Enterprise Intelligence that leads to a better government

Verizon's vision for the public sector in Singapore

Verzon



Transforming the government experience for everyone

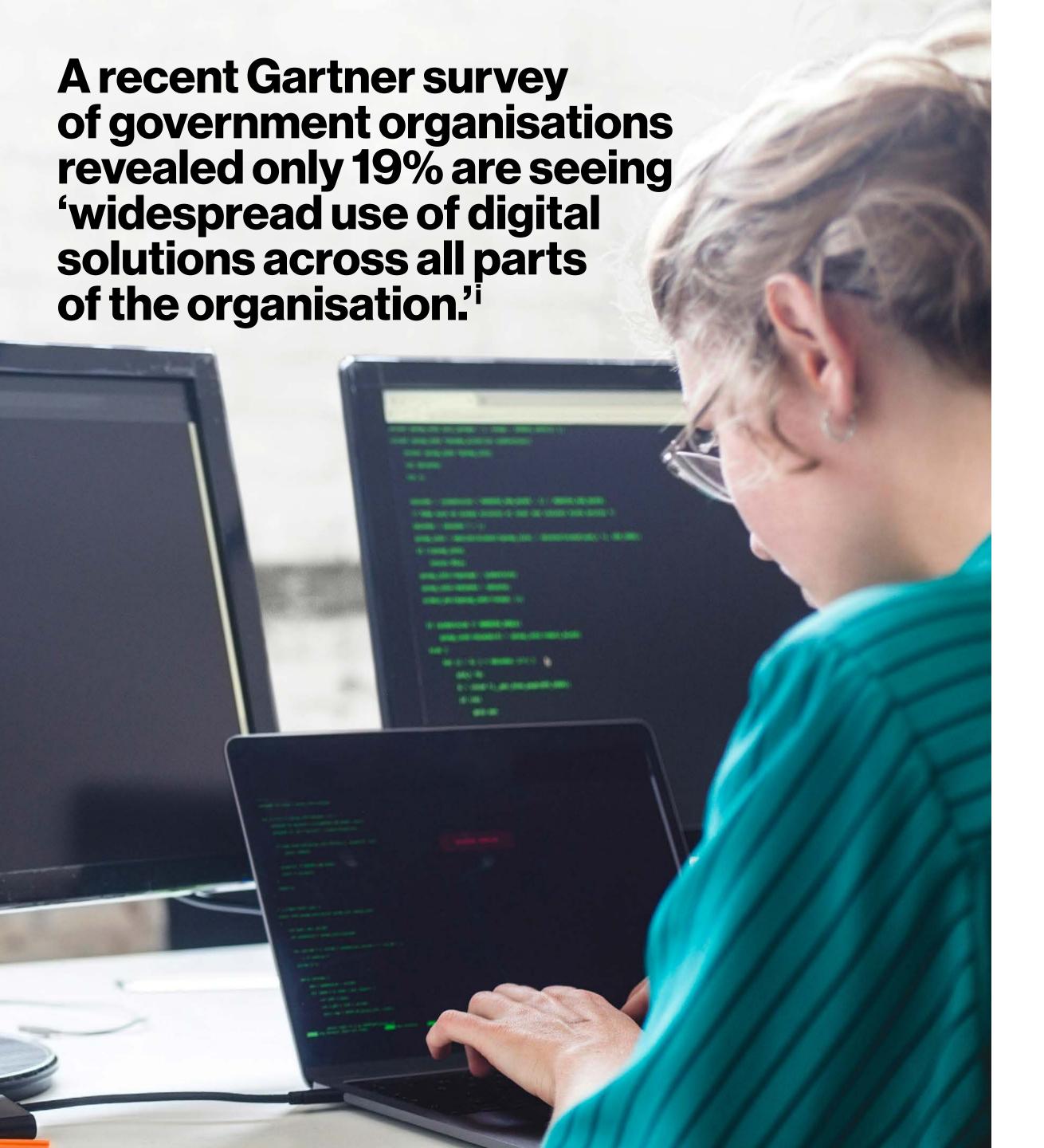
Becoming a technology-enabled organisation.

The pandemic was a wake-up call for many government organisations. An urgent need for digital experiences forced agencies to invest in new hybrid solutions for employees

and citizens. This transformation unleashed an opportunity to dramatically improve government services.

To tackle this change, Verizon uses Enterprise Intelligence to help organisations go beyond survival to deliver more efficient, user-friendly and seamless public services. Enterprise Intelligence uses technology to capture an end-to-end vision of your organisation as it operates, providing a secure platform to support the latest technologies and partner solutions. Agencies that adopt these platforms can continuously translate information into insights, driving 'next best actions' that are contextual, consistent and guided by clear government goals.







A better citizen experience

Citizen expectations for public services are continuing to increase. A 2019 independent review reported that Australians were less satisfied with government services when compared with the private sector. On top of that, 58% of agencies said they lacked the skills for digital delivery – preventing them from modernising public sector services and meeting community expectations.ⁱⁱ



Real-time decision making

Governments have often struggled with efficient planning and decision making. Business intelligence and data science using artificial intelligence (AI) could significantly lower costs from late intervention and allow responsive and timely government service delivery. Gartner estimates that by 2024, 60% of government AI and analytics investments will aim to directly impact real-time operational decisions and outcomes.ⁱⁱⁱ



Case Management as a Service (CMaaS)

Case management as a service (CMaaS) can build institutional agility by replacing legacy systems with modular case management products. Gartner predicts that by 2024, government organisations with a composable case management application approach will implement new features at least 80% faster than those without.ⁱⁱⁱ

Challenges of today

As demands for improved government services and cyber security attacks increase, the APAC public sector has struggled to keep up. A connected digital experience is no longer a want for citizens, it's a need.

Poor visibility

About a third of governments surveyed by Forrester Consulting on behalf of KPMG cited data siloes between channels, jurisdictions and locations as a key barrier to progress on citizen-centricity. Advanced technology can give agencies a clearer view of their citizen behaviour, helping them better address community needs.

Failure to scale

Despite increased focus and investment, 55% of digital government programs are failing to scale, according to a survey from Gartner. In the survey of 166 government organisations, 10% of respondents said they are in the early stages of experimenting, exploring or deploying citizen-facing digital services, while only 5% reported they were at the top of the maturity scale.

Cyber security and data privacy

The rise in cyber attacks in APAC is credited to the region's rapid digitalisation coupled with low cyber security awareness, training and regulations. According to IBM X-Force Threat Intelligence Index 2022, Asia was the most attacked region in 2021, receiving 26% of all global attacks.^{vii}

Shortfalls in digital services

A Deloitte study of seven countries in APAC found that 41% of people are struggling to access digital services on their own. On top of that, 67% of respondents expect the quality of government services to be on par with those offered by the private sector. With 900 million new internet users predicted to be added by 2025, the need for investment in digital services by governments continues to grow.vi

Public sector insights in Asia Pacific

APAC government officials and citizens alike believe that the public sector isn't investing enough in digital services, though Singapore is an acknowledged and long-standing leader in this space. People are expecting their government to provide exceptional services across channels, just as private sector businesses do.

While the pandemic was a nudge in the right direction, a lack of cyber security awareness and pressure from communities are forcing government agencies to act fast. Digital transformation can help the public sector innovate rapidly, meet expectations and simply keep up with the times.

Industry benchmarks: How do you compare?

Citizens now expect Uber-like services from the public sector, and governments are rising to the challenge. Government technology spending is up across the board, and leaders in the industry understand the vital role digital tools will play in improving the citizen experience while staying secure. **77%**

of respondents to a Flexera IT spending survey indicated their organisations spent more than US\$25M annually on IT, with 14% spending more than \$500 million USD annually.

Digital transformation (DX) spending in APAC is forecast to reach a year-on-year growth of about 18%. Government will account for 10% of the total spend in the region.^{ix}

Spending on security solutions and services in APAC is forecast to increase by 15.5% in 2022 from 2021.^x

The future is looking bright for government digital transformation, with technology spending predicted to rise:

- Government IT spending in APAC is predicted to grow annually by 8% by 2025, as 900 million citizens are expected to join the online community in the next three years.xi
- Between 2021 and 2026, governments in APAC will account for roughly 10% of the overall spending on artificial intelligence solutions in the region.xii

Verizon: We'll build a solution just for you.

Verizon can help make your vision of a better government and citizen experience a reality, faster. From a reliable 5G network that enables improved citizen experiences to advanced virtual reality that allows for seamless training, Verizon has the right tools to meet the public sector's needs. As your transformation partner, we'll co-create an environment that is connected, efficient, safe and secure – we call this Enterprise Intelligence.



How we do it...



A connected environment

Having the right network is paramount to providing the access and connectivity required to ensure a good user experience. Along with this, a reliable network provides workforce enablement and scalable, flexible and adaptable delivery of citizen services. Verizon's collaboration and communication solutions sit above the network so that government officials, industry partners, suppliers and citizens can easily and effectively work together.



Increased visibility

Many agencies are using Internet of Things (IoT) technology to control equipment, monitor building systems, or perform other tasks. Agencies surveyed by the U.S. Government Accountability Office, "most frequently reported increasing data collection and increasing operational efficiency as benefits of using IoT technologies." xiii Increasing data collection and visibility can ultimately aid decision making and support technology development that better serves the public.

With the right tools, employees can easily collect data and uncover insights that will help improve the interactions between the government and its citizens.



Upgraded training and education

5G can power government entities to tap emerging technologies, like virtual reality (VR), in new and innovative ways. Virtual training experiences powered by 5G, for example, could potentially help bring realistic training experiences to life for government agents in a safe environment while also reducing the number of field officers that have to be pulled from regular duties to conduct the sessions.

In the educational sector, VR also offers new possibilities for students to interact with educational content within a virtual, three-dimensional learning environment. For example, students wearing VR headsets could manipulate digital stars and planets during lessons about space. And school districts are more empowered to deliver equitable experiences when everyone is connected to a high-speed network – a goal that 5G could enable.

Continues...

How we do it...



Boosted cyber security

When it comes to cyber security in the public sector, you must be fully prepared for any attack. Establishing a long-term, programmatic approach requires agencies to establish upfront requirements for a service-oriented architecture, security, end-user capabilities and availability.

Taking an inventory of data and thinking about the best ways to move that data securely is a sensible strategy to protect sensitive citizen information. Organisations should also determine how to make the data consumable by end users and how best to present that data to decision makers. Verizon can help create a security strategy that can grow with your agency and conduct vulnerability assessments and penetration tests to keep tabs on your security posture.

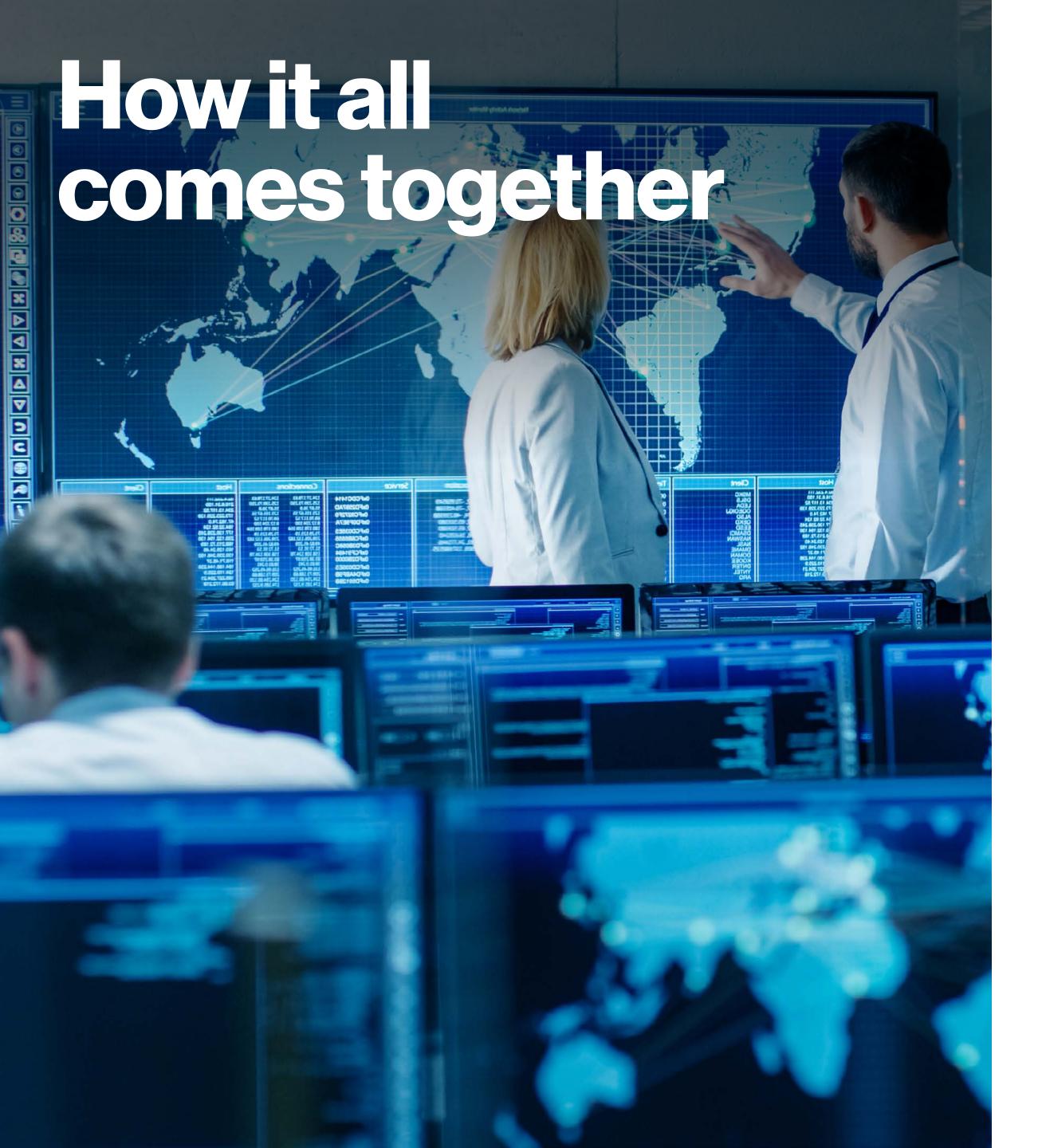


Enhanced public safety

5G's ability to deliver low latency and high speeds, combined with the placement of computer and storage resources at the edge, can open a wealth of possibilities for public safety. The technology can enable first responders to share large data files such as HD video feeds and rapidly collect and vet data to respond to emergencies effectively.

Al can also be used to analyse data and enable object detection in potentially life-saving situations. The Verizon network also allows personnel to monitor each emergency responder's status and location in near real time using geolocation data and wearable sensors.









Challenge

A government agency was not keeping pace with its work and needed to use technological innovation to drive rapid progress.



Solution

A living lab concept to explore the capabilities of 5G-enabled technologies. Verizon's 5G Ultra Wideband delivers high bandwidth, fast speeds and low latency to support the project.

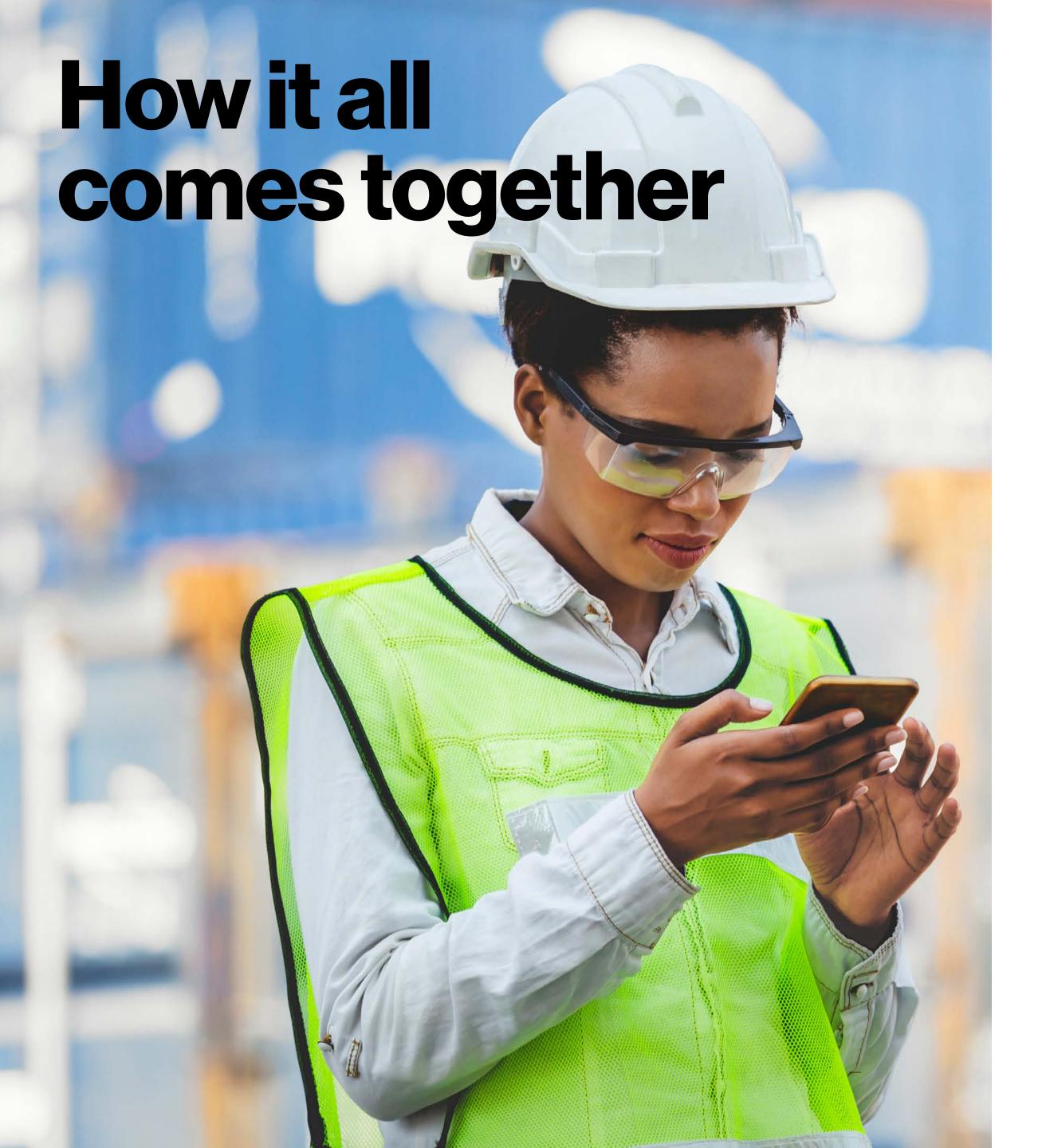


Results

Increased safety of personnel with unmanned logistics programs for both air and ground vehicles.

Enabled test drives of smaller-scale prototypes without having all the technologies corralled under the Department of Defense umbrella.

Facilitated the testing and refinement of cutting-edge 5G applications in drones, connected vehicles, energy communications and security.







Challenge

A mixed-use port faced a number of complications regarding connectivity.

Manual entry of information and public 4G limitations led to inefficiencies.



Solution

Verizon Private 5G Network provided ABP with reliable, low-latency connectivity across the port.



Results

Enhanced security through a new private network that consolidated parts of its network and communications.

Improved visibility through fast data exchange and near real-time analytics.

Boosted morale as employees felt confident with more efficient connectivity.

Astrong local presence

Verizon has built a strong presence in Singapore.
We employ a dedicated local team who operate
from three locations – SGP Science Park, Mapletree
Anson and an innovation centre at Ocean Financial
Centre OFC. Our offering spans cyber security,
advanced communications, secure network services,
professional services and media.

Verizon takes security seriously. Here are some of our local and global capabilities:

Singapore	Global
Managad Coougity Corvings	ISO 07001
Managed Security Services	ISO 27001
Advanced Security Operations	ISO 27002
Autonomous Threat Hunting	Payment Card Industry Data Security Standard (PCI DSS)
DDoS Shield	(1 01 000)
Network Threat Advanced Analytics	National Institute of Standards and Technology Cybersecurity
Software Defined Perimeter	Framework (CSF)
Ethernet access – Private IP	National Institute of Standards and Technology SP 800-53
Private 5G	CSA Cloud Controls Matrix
Partner Access - Starhub/Singtel	Cybersecurity Capability Maturity Model
Secure Cloud Interconnect with AWS/Microsoft/Google/Alibaba	Control Objectives for Information Technologies (COBIT)



Our global strength

When you choose Verizon, you'll not only benefit from dedicated local resources, but our global capabilities too. This combined strength gives you unrivalled connectivity and protection from cyber threats.

99%

of Fortune 500 companies as customers

2,400+

certifications and training for security team members each year 9

security operation centers (SOCs) globally

34TN

raw logs processed each year to protect our customers and minimise threat 150+

countries

We are also a globally recognised:

- Gartner Magic Quadrant Leader (Network Services and Managed IoT Connectivity Services)
- Omdia Global IT Security Services Leader
- Unified communications as a service (UCaaS) leader for enterprise

Nextsteps

Let's take our partnership to the next level with an executive briefing.

Verizon can help you progress toward government digital and network transformation with Enterprise Intelligence – no matter where you are on your journey.

We can also organise one of our Connected Future Workshops to help you define your vision. By following a tried and tested framework, we can help you:

- Learn what industry leaders are implementing
- Walk through your transformation agenda
- Brainstorm opportunities
- Create a roadmap
- Decide on next steps

Contact us:

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- i. Gartner Survey Finds More Than Half of Digital Government Programs Are Failing to Scale
- ii. Our Public Service Our Future: Independent Review of the Australian Public Service
- iii. What Technology Trends Enable Government CIOs to Meet Stakeholder Needs?
- iv. Government service delivery in a digitizing world
- v. Gartner Survey Finds More than Half of Digital Government Programs are Failing to Scale
- vi. Gov't IT spending in APAC to reach US\$151-B by 2025
- vii. X-Force Threat Intelligence Index 2022
- viii. FLEXERA™ 2022: Tech Spend Pulse
- ix. <u>Digital Spending in Asia/Pacific* to Reach US\$1.05 Trillion by 2026, IDC Reports</u>
- x. Security spending in Asia Pacific to grow 15% to \$31 bn: IDC
- xi. Gov't IT spending in APAC to reach US\$151-B by 2025
- xii. IDC: Al Spending Will Rise Over \$46 Billion by 2026 in Asia/Pacific
- xiii. Internet of Things: Information on Use by Federal Agencies

