trust's IT estate, migrate mission critical services from multiple on-premises data centres into the public cloud, and subsequently manage the cloud environment. A fundamental challenge for the project team was the need for a seamless transition of systems into the public cloud, given the immediate and potentially life-threatening impact of any loss of service.

"Our IT platform is now stable, resilient, and secure. Confidence and certainty in the availability of our systems, data, and services is now much improved across the Trust, which translates into operational efficiencies and improved outcomes for patients."

SARAH JENSEN
Chief Information Officer, Barts Health NHS Trust

The partners carried out a detailed discovery and assessment process using the comprehensive, industrialized Capgemini Cloud Migration Factory (CCMF) methodology to produce a complete inventory, usage profile, and dependency map of Barts' entire application ecosystem. Gathering and analysing this data provided a forensic level of business intelligence to inform the design and selection of the technology platform and migration strategy that would meet Barts' goals, including maximising its return on investment.

GROUND-BREAKING SOLUTION TICKS ALL THE BOXES

The impact of COVID-19 delayed the project by nearly a year and, with Barts Health having a large estate still using the 2008 version of Microsoft, the Trust and Capgemini agreed on a move to Azure VMware Solution (AVS), a new Microsoft cloud service verified by VMware and running on Azure infrastructure. This solution accelerated Barts' digital transformation, allowing the organisation to explore the benefits of Azure faster and more efficiently while also ensuring that existing medical systems and devices dependent on specific IP addresses continued to function normally.

Although AVS was a new product, the partners immediately recognized its value as a means of quickly and easily migrating Barts' existing VMware workloads, virtually unchanged, from on-premises data centres into the cloud. Once the platform was ready, it enabled 107 servers and 32 applications to be migrated in just three months.

This relieved an immediate security issue and provided those systems with a stable and reliable environment while paving the way for a planned migration of additional resources and the modernisation of applications using Azure Native services.

CREATING A TEMPLATE FOR ALL NHS TRUSTS

The Trust valued the ability to continue using traditional VMware tools within Azure, maximising its confidence that the project would maintain operational continuity throughout the transition. Capgemini worked in close partnership with Barts' IT team and Microsoft to develop AVS solution architecture that met the Trust's precise requirements, which subsequently became Microsoft's best practice reference architecture for all AVS deployments.

The project team also co-ordinated a Microsoft training programme for Barts to maximize the value of its investment. As a result, Barts became one of the first organisations in the world to use AVS, with technical skill, expert planning, and comprehensive internal communications ensuring a seamless transition with no downtime.

UNLOCKING THE HUGE POTENTIAL OF THE AZURE PUBLIC CLOUD

Over the next 12 months, the Trust transitioned over 200 terabytes of data and 32 applications to the public cloud, resulting in a decommission of 107 servers and delivering a stable, secure, and modern cloud environment with 100% availability. The next step on the Trust's journey is to mature its use of the public cloud, unlock the huge potential of the Azure public cloud, and use it to support the world leading Barts Life Sciences healthcare innovation programme.

In the long term, the Trust is now able to access the vast array of easily integrated clinical capabilities within the Azure ecosystem. For example, the Microsoft Cloud for Healthcare provides a huge range of digital tools, insights, and analytics to increase clinicians' productivity, enhance the patient experience, and improve outcomes.

Barts identifies Capgemini's commitment, transparency, skill at relationship building and ability to create an environment in which collaborative innovation thrives as key enablers in its long-term partnership.

"I have a very strong sense that our systems and data are in technical environments which are secure, less liable to downtime and at an 'always on' level of performance. That really matters for clinical practice."
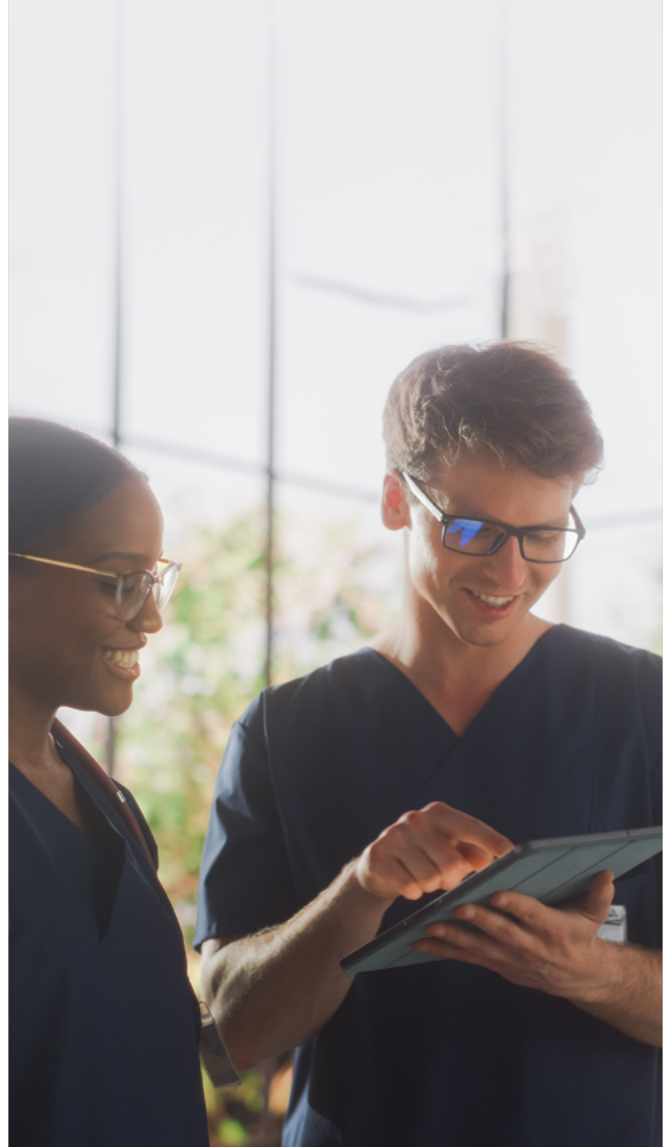
CHARLES GUTTERIDGE
Chief Clinical Informatics Officer, Barts Health NHS Trust

"Now we have peace of mind and more time and bandwidth to make plans for the future. Capgemini has demonstrated great resiliency as an organisation. They've worked closely with us on our cloud journey, and at every stage resolved challenges and issues with us in a highly collaborative way. The biggest benefit is undoubtedly no downtime."

FAY STEVENSON
Deputy Director of Informatics at Barts Health NHS Trust

About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided every day by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of nearly 350,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering, and platforms. The Group reported in 2022 global revenues of €22 billion.

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