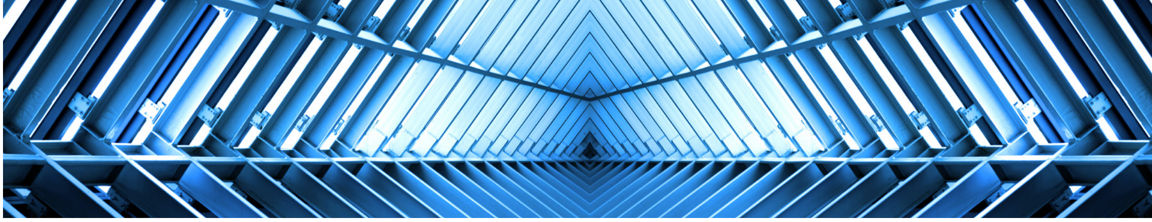
S&P Global
Market Intelligence
Business Impact Brief



Secure Access Service Edge:
Lessons Learned and Advice From Security Practitioners

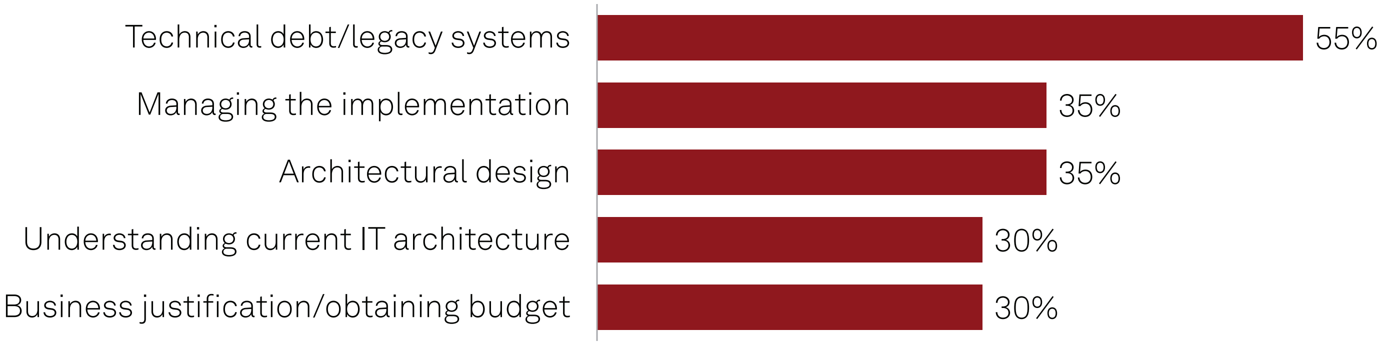
The Take

S&P Global Market Intelligence conducted a custom secure access service edge (SASE) research project in late 2022 and early 2023 with respondents in Europe and Asia-Pacific. The research focused on determining key SASE decision-making criteria, areas of benefit, deployment models, roadblocks and lessons learned. The first report in this SASE series covered potential business and technical benefits; this report covers roadblocks and lessons learned from real-world SASE deployments.

As the first Business Impact Brief in this series showed, organisations are realising value from SASE deployment. However, since SASE migration is a complex project spanning multiple organisational groups and technology tiers, achieving benefits is a significant exercise. The study shows that larger organisations have struggled more due to the increased complexity of their IT estates ("technical debt") and added burden from legacy systems that must be replaced or updated to support SASE's technical requirements.

According to study respondents, organisations struggled with five primary SASE roadblocks: technical debt and legacy systems, managing the implementation, architecture design, understanding the current IT architecture and business justification/obtaining budget.

Top SASE roadblocks



Q. Below is a list of potential or actual SASE/ZTNA project barriers or challenges. Please select the top three barriers that you already encountered/believe you may encounter during the life span of the project.
Base: All virtual executive discussion board respondents (n=20; APAC=10, Europe=10).
Source: S&P Global Market Intelligence custom SASE study, March 2023.

Business impact

Technical debt and legacy systems. Technical debt describes components of a system that require updating to support new technologies. For example, legacy layer 3 firewalls implemented when perimeter defences were state of the art must be updated to support hybrid cloud architectures and SASE. Another issue is upskilling staff on new technologies such as cloud and SASE.

One study participant, CISO of a 10,000+-employee insurance organisation in Hong Kong, noted that addressing technical debt requires "very clearly understanding what, where, when and how applications integrate together across networks, internally and externally, across different infrastructure components, and also in association with any transversal technology that may be part of this fabric (i.e., internal firewall rules) — you need to invest time up front to fully understand all aspects, rather than piecing it all together in a troubleshooting mode during project implementation."

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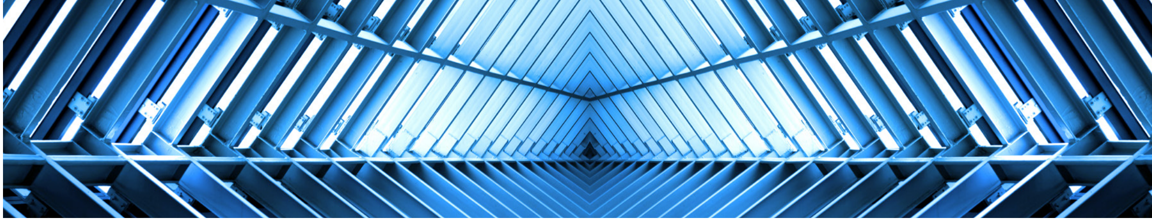

Managing the implementation. SASE is one of the more technically complex implementations undertaken by an organisation, and a successful implementation lays a foundation for successful digital transformation projects. Deployments involve IT operations and security teams, as well as business-line stakeholders affected by the SASE implementation. Large organisations generally have more difficulty in this area because complex systems are spread over many locations. It is critical to design the SASE implementation so that each project phase is achievable and can demonstrate a “win” for the overall project.

Another study participant, CIO of a healthcare organisation in Sweden, said, “Managing implementation is quite taxing on staff. Do not plan for more rollouts than is realistic. Do not overstretch or try to work faster than the plan. This will put too much strain on the staff.”

SASE architecture design. Defining the SASE architecture is key to overall project success, and as many study participants indicated, this can be a significant undertaking. SASE includes as many as five distinct technology tiers and hundreds of dependencies and interconnections, so taking the time to properly design the system architecture is a necessity.

The head of infrastructure and information security for a UK-based 10,000+-employee financial services firm described architectural challenges: “Roadblocks included legacy applications and siloed architectures. Legacy technologies cause a hindrance to digital transformation, and there is lack of harmonisation between technologies and governance… We need to ensure we have security by design… We had quite a few impediments.”

Understanding the current IT architecture. For many respondents, obtaining a complete understanding of their IT architecture was a daunting task. This requires detailed mapping of legacy systems, asset locations and data in use. Fortunately, some organisations have already begun this process as part of digital transformation projects, such as creating software bills of materials and compliance projects that require robust documentation of system architectures and dependencies.

The director of cloud security and technical risk for an IT services organisation in Hong Kong described their challenges as follows: “Understanding current network architecture to the level required to effect consistent changes across [the organisation] may sound like a simple task, but in reality, it is nothing short of a Herculean endeavour if you are a large organisation operating in multiple countries. Gauge your architecture well and prune and prime it prior to make a good substrate for SASE.”

Business justification and obtaining budget. Some respondents indicated only minimal business justification was required, while others struggled to obtain budget approval. Urgency played a role in speeding this process. In cases where SASE was the only way forward, such as supporting remote workers due to the pandemic or addressing critical security shortcomings, budget was easier to secure.

The CISO of a data services company in the UK described the issue this way: “It’s really tricky to estimate the full cost during the budgeting stage. It was almost inevitable to overrun… I would have done more design work before requesting budget or split the design phase into a business case with dedicated cost and outcome.”

Looking ahead

As SASE technologies mature, some roadblocks mentioned in this brief will be minimised. SASE was defined in 2019, and vendors did not deliver commercial offerings until 2020 or later. Since then, SASE technology stacks and deployment methodologies have matured, as have integrations with legacy systems. And as vendors and service providers continue delivering successful implementations, the deployment process will continue to become simpler and more streamlined. In addition, numerous study participants mentioned that obtaining proper expertise for SASE was key — and leveraging experienced third parties can make the difference between success and failure.

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We commissioned this research to help companies cut through all the noise and get a true picture of both the good and the bad. Understanding both the obstacles businesses are facing and the benefits that can be achieved through SASE enables us to evolve the services that we offer. Our highly experienced network security consultants can support you throughout the journey, including to help determine your strategic approach and target operating model, as well as providing ongoing proactive management. We can help you de-risk adoption and realise greater benefits, faster.

EMEA whitepaper APAC whitepaper