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Innovation in Government: Social, Economic, and Environmental Wins

JUNE 2024

Governments worldwide struggle with intricate social, economic, and environmental challenges. Tight budgets often leave them with limited resources to address these issues head-on. However, innovation offers a powerful path forward.

By embracing new technologies, adapting to cultural shifts, and fostering new skills, structures, and communication methods, governments can find solutions within existing constraints.

Optimising Operations: Tech-Driven Efficiency

Technology is transforming how governments operate, boosting efficiency and allowing employees to focus on core functions.

Here are some real-world examples.

> **Singapore Streamlines Public Buses.** A cloud-based fleet management system by the Land Transport Authority (LTA) improves efficiency, real-time tracking, data analysis, and the transition to electric buses.

> **Dubai Optimises Utilities Through AI.** The Dubai Electricity and Water Authority (DEWA) leverages AI for predictive maintenance, demand forecasting, and grid management. This enhances service reliability, operational efficiency, and resource allocation for power and water utilities.

> **Automation Boosts Hospital Efficiency.** Singapore hospitals are using automation to save man-hours and boost efficiency. Tan Tock Seng Hospital automates bacteria sample processing, increasing productivity without extra staff, while Singapore General Hospital tracks surgical instruments digitally, saving thousands of man-hours.

Tech for Citizens

Digital tools and emerging technologies hold immense potential to improve service accessibility and delivery for citizens.

Here's how governments are leveraging tech to benefit their communities.

◁ **Faster Cross-Border Travel.** Malaysia's pilot QR code clearance system expedites travel for factory workers commuting to Singapore, reducing congestion at checkpoints.

◁ **Metaverse City Planning.** South Korea's "Metaverse 120 Center" allows residents to interact with virtual officials and access services in a digital environment, fostering innovative urban planning and infrastructure management.

◁ **Streamlined Benefits.** UK's HM Revenue and Customs (HMRC) launched an online child benefit claim system reduces processing time from weeks to days, showcasing the efficiency gains possible through digital government services.

Bridging the Financial Gap

Nearly 1.7 billion adults or one-third globally, remain unbanked.

However, innovative programs are bridging this gap and promoting financial inclusion.

Thailand's Digital Wallet. Aimed at stimulating the economy and empowering underserved citizens, Thailand disburses USD 275 via digital wallets to 50 million low-income adults, fostering financial participation.

Ghana's Digital Success Story. The first African nation to achieve 100% financial inclusion through modernised platforms like Ghana.gov and GhanaPay, which facilitate payments and fee collection through various digital channels.

Philippines Embraces QR Payments. The City of Alaminos leverages the Paleng-QR Ph Plus program to promote QR code-based payments, aligning with the central bank's goal of onboarding 70% of Filipinos into the formal financial system by 2024.

Building a Sustainable Future

Governments around the world are increasingly turning to technology to address environmental challenges and preserve natural capital.

Here are some inspiring examples.

01 **World's Largest Carbon Capture Plant.** Singapore and UCLA join forces to build Equatic-1, a groundbreaking facility that removes CO_2 from the ocean and creates carbon-negative hydrogen.

02 **Tech-Enhanced Disaster Preparedness.** The UK's Lincolnshire County Council uses cutting-edge geospatial technology like drones and digital twins. This empowers the Lincolnshire Resilience Forum with real-time data and insights to effectively manage risks like floods and power outages across their vast region.

03 **Smart Cities for Sustainability.** Bologna, Italy leverages digital twins of its city to optimise urban mobility and combat climate change. By analysing sensor data and incorporating social factors, the city is strategically developing infrastructure for cyclists and trams.

Tech for a Healthier Tomorrow

Technology is transforming healthcare delivery, promoting improved health and fitness monitoring.

Here's a glimpse into how innovation is impacting patient care worldwide.

Robotic Companions for Seniors. South Korea tackles elder care challenges with robots. Companion robots and safety devices provide companionship and support for seniors living alone.

VR Therapy for Mental Wellness. The UAE's Emirates Health Services Corporation implements a Virtual Reality Lab for Mental Health, that creates interactive therapy sessions for individuals with various psychological challenges. VR allows for personalised treatment plans based on data collected during sessions.

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