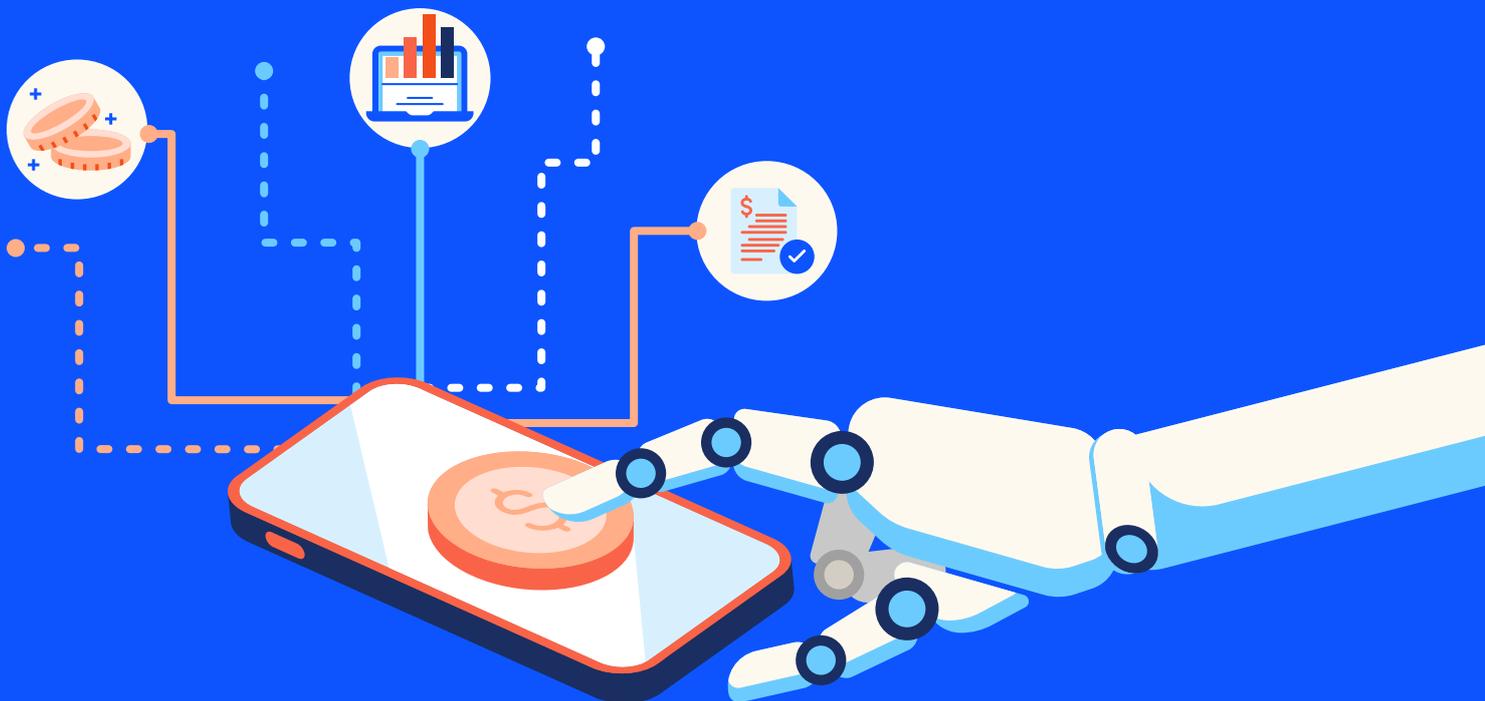# Financial services need resilience for AI success.
Is their network up to the task?

Telstra

The financial services industry is widely using technology for process and workflow transformation to generate new value and remain competitive. However, challenges remain including high customer expectations, technology return on investment, network performance, complex regulatory environments, levels of fraud, cybersecurity risk, legacy technology, and data fragmentation.

Technology investment is central for the financial services industry, with McKinsey calculating that banks alone spend around US$600 billion on technology annually. However, it warns that despite this IT spending, productivity remains low. It says that companies should focus on technologies with the greatest impact, while scaling back investments that do not improve workflows, customer engagement, or business models.

With a complex global hybrid digital infrastructure supporting their business, the network plays a key role underpinning the success of all these initiatives. In fact, analyst IDC says that technology innovation and business resilience in the financial services industry depends on real-time scalable connectivity and AI-ready infrastructure.

Driving success in AI

Like other sectors, AI is a key technology that the financial services industry hope will revolutionise productivity and competitiveness. A recent survey commissioned by Telstra International from Omdia found that 77% of respondents in that industry have deployed at least one AI model.

Typical use cases include using conversational AI chatbots to make interactions more natural and accurate. AI also plays a key role in preventing fraud and financial crime by detecting and flagging suspicious behaviour in real time. It also helps improve the quality and speed of financial decisions such as claims handling and credit scoring.

All these technology initiatives depend on network performance. For example, AI chatbots need to access data and processing in both cloud and data centres to deliver real-time accurate responses to customers. Poor network performance can slow response times down, potentially damaging high customer expectations and sending them onto more expensive agent calls, or worse, to competitors.
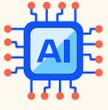
Integrating AI into financial systems

The financial services industry is integrating AI into a wide range of systems, including trading platforms, risk modelling, and fraud detection. These workloads require high resiliency and predictable performance, not just raw bandwidth. While network latency matters for trading, resiliency is even more critical. Networks must support multiple diverse routes to manage failures without impacting operations. Brief downtime, even in milliseconds, can erode profitability significantly.

This is reflected in the Omdia survey, which found that there are a range of priorities for network investment in financial services. The top three are: greater reliability (56%), more flexibility/agility (44%) and higher performance.

Financial services also use private connectivity such as EPLs and MPLS IPVPNs for sensitive workloads to separate financial data traffic from the public internet. This is essential to meet compliance requirements and protect customer data. Financial services companies are also highly focused on data sovereignty rules and often need physical route maps as part of their network requests for proposals (RFPs).

Boosting bandwidth

Bandwidth needs are increasing to manage the growing volumes of data processed across the network. The Omdia survey found that the top bandwidth consuming applications in the financial services sector were payment processing/transfers (34%), enterprise operations such as ERP or CRM (34%), high-frequency trading (27%), business intelligence/analytics (24%), IoT data collection and response (22%).

Financial services firms, especially those with trading operations, are deploying much higher bandwidth backbone networks, with increases from 10 Gbps to 100 Gbps common, as shown in the Omdia research. This is driven by AI-enhanced analytics and trading algorithms, which generate large volumes of data.

In addition, two-thirds of financial services respondents planned to either double or triple their cloud and data centre connectivity over the next 18 months, with 11% planning increases of four times their current bandwidth. Smaller increases are planned for smaller branch sites, with 70% of respondents expecting capacity increases of around 100%.

Delivering high-bandwidth low-latency network for global trading firm

Telstra International worked with a trading firm which provides liquidity on global markets and directly to clients. As it operates across major financial exchanges worldwide, the firm's business model demands real-time execution of trades across asset classes, as every millisecond could determine the success or failure of a trade. Their trading strategies require not only the lowest possible latency but also highly predictable and stable network performance.

To address these challenges, Telstra International delivered a tailored solution leveraging Ethernet Private Line (EPL) services. Secure, uncontended point-to-point connectivity is established for core backbone routes using EPL, with the circuit terminating at Telstra's cable landing stations. This purpose-built, low-latency network provides deterministic routing between key financial exchanges, delivering the shortest possible path to minimise round-trip delay (RTD).

Network design requirements

The internet remains a popular underlay network for connecting enterprises to the cloud and other services. However, not all internet connections are the same, and financial services companies need to ensure that their choice of internet underlay meets the business requirements for resilience and security.
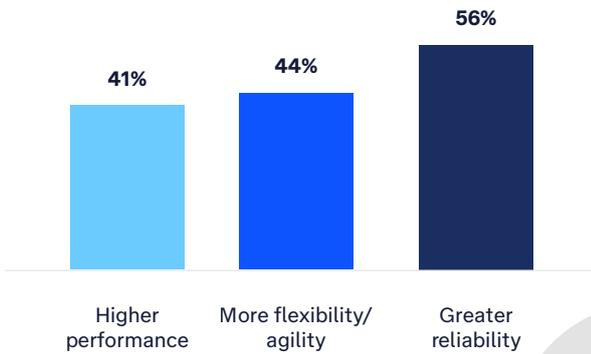
For example, they need to ensure that their internet service provider (ISP) offers enterprise-focused traffic management and peering to relevant regional cloud services, rather than optimised subscription streaming services, for example. The Omdia survey found that 60% of enterprises planned to move from best-effort public internet services to business-grade options.

MPLS IPVPNs can also play a role in financial services networks. In fact, the Omdia survey found that 80% of enterprises across all sectors were planning to rebalance their public Internet and private network investments.
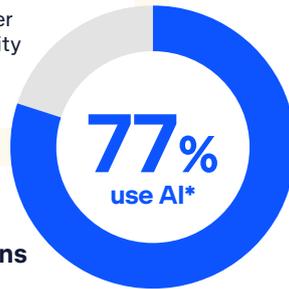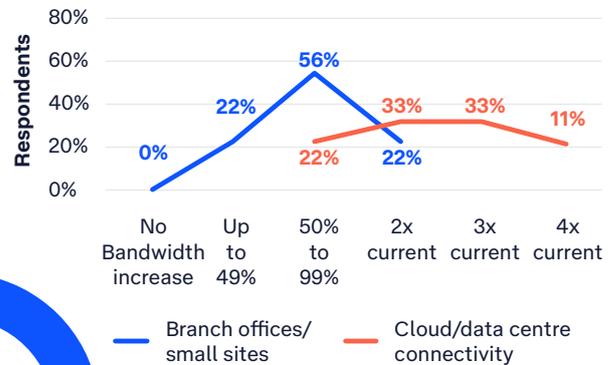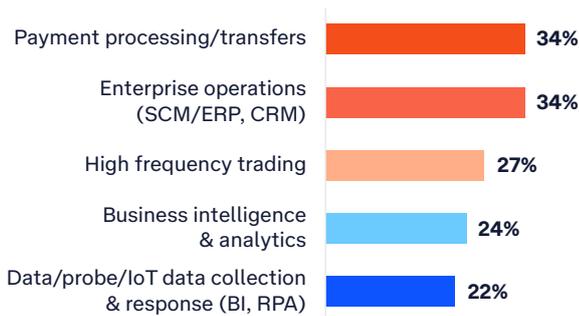
Digital demand snapshot: Financial Services

Top network investment drivers

- Higher performance: 41%
- More flexibility/agility: 44%
- Greater reliability: 56%

Expected bandwidth increases – next 18 months

Respondents (y-axis: 0%, 20%, 40%, 60%, 80%)

Branch offices/small sites:
- No Bandwidth increase: 0%
- Up to 49%: 22%
- 50% to 99%: 56%
- 2x current: 22%

Cloud/data centre connectivity:
- 50% to 99%: 22%
- 2x current: 33%
- 3x current: 33%
- 4x current: 11%

— Branch offices/small sites
— Cloud/data centre connectivity

77% use AI*

5 most critical bandwidth-consuming applications

- Payment processing/transfers: 34%
- Enterprise operations (SCM/ERP, CRM): 34%
- High frequency trading: 27%
- Business intelligence & analytics: 24%
- Data/probe/IoT data collection & response (BI, RPA): 22%

Live 100Gbps circuits: Largest sites

Category	Today	18 months
None	7%	2%
1-2	37%	22%
3-5	22%	27%
6-10	20%	20%
11-25	12%	17%
26-100	0%	10%
101 or more	2%	0%

■ Today ■ 18 months
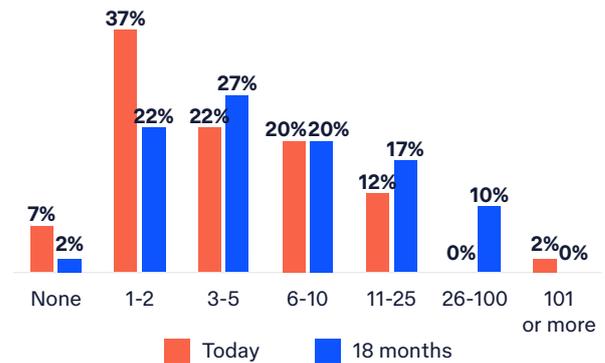
N=41   Source: Omdia 2025

*one or several types

Why Telstra International for financial services

Our extensive digital infrastructure and connectivity services across Asia Pacific, including our wholly owned EAC and C2C subsea cable systems, provide greater reliability and more consistent low latency for trading routes connecting Singapore, Hong Kong, Japan, and other financial hubs across the globe. This allows us to provide trading firms with high-speed, high-bandwidth, and low-latency execution.

Telstra International offers fast, flexible and resilient global networks with multi-supplier options (EPL, MPLS IPVPN, or Internet) using transparent access routes. We are increasing our investments to expand capacity, enhance resilience, and build a next-generation network powered by AI, machine learning, and cognitive computing, designed to be adaptive and autonomous.

Leading global financial institutions already use Telstra International, and our experts can help you build resilient networks that enhance customer experience and streamline operations.

Find out more about our services for the financial services industry here:
telstrainternational.com/en/enterprise/industries/financial-services