

Creating New Cost-Efficiencies and Expanding Capabilities with a Unified SD-WAN Solution



Abzorb enabled Norfolk County Council to transform its network, optimise its cost-base, and deliver enhanced user experiences without needing to 'rip and replace' legacy technology.

Norfolk County Council (NCC) required a partner that could understand its IT estate and deliver a solution that would remove complexity, improve security and reduce costs. The authority wanted to move beyond a large rigid supplier and reduce its reliance on traditional legacy MPLS networking.

Abzorb developed a bespoke SD-WAN solution that integrates existing technology, protecting NCC's existing investment with the highest performing connectivity providers across more than 221 sites. It worked in collaboration with NCC on a £1.2 million change project aimed at reducing the complexity of its networking environment, increase user satisfaction, drive long-term cost-efficiency and preparing the authority for the future.

Opportunities for Improvement

Legacy MPLS networks

NCC recognised the limitations of its legacy MPLS network and actively sought network transformation. While MPLS lacked the flexibility and scalability needed to accommodate growing user demands, NCC proactively sought alternative solutions to enhance its network.

Limited resource

With a busy team tasked with delivering essential IT services, there were opportunities for NCC to maximise the value of its IT services for end users across libraries, museums, offices, social care facilities, and Fire & Rescue services.

User experience challenges

There were opportunities to improve how network faults were dealt with. Resource constraints meant there was an opportunity to improve management of network faults as internal teams were allocating much of their time to troubleshooting and internal ticketing.

A single network provider

In order to diversify and strengthen its network architecture, NCC explored options to reduce the reliance on a single network provider. The single provider caused rigidity and inflexibility in the network. With only one provider, there was also a single point of failure for the network.

Cybersecurity risks

Recognising the evolving cybersecurity landscape and the need to mitigate growing threats, NCC prioritised enhancing cybersecurity measures to reduce vulnerability across its IT sites.

Remove complexity

Building on previous IT investments, including existing equipment on sites and in data centres, NCC recognised there was no option to 'rip and replace', deciding to enhance its existing infrastructure removing complexity.

The Solution

NCC recognised that the cost of inaction was too great to continue to use its legacy approach to networking. Abzorb responded by developing a bespoke SD-WAN-based solution that integrates existing hardware, the best connectivity options at every site as well as DDoS protection and automated ticketing. It understood the range of challenges facing the NCC and built a solution that would remove complexity, improve security, increase resilience, relieve budget and management pressures.

Its internet-based solution meant it could benefit from the best networking technologies available at every site including FTTP, SoGEA, 5G and Fibre Ethernet while selecting the most cost-efficient and high performing provider at each site. This offers immediate flexibility compared to MPLS and enables NCC to realise cost reductions over time. Carrier management is provided by Abzorb reducing complexity while increasing connectivity options. Local internet breakout instead of at the data centre increases resiliency in the network and removes a single point of failure. Abzorb's design integrated new Cisco Meraki devices while leveraging existing routers, saving costs without compromising performance. Its engineers worked on-site to reprogram NCC's routers, facilitating a smooth transition and integration process. DDoS protection

at the network level was installed to mitigate potential threats, safeguarding the integrity and availability of the network.

Abzorb centralised ticketing by developing a full ITSM integration, which allows NCC to raise tickets that Abzorb manages end-to-end. NCC's team is no longer burdened with managing tickets and network performance issues.

Benefits

SD-WAN reduces costs

Abzorb enables NCC to use the most cost-effective connectivity solution at each site combined with local internet breakout.

Simplified management

NCC's IT team has a single networking solution to manage with an ITSM solution with automated ticketing flowing through to Abzorb

Optimised user experience

90% of end users at NCC say they see improvement in network performance since the deployment and internal teams are no longer burdened with troubleshooting

An Internet-based solution

Abzorb enabled NCC to reduce complexity with the ability to use the best networking technology and suppliers at every site.

Vulnerability Scanning

As each site transitioned to the SD-WAN, a vulnerability scan was conducted to confirm the security of the site.

“NCC wanted to reinvent its approach to networking. We consolidated a complex networking environment into a single solution that reduced costs and simplifies management. A small team now has control over their networking environment, ticketing support from a single helpdesk and a solution that leverages the best connectivity options at every site. We've proven that network transformation can deliver simplicity, flexibility, and agility for local councils.”

Dean Al-Sened, Head of Public Sector and Enterprise, Abzorb

DDoS Protection

Council infrastructure was secured using a 24/7 Managed DDoS Monitoring and Mitigation service, operating at the ISP Layer.

Integration of Legacy Technology

Abzorb's in-house development team created bespoke integrations with existing infrastructure to streamline service delivery.

Bespoke Alerting

Abzorb's development team built a bespoke alerting engine that monitors each site and reports back by email if any of them lose connectivity.

Monthly SDR Meetings

With monthly SDR meetings, bespoke Management Information was produced in collaboration with both parties.

The Future

Abzorb's expertise and forward-thinking approach has put NCC in a position to explore emerging technologies and strategies to further optimise its IT capabilities for now and the future. This foundation not only enables NCC to meet the evolving demands of its constituents but also positions the council to proactively anticipate and adapt to emerging trends, technologies and cloud services.

“Working with Abzorb was refreshing as they are agile and responsive. The team delivered network transformation, cost savings and a simple and easy to manage solution as planned, to budget, and well ahead of schedule. They clearly understood our networking environment, resources and existing technology and developed a solution that solved a range of long and short-term challenges. We now have the best connectivity options at each of our sites with a single management platform and ticketing system. Abzorb helped us deliver the outcomes we needed.”

Kurt Frary, Head of IT, Norfolk County Council