



The state of IT and OT convergence in Korea



The way that businesses use technology is evolving at a rapid pace. Tech-driven innovation is a key battleground for competitive differentiation across industries and markets, as organisations embrace the Internet of Things (IoT), big data, Artificial Intelligence (AI), cloud, and modern network technology as part of a push towards Industry 4.0.

Building interconnected digital value chains requires organisations to unify traditionally separate processes across Information Technology (IT) and Operational Technology (OT). This convergence of IT and OT helps businesses achieve new levels of growth and operational scale, although it raises critical security challenges that can be difficult to address.

Telstra commissioned technology research company Omdia to assess the state of IT and OT convergence in North Asia, including China, Hong Kong, South Korea, Japan and Taiwan. While 85% of firms expect business benefits from convergence, many find it difficult to manage cybersecurity challenges.

Despite some common hurdles, each market shows interesting distinctions. Here are some key barriers and enablers for IT/OT convergence in Korea.

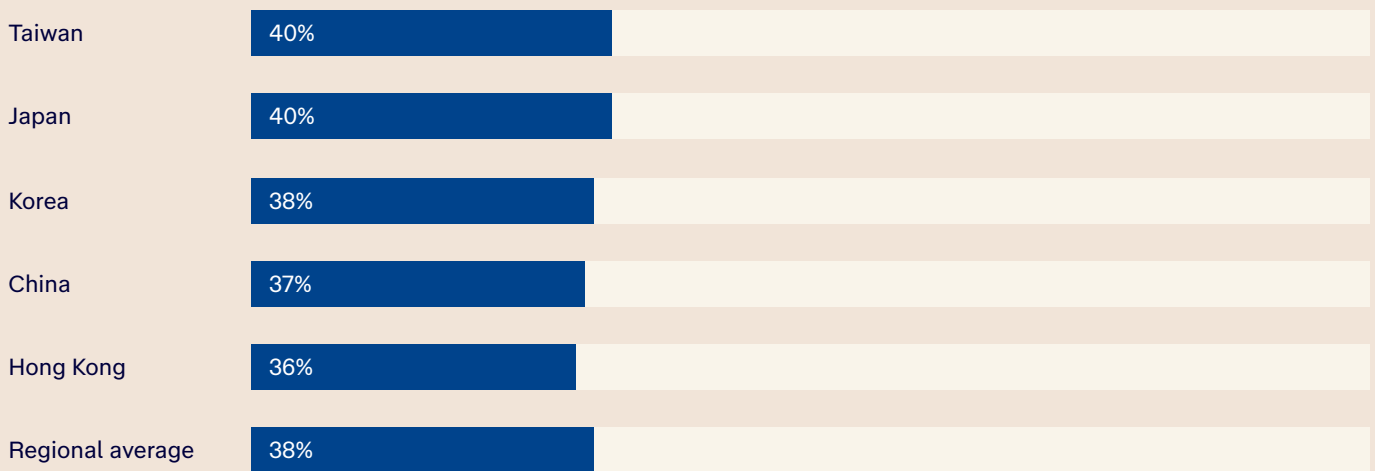
IT/OT maturity in Korea

Korea has the third-highest levels of IT/OT system integration in North Asia, with 38% of IT and OT systems integrated across industrial settings. That puts it on par with the cross-region average (see Figure 1).

Just 24% of firms have completed some level of digitisation to connect IT and OT systems, well below the regional average of 34%. However, almost half (48%) have integration activities underway, compared to a cross-region average of 43%.

Most Korean firms (52%) plan to have IT and OT well integrated in the next 12 to 18 months, although only 46% see it as important for business outcomes, compared to a cross-region average of 48%.

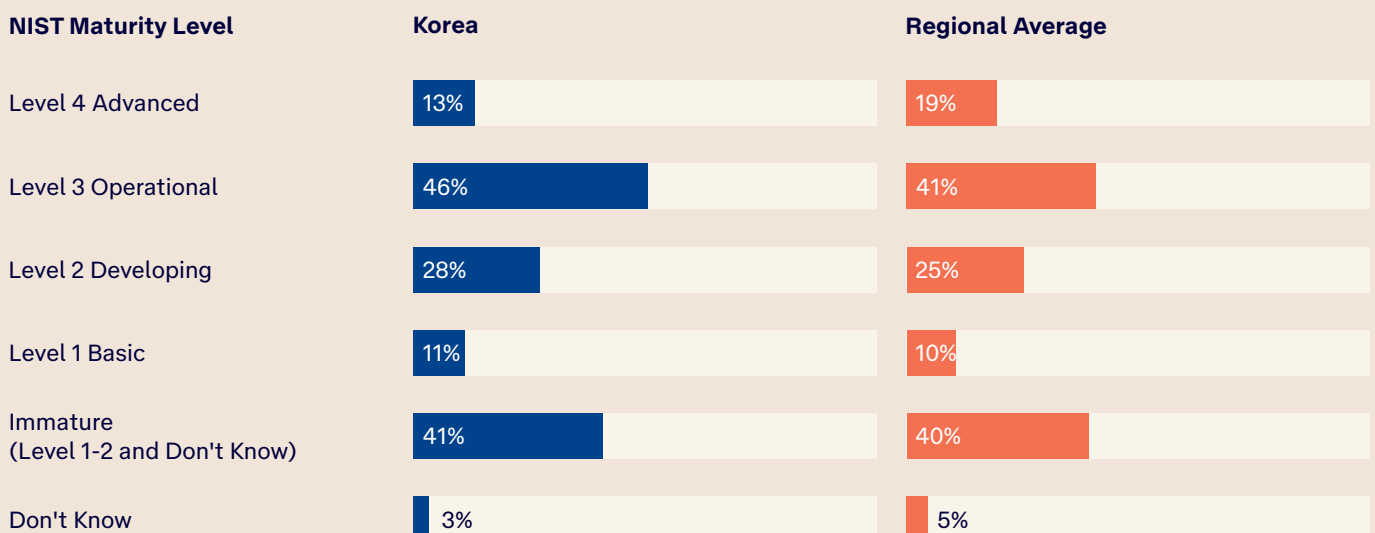
Figure 1: Percentage of IT/OT integration by market



OT security maturity in Korea

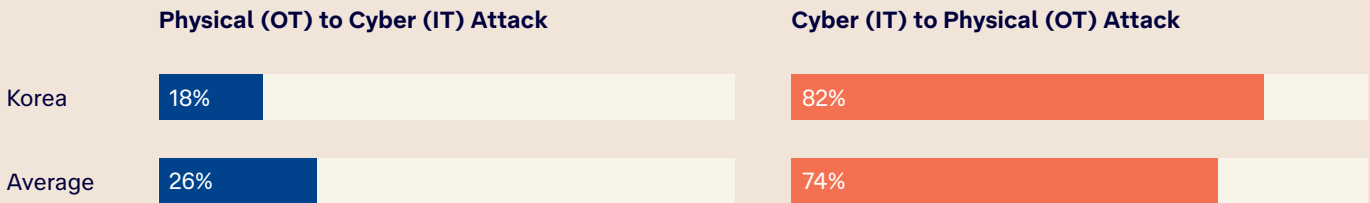
Korea is the least mature market when it comes to OT security. Just 13% of firms say they're 'advanced' in securing OT, well short of the cross-region average of 19%. Overall, IT/OT security is sub-optimal, with 41% of firms reporting immature levels (see Figure 2).

Figure 2: OT security maturity in Korea



In Korea, 82% of the most significant major security incidents or breaches that impacted operations started in cyber (IT) – significantly higher than the cross-region average of 74% – leaving just 18% that started in OT (see Figure 3). This is a challenging issue for all markets in North Asia, highlighting how attacks targeting IT can impact operational processes and technology as convergence progresses.

Figure 3: Origin of attacks on organisations



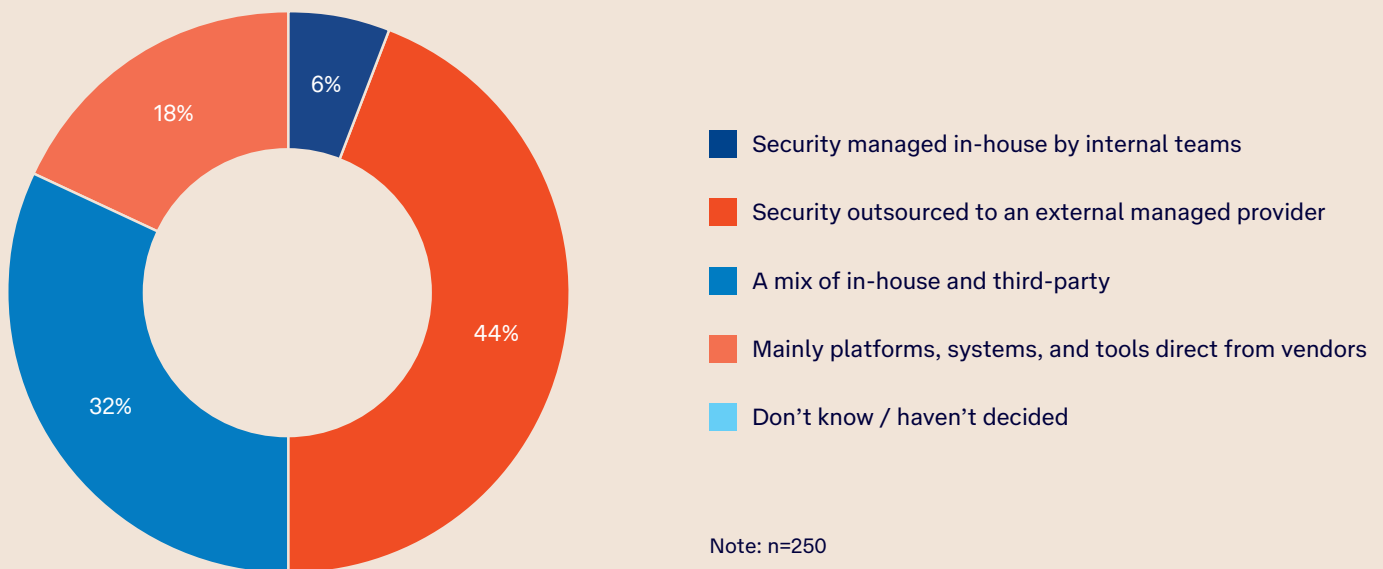
Calling in outside help

Finding the right talent to help manage the complexity of IT/OT convergence is incredibly challenging for many organisations. Risks often mount very quickly, as threats that target one previously siloed system can rapidly have a broader impact on critical business data and processes once integrated.

That's why most firms across North Asia plan to engage a third party to help them manage IT and OT security in the next 18 months, with 42% saying they'll completely outsource security to an external managed services provider.

The need for third-party help is strong in Korea, with 76% of firms planning to outsource to an external provider (either completely or in a mixed arrangement), while just 6% plan to go it alone and 18% say they'll rely largely on vendor platforms, systems, and tools (see Figure 4).

Figure 4: How will your organisation likely manage IT and OT security 18 months from now?



With a team of trusted IT and OT security experts, Telstra is fully equipped to help North Asian organisations take the next step on their IT/OT convergence journeys. To learn more about how convergence can transform your business, get in touch with a Telstra representative or download the full white paper at telstra.com/securing-ot-it-convergence-whitepaper



Want to learn more about how to improve IT and OT security in your organisation?

Contact your Telstra account representative for more details.

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