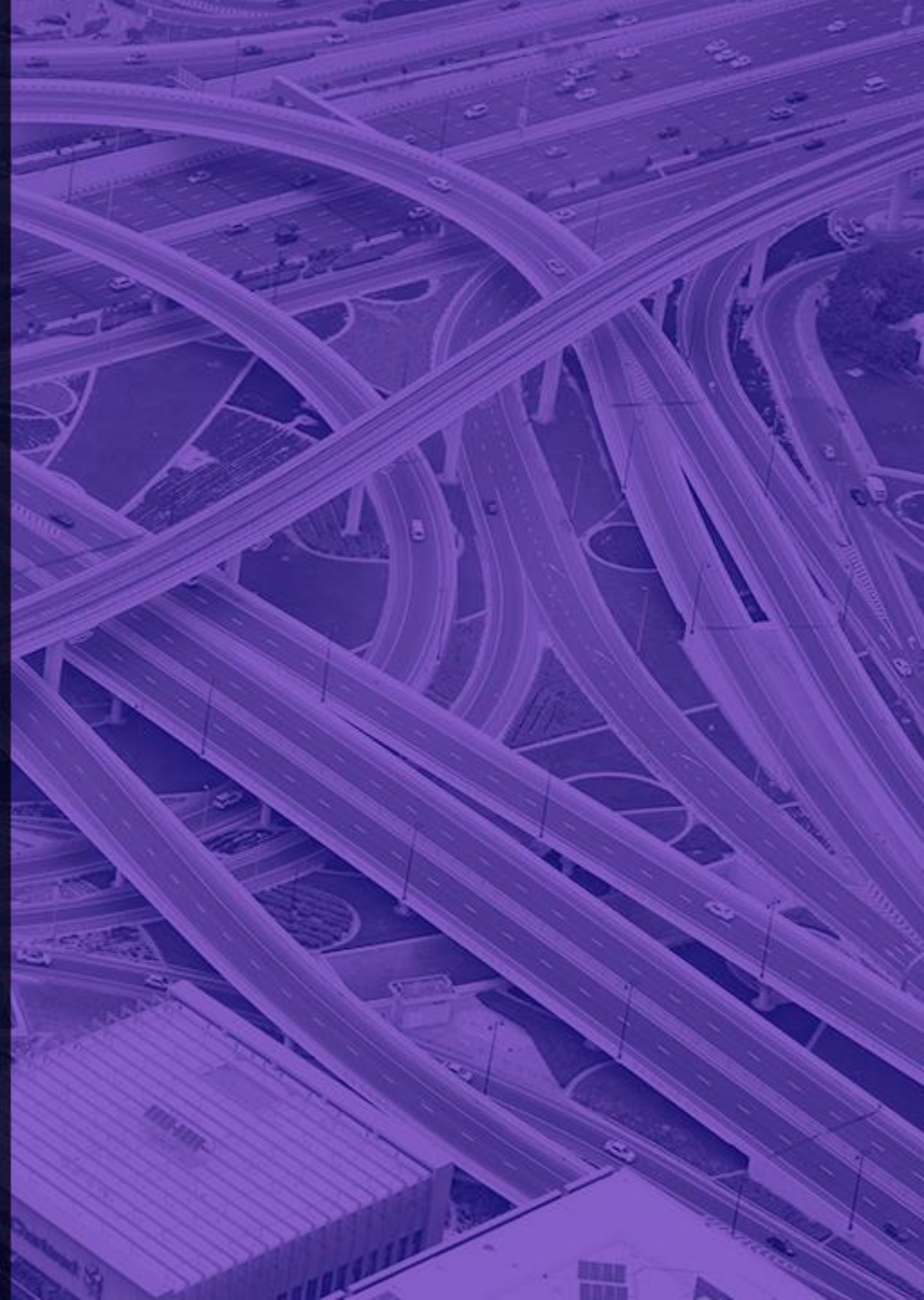# ecosystm

The Intelligent Enterprise

The Future of the Public Sector

JULY 2023

Overview

Technology is reshaping the Public Sector worldwide, optimising operations, improving citizen services, and fostering data-driven decision-making. Government agencies are also embracing innovation for effective governance in this digital era.

Public sector organisations worldwide recognise the need for swift and agile interventions. With citizen expectations resembling those of commercial customers, public sector organisations face mounting pressure to break down the barriers to provide seamless service experiences.

Drivers of Evolution in Public Sector

Technological Advancements
Legacy systems need to be replaced to make systems optimum for digitalisation, data analytics, AI, and automation.

Rapid Globalisation
This calls for interconnectedness, coordinated efforts, and international cooperation.

Changing Citizen Expectations
Citizens expect experiences similar to what they get from the private sector – greater transparency, responsiveness, and personalised services.

Environmental Concerns
Growing environmental awareness requires sustainable practices and policies to address climate change and promote ecological well-being.

Crisis & Disasters
Natural disasters, pandemics, and other crises are prompting necessary reforms and preparedness measures.

Cyber Threats
A growing reliance on digital systems needs robust data protection and cybersecurity measures, especially when facing nation-state attacks.
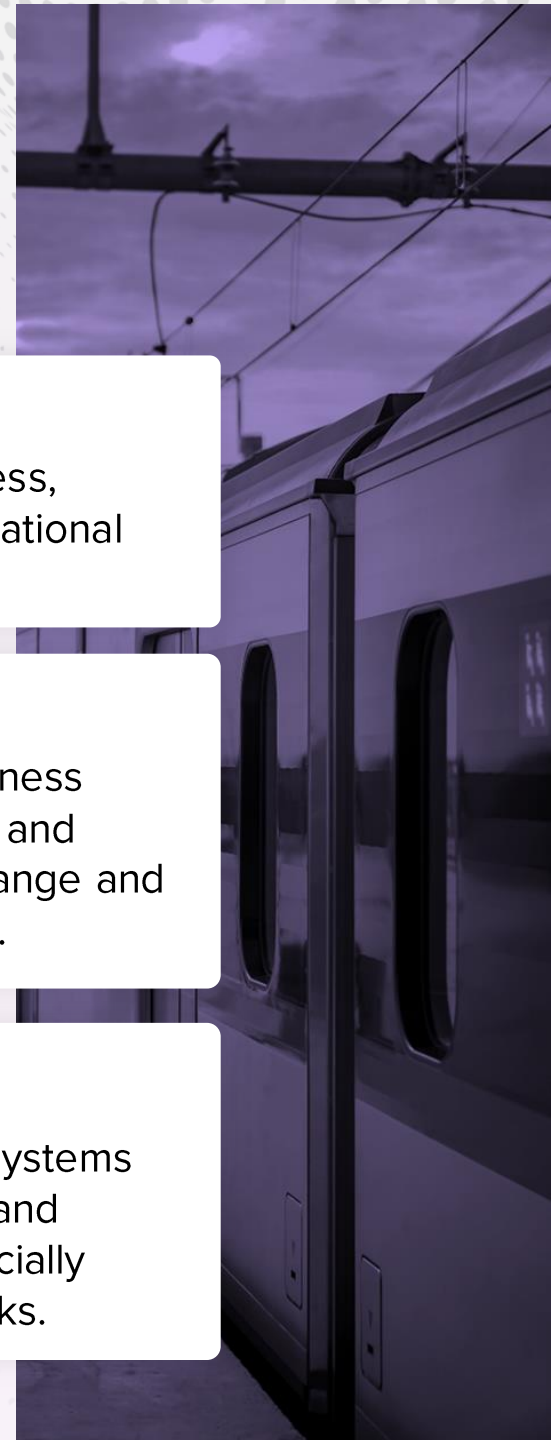
Key Public Sector Tech Trends for 2023 & Beyond

Continued Digitisation for Citizen Engagement

This strengthens the connection between citizens and public institutions, building trust, enhancing civic participation, and improving the overall governance and service delivery. With the easy access to technology, it has also become a means of bridging digital divide and promoting inclusivity.

Innovations to Stay Ahead of the Curve

Many government agencies, especially in mature economies, are working on staying ahead of curve – experimenting with latest cyber technologies, crypto and CDCs, the Metaverse for better citizen engagement, and quantum computing.

AI for decision intelligence & empowerment

A data-driven approach helps policymakers make well-informed decisions based on evidence and insights. The role of AI has expanded across use cases such as personalised citizen services, fraud detection and prevention, public and population health management, and resource optimisation.
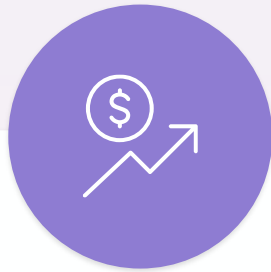
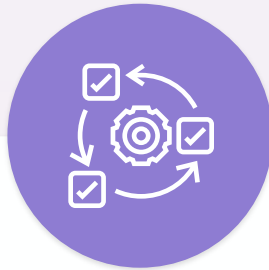# Public Sector Focus on Innovation Seeing Exponential Growth

Agencies are also focusing more on becoming profitable and resilient

+89%
Innovation

+41%
Revenue Growth

+26%
Business Continuity/ Resiliency

+16%
Supply Chain Optimisation

+12%
Improving Employee Productivity

Increased Focus since 2022

Source: Ecosystm Digital Enterprise Study, 2023

Digitisation for Inclusion & Better Citizen Experiences

The Public Sector continues to focus on improving accessibility and convenience.

The Philippines' Department of Information and Communications Technology (DICT) has initiated the **Smart Village program on Sacol Island**, aiming to foster digital inclusion. By providing connectivity and ICT tools, the program enhances healthcare, education, agriculture, and local government services in economically disadvantaged areas. It collaborates with governmental departments, private sector partners, and skill-training programs to achieve its goals.

In Vietnam, **QR codes at the Chi Ma border gate** efficiently monitor frequent travellers, enhancing security and border gate operations. Linked to personal information, QR cards have reduced congestion and expedited verification for border crossings. The Viet-Smart Travel Card in the "Vietnam Travel" app also digitises travel activities, supporting the growth of the tourism sector. Similar innovations have been made by other Southeast Asian countries.

Innovating to Stay Ahead of the Curve

Governments are working to adapt to emerging challenges and remain relevant.

South Korea launched the Metaverse Seoul, a virtual replica of its capital city, estimated to be completed by 2026. Initially it will invite citizens to use avatars to get their tax questions answered, access youth counseling, find support for small businesses and even read e-books. Future plans include expanding to real estate, incorporating AR, and blockchain.

Singapore launched the National Quantum-Safe Network Plus (NQSN+), to fortify digital infrastructure against quantum attacks addressing risks to current encryption methods. Additionally, Singapore drives international standardisation and collaboration in quantum-safe technologies, promoting global adoption. Plans to integrate quantum-safe networks with other cities for international connectivity are also underway.

Data & AI to Drive Mission Outcomes

Public sector initiatives are harnessing data and AI for better citizen services and employee empowerment.

The **NSW government in Australia has launched a "legislation twin"**, developed and maintained by the NSW Data Analytics Centre. This interface enables public servants to explore relationships between legal elements like Acts, statutory instruments, environment planning instruments, and gazettes in NSW law. Powered by NLP and regularly updated, the service offers insights into Act allocation to ministers and the consistency or variation in definitions.

Governments are also ramping up efforts to gain more access to the vast volumes of data generated by public sector agencies. **Thailand has established the Big Data Institute (BDI)** to leverage data for economic and social advancements, providing data-driven solutions to various sectors, and supporting innovative projects. **The Malaysian government plans to introduce the Omnibus Act** to enable data sharing among government agencies through the Malaysian Main Database (Padu). Padu will be a continuous and integrated database, that combines socio-economic information, streamline subsidy distribution, and strengthen data security.

Ecosystm Opinion

Peter Carr
VP Consulting
Ecosystm

Despite major advancements in technological infrastructure, the digital divide between the government and its citizens remains significant. However, while previously, citizens were primarily impacted by the lack of digital inclusion, now the divide is more evident within the government itself, characterised by stark disparities in digital capability and readiness in different government departments, agencies, and authorities. This internal digital divide is visible at all levels, with certain organisations possessing abundant resources and substantial support, and others lagging behind.

The future of govtech does not hinge solely on technological advancements. It relies on the effective and balanced utilisation of technologies across all departments, ensuring equitable service delivery and a more digitally inclusive public sector.

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