

GovTech Prize 2024: Government Services Delivering Impact

February 2024



جائزة تكنولوجيا الحكومات
GOVTECH PRIZE

**WORLD
GOVERNMENTS
SUMMIT 2024**

in collaboration with

TDRA

هيئة تنظيم الاتصالات والحكومة الرقمية
TELECOMMUNICATIONS AND DIGITAL
GOVERNMENT REGULATORY AUTHORITY

and

KEARNEY





Table of Contents

Introduction	4
<hr/>	
Winners Selection Process	6
A. Knock-Out Phase	8
B. Selection Phase	10
C. Scoring Phase	11
<hr/>	
GovTech Prize 2024 Categories & Featured Projects	12
<hr/>	
Educational Services	14
<hr/>	
Healthcare Services	26
<hr/>	
AI-Powered Government Services	38
<hr/>	
Inclusive Digital Transformation	50
<hr/>	
Conclusion	60
<hr/>	

Introduction

The “M-Gov Award” and the “GovTech Prize” are annual awards managed by the Emirates Government Service Excellence Program (EGSEP) at the UAE Prime Minister’s Office. These awards are designed to encourage pioneering students, researchers, government agencies & institutions, private sector companies and startups to develop innovative solutions and explore new opportunities for a better future for humanity.

In its 9th edition, As part of the World Governments Summit 2024, “The GovTech Prize” was presented to government entities, central or local, worldwide to recognize creative and innovative solutions that address pressing challenges and/or create exceptional government service experiences. The award aims to recognize solutions that adopt novel approaches and techniques efficiently leveraging technology to solve problems affecting a large segment of the population and provide tangible benefits with the ability to expand geographically across borders.

The GovTech Prize 2024 recognized innovations in creating human centric government services experiences in the following categories: Educational Services, Healthcare Services, AI-Powered Government Services, and Inclusive Digital Transformation.

An independent jury team evaluated the submissions to determine the winners. The winners were announced during the World Governments Summit in Dubai on the 13th of February 2024.

Educational Services:

Initiatives leveraging technology for innovative and impactful advancements in education service.

Healthcare Services:

Initiatives that apply technology to enhance healthcare services for citizens.

AI-powered Government Services:

Initiatives employing AI to optimize and elevate various public services.

Inclusive Digital Transformation:

Initiatives that ensure accessibility and benefit all citizens, fostering inclusion.



Winners Selection Process

To determine the winners of the GovTech Prize, a comprehensive and meticulous selection process was implemented. This process involves both scouting and evaluating submissions from government entities worldwide, ensuring a diverse and robust competition. The initial phase encompasses a thorough review of recent and relevant initiatives, both technology-oriented and government-backed, across the four categories of the Prize. The total number of projects for 2024 surpassed 1300 projects spanning more than 65 countries reflecting a global representation.

The selection procedure unfolds through the following phases:



A Knock-Out Phase

Filtering of case studies from the initial list based on alignment with the five GovTech requirements



B Selection Phase

Curation of the filtered list of case studies for compliance with key dimensions for selection








C Scoring Phase

Nomination of the best case studies with the highest score across all selection criteria

A. Knock-Out Phase

Each submission and/or scouted project initially passes through a knockout phase, where they are evaluated against specific knockout criteria. This step ensures that all considered projects align with the selection requirements set forth by the GovTech Prize.

Criteria	Description	Scale	Threshold
 Adopted and being used by Government Entities	The solution should be effectively adopted by one or more government entities	Yes/No	Yes
 Related to technology solutions and innovation	The solution should be related to technology innovation	Yes/No	Yes
 Adopted not earlier than 2021	The solution should have been adopted recently, within last 2-3 years	Yes/No	Yes
 Clear ownership of the solution	The solution should have a well identified owner or responsible	Yes/No	Yes
 Aligned with the categories of the GovTech Award	The solution should align and belong to one of the categories of the GovTech Award	Yes/No	Yes



B. Selection Phase

The selection criteria introduce five key dimensions for the evaluation of each project.

Each criterion is scored on a scale of 4 (with one being the lowest score and 4 being the highest). A threshold value of 3 has been put in place as a bare minimum required for any solution to pass the different selection criteria phases.

	1 Nascent	2 Emerging	3 Committing	4 Excelling
Level of innovation	Leveraging old and obsolescent technology	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption
Impact	Impact limited to a small portion of the population and not replicable elsewhere	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption
Maturity	The solution exists as an idea and is still in the concept phase	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption
Scalability & replicability	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption
Sustainability	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption	Medium environmental impact with medium financial requirements for its adoption

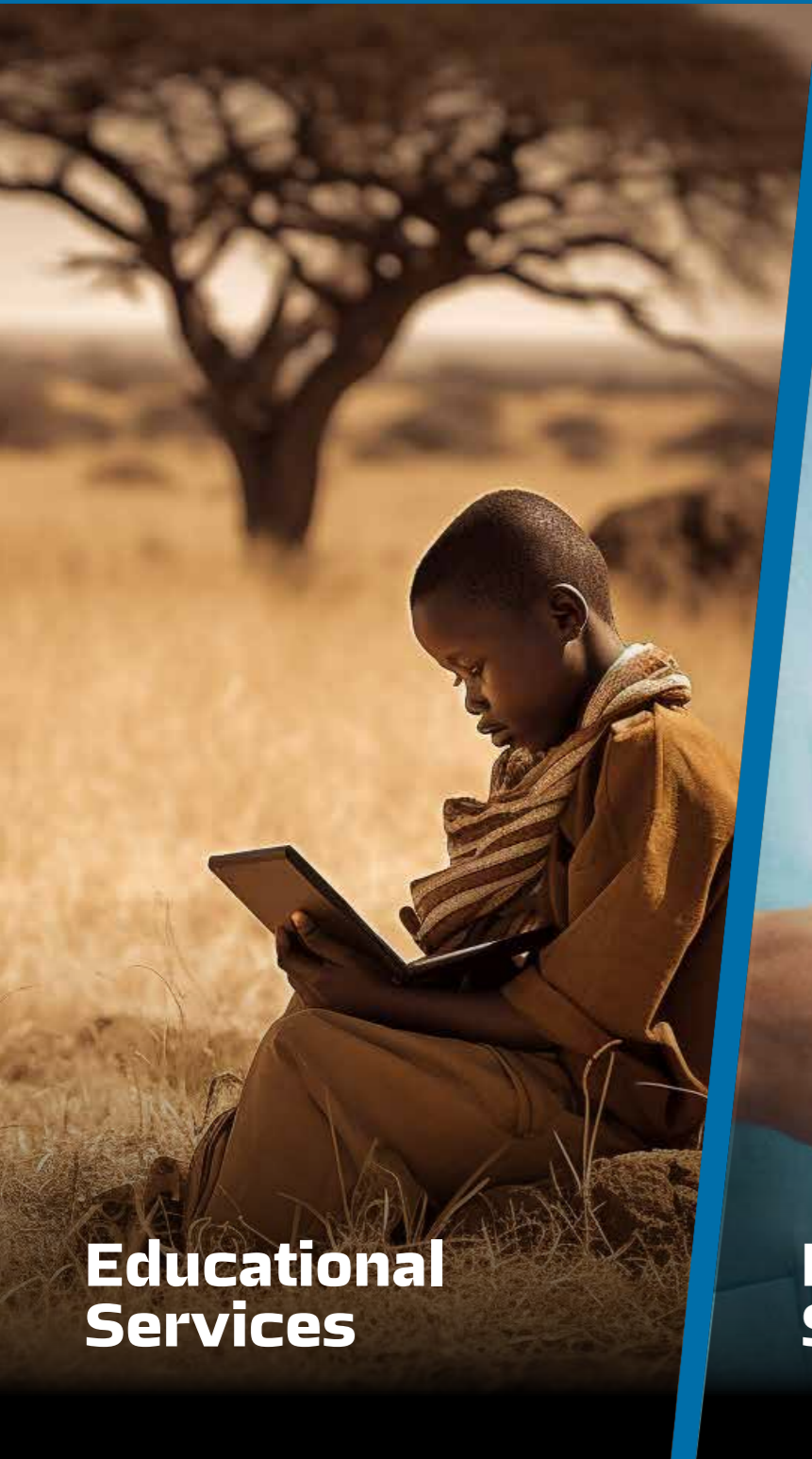
C. Scoring Phase

By evaluating and scoring each case study against these selection criteria, an independent judging panel identified the most deserving winners across the four categories of the GovTech Prize, ensuring that the selected initiatives demonstrate innovation, impact, scalability, sustainability, government support, and inclusivity.

GovTech Prize 2024 Categories & Featured Projects

The organizing committee of the GovTech Prize 2024 has carefully selected four projects in each category to be showcased in this report.

It is important to note that, aside from the category winners, the featured projects are presented without any specific ranking order.



Educational Services



Healthcare Services



AI-Powered Government Services



Inclusive Digital Transformation

Educational Services


Featured Projects




Tech-driven initiatives
**fueling innovative
and impactful
advancements** in
education services

Ghana Education Outcomes Project

Supporting out-of-school children to reintegrate into Ghana's formal education system and improve learning outcomes in primary schools

 **Entity**
Ministry of Education
(Ghana Education Outcomes Project)

 **Region / Location**
Africa, Ghana

 **Date of Launch**
2022



CATEGORY WINNER
EDUCATIONAL SERVICES
2024



Description:

EOP aims to support out-of-school children to reintegrate into Ghana's formal education system and improve learning outcomes in primary schools. The \$30 million project builds on the ongoing work of the IDA-financed Ghana Accountability for Learning Outcomes Project (GALOP), which aims to improve the quality of education outcomes by supporting teaching and learning. The operation will target approximately 70,000 OOSC in areas with the highest absentee and dropout rates.

The Challenge:

In Ghana, a significant number of children remains outside the formal education system, hindering overall educational attainment. Lack of qualified teachers, inadequate learning materials, and poor school infrastructure are only few of the main problems for children education.

The Solution:

GEOP addressed these challenges through multiple initiatives. At first, sensitization campaigns in areas with high percentages of out-of-school children encouraged enrolment and increased awareness of the importance of education. Target interventions were made through tailored support mechanisms and flexible learning options to facilitate the students' reintegration. Moreover, individualized interventions addressed the specific needs of struggling students.


Impact and Benefits:

The initiative targeted the following benefits:


- Increased out-of-school students reintegration: The project successfully reintegrated over 70,000 children back into mainstream education.
- Improved learning outcomes: Students in participating schools demonstrated measurable gains in literacy and numeracy skills.
- Strengthened school management: More effective leadership practices and improved data management systems enhanced school accountability.
- Enhanced data collection and analysis: Standardized data collection methods facilitated better monitoring and evaluation of educational interventions.

Can't Wait to Learn

Platform utilizing adaptive learning technologies embedded in games to deliver primary education to children in areas of conflict

 **Entity**
Ministry of Education and Science

 **Region / Location**
Asia, Ukraine

 **Date of Launch**
2022



Description:

“Can’t Wait to Learn” (CWL) is a mobile application designed to provide gamified primary education to children affected by conflict and displacement. Developed by War Child Holland and Osvitoria NGO, in partnership with the Ukrainian Ministry of Education and Science, CWL specifically caters to children in grades 1-4.

The Challenge:

Children living in conflict zones often face disrupted education, leading to learning gaps and developmental challenges. Traditional educational methods might not be readily available or accessible in these settings.

The Solution:

CWL leverages the power of gamification to make learning engaging and interactive. The app’s main features are as follows:

- Story-based game format: Children progress through an engaging narrative, unlocking new levels and characters as they learn.
- Educational mini games: Each level incorporates fun and interactive games aligned with the Ukrainian national curriculum, covering subjects like reading, writing, mathematics, and critical thinking.
- Offline functionality: The app works without an internet connection, ensuring accessibility even in areas with limited connectivity.
- Cultural sensitivity: The games and characters are designed to be culturally relevant and engaging for children in Ukraine.

- Local language support: CWL currently operates in Ukrainian, English, and Arabic, with plans to expand to other languages.
- Progress tracking: Teachers and guardians can track children’s progress and tailor their learning experience.

Impact and Benefits:


CWL proved to make quality education accessible to children even in conflict zones, promoting lifelong learning opportunities. Studies show that CWL users demonstrate significant improvements in literacy, numeracy, and critical thinking skills. The engaging gameplay and positive reinforcement foster a sense of achievement and motivation, contributing to children’s emotional well-being. CWL provides also training and resources for teachers, enabling them to integrate the app into their teaching practices.

First Responder VR Training

VR training for first responders that replicates real-life scenarios to save the lives of people in need of immediate care



 **Entity**
Austin-Travis County EMS

 **Region / Location**
North America, United States

 **Date of Launch**
2021



Description:

Austin-Travis County Emergency Medical Services (ATCEMS) has implemented a groundbreaking Virtual Reality (VR) training program in collaboration with Augmented Training Systems (ATS). This program immerses first responders in realistic simulations, enhancing their preparedness for critical situations.

The Challenge:

Traditional training methods often lacked accessibility and variety, limiting practice frequency and scenario diversity. Infrequent exposure to complex events could potentially hinder real-world response efficiency. Moreover, real training scenarios and specialized equipment came at a high cost, creating budgetary constraints and limiting training opportunities, especially for smaller departments.

The Solution:

Leveraging VR technology, the program transports responders into realistic simulations of high-acuity, low-frequency events, enabling them to practice critical skills in a safe and controlled environment.


Impact and Benefits:

The training platform utilizes Augmented Reality to provide an immersive training experience, delivering the following benefits:


- **Enhanced Skill Development:** VR simulations recreate high-acuity, low-frequency events like mass casualty incidents. This allows first responders and paramedics to practice critical skills repeatedly, even without access to physical equipment or complex setups.
- **Improved Memory and Efficiency:** Studies show VR trainees experience a 45% reduction in errors, a 29% faster completion time, and an 82% confidence boost compared to traditional methods. This translates to quicker, more accurate responses in real emergencies.
- **Cost-Effectiveness:** VR training costs a fraction of traditional methods, eliminating the need for expensive mock scenarios and minimizing travel expenses. It also allows for decentralized training, enabling responders to learn at their own pace and location.
- **Increased Training Accessibility:** VR overcomes limitations like budget constraints and scheduling conflicts, ensuring consistent training even during pandemics or resource shortages. This ensures all personnel are fully prepared for any situation.
- **Reduced Emotional Impact:** Training for high-stress events can be mentally taxing. VR simulations allow responders to experience such scenarios in a controlled environment, minimizing potential psychological burden while building resilience.

Virtual Open School

Initiative
empowering over
170 Mn Indian
students, providing
them with the
necessary digital
skills to integrate
into the current
workforce

 **Entity**
National Institute of Open Schooling
(NIOS)

 **Region / Location**
Asia, India

 **Date of Launch**
2021



Description:

Launched by the National Institute of Open Schooling (NIOS), the Virtual Open School (VOS) constitutes a significant initiative aimed at empowering over 170 million students across India. VOS provides an accessible and user-friendly online learning platform, eliminating geographical barriers and enabling students from diverse backgrounds to participate. Recognizing the ever-growing importance of digital skills in the modern workforce, NIOS leverages VOS to address the crucial need for digital literacy integration into the educational landscape.

The Challenge:

A significant portion of India's population lacks even basic digital literacy, forming a formidable barrier to online learning and integration into the digital economy. The geographical distribution of technology infrastructure often leaves those residing in remote areas at a disadvantage, where limited access to internet-enabled devices and reliable connectivity further compounds the issue, excluding potential learners from the program's reach.

The Solution:

VOS addresses these challenges by offering a comprehensive solution. The online platform eliminates geographical barriers and offers affordable fees, making it accessible to diverse student populations. The program adopts a flexible approach, allowing individuals to learn at their own pace and convenience, catering to varying schedules and needs. The program offers a range of interactive courses covering basic computer literacy, internet usage, e-commerce, digital marketing, and more, equipping students with practical skills.

Impact and Benefits:

The platform offers the following benefits:

- **Building Digital Literacy:** VOS plays a crucial role in bridging the digital divide by equipping millions of students with the necessary skills to navigate the online world confidently.
- **Enhancing Employability:** By cultivating digital fluency, VOS empowers its students to compete effectively in the job market, increasing their employability potential.
- **Promoting Entrepreneurship:** The program fosters a spirit of entrepreneurship by equipping students with digital marketing and e-commerce skills, enabling them to explore self-employment opportunities.
- **Lifelong Learning:** VOS promotes a culture of lifelong learning by providing individuals with tools and resources to continually update their digital skills, staying relevant in the evolving job market.

Rapor Pendidikan is helping schools and government plan better by leveraging data-driven insights generated by advanced algorithms



Entity

Ministry of Education, Culture, Research and Technology



Region / Location

Asia, Indonesia



Date of Launch

2022



Description:

Launched by the Indonesian Ministry of Education and Culture (Kemendikbud), Rapor Pendidikan (Education Report) serves as a national platform for evaluating and reporting on the quality of education across Indonesia. Leveraging various data sources like Asesmen Nasional (National Assessment), Dapodik (Education Data Center), and surveys, Rapor Pendidikan aims to provide a comprehensive and transparent picture of education at all levels, from early childhood to higher education.

The Challenge:

Prior to Rapor Pendidikan, assessing the quality of education in Indonesia relied on fragmented data collected through various channels. This led primarily to inconsistent and divergent data, hindering accurate conclusions about nationwide education quality. Additionally, actionable insights were lacking for education stakeholders to improve their practices.

The Solution:

Rapor Pendidikan addressed these challenges by aggregating data from various sources into a single, unified platform, ensuring consistent data reporting and analysis. This enables the generation of comprehensive reports at various levels (national, provincial, district, and school), providing granular insights into strengths and weaknesses, guiding educators and policymakers towards targeted interventions.

Impact and Benefits:

Rapor Pendidikan has generated significant benefits for Indonesia's education system:

- **Transparency and Accountability:** Public access to data fosters transparency and empowers stakeholders to hold institutions accountable for educational outcomes.
- **Data-Driven Decision Making:** Informed by accurate data, policymakers and educators can make informed decisions about resource allocation and strategic interventions.
- **Targeted Improvements:** Granular data allows identification of specific areas needing improvement, enabling targeted strategies for school-level and regional progress.
- **Collaboration and Partnership:** The platform facilitates collaboration between different education stakeholders, promoting collective efforts towards a better education system.



Healthcare Services

Featured Projects

Initiatives leveraging technology to **elevate and revolutionize** healthcare services, providing citizens with **advanced and transformative solutions**

SatuSehat (One Healthy)

Healthcare data platform integrating all the patients' medical records onto a single health services repository

 **Entity**
Ministry of Health

 **Region / Location**
Asia, Indonesia

 **Date of Launch**
2022



CATEGORY WINNER
HEALTHCARE SERVICES
2024

Description:

Launched in July 2023, SatuSehat (One Healthy) represents a monumental step toward an integrated healthcare system in Indonesia. Led by the Ministry of Health (Kemenkes), this initiative aims to bridge the gap between fragmented data and services, creating a seamless experience for patients and healthcare providers across the country.

The Challenge:

Indonesia's healthcare system faced significant challenges related to medical information. Patient records often remained siloed within individual hospitals and clinics, hindering continuity of care and informed decision-making. This was further exacerbated by geographical disparities and a lack of standardized procedures, making accessing quality healthcare a challenge for many citizens.

The Solution:

SatuSehat addresses these challenges by establishing a central platform for integrating patient medical records, enabling seamless data sharing between healthcare providers nationwide. The introduction of standardized electronic medical records (EMRs) ensures uniformity and accessibility of patient data across the system, regardless of location or provider. Moreover, data-driven insights gained from the platform can inform improved resource allocation and targeted interventions, addressing regional disparities and ultimately enhancing healthcare accessibility and quality for all Indonesians.

Impact and Benefits:

The potential benefits of SatuSehat are vast and extend to various stakeholders:

- **Patients:** Enjoy improved continuity of care, easier access to medical records, and increased efficiency in navigating the healthcare system.
- **Healthcare Providers:** Benefit from data-driven insights for enhanced diagnosis, treatment planning, and collaboration with colleagues across the nation.
- **Policymakers:** Gain valuable data for evidence-based healthcare policies and targeted interventions addressing specific needs and challenges.
- **Public Health:** Enables nationwide disease surveillance, outbreak control, and improved public health initiatives.

Smart Bandages to dramatically increase healing times by delivering medication and low-level electrical fields to stimulate tissue regeneration



Entity

National Institutes of Health (NIH)



Region / Location

North America, United States



Date of Launch

2023



Description:

In a groundbreaking collaboration, the National Institutes of Health (NIH) and Caltech have launched the “Smart Bandages” initiative, revolutionizing healthcare with intelligent wound dressings. Leveraging the power of artificial intelligence (AI) and electrical stimulation, these advanced bandages actively promote healing, monitor progress, and hold immense potential to transform wound care across diverse medical fields.

The Challenge:

While functional, traditional wound dressings offer passive support, relying solely on the body’s natural healing processes, which can be slow and inconsistent. This becomes particularly challenging for certain wounds, like diabetic ulcers, requiring more advanced interventions.

The Solution:

Smart Bandages tackle these limitations through unique features. Embedded sensors collect real-time data on vital signs like temperature, pH, and moisture levels within the wound bed. AI algorithms analyse this data, providing insights into healing progress and potential complications. The bandage can then deliver targeted electrical stimulation based on the AI analysis, promoting cell growth, reducing inflammation, and accelerating healing.

Impact and Benefits:

The potential benefits of Smart Bandages are significant:

- **Faster Healing:** AI-driven interventions and targeted stimulation can significantly accelerate healing times, reducing patient discomfort and hospital stays.
- **Reduced Complications:** Continuous monitoring and AI-based alerts allow for early detection and intervention, reducing the risk of infections and other complications.
- **Personalized Care:** Tailored electrical stimulation based on individual needs can optimize healing for diverse wound types and patients.
- **Remote Monitoring:** The ability to monitor wound progress remotely empowers patients and healthcare providers, improving care accessibility and efficiency.

NovaResp

World's first AI-Enabled predictive & preventative Continuous Positive Airway Pressure Machine (CPAP) to prevent sleep apnea



Entity
Atlantic Canada Opportunities Agency
(Government of Canada)



Region / Location
North America, Canada



Date of Launch
2023



Description:

Affecting millions of Canadians, sleep apnea is a chronic condition where breathing pauses during sleep, impacting health and quality of life. While Continuous Positive Airway Pressure (CPAP) therapy has been the standard treatment, discomfort and inconvenience are reducing the effectiveness of this method. NovaResp, a Canadian medical technology company aiming to revolutionize sleep apnea treatment with their AI-powered cMAP platform. Support for this initiative comes from ACOA, NRC-IRAP, BioNova, and the Nova Scotia Innovation Hub.

The Challenge:

Current CPAP machines have limitations. High air pressure, often required, leads to discomfort and mask leaks, reducing adherence and effectiveness. Additionally, the lack of real-time data and insights makes remote monitoring and treatment optimization difficult for healthcare professionals.

The Solution:

NovaResp's cMAP platform tackles these challenges through innovative AI technology. Machine learning algorithms analyse real-time physiological data to predict apnea events. The platform then automatically adjusts air pressure only when necessary, providing personalized comfort and preventing unnecessary pressure. By connecting to a cloud-based system, healthcare professionals can remotely monitor patient data, track adherence, and adjust settings, ultimately improving treatment effectiveness.


Impact and Benefits:

Early-stage studies and field trials suggest promising results:

- **Improved Adherence:** Patients using cMAP report increased comfort and a higher likelihood of sticking with their treatment compared to traditional CPAP.
- **Reduced Apnea Events:** The AI-powered pressure adjustments lead to a significant reduction in sleep apnea events, translating to better sleep quality and health outcomes.
- **Enhanced Healthcare Management:** Remote monitoring and data analysis capabilities improve healthcare efficiency and enable personalized treatment adjustments, optimizing patient care.
- **Cost-Effectiveness:** By potentially reducing complications and hospital visits, cMAP could provide long-term cost savings for patients and healthcare systems.

FlyZipline: Delivery Drones for Medical Supplies

Kenya is transforming the emergency medical supplies delivery market by using drones to reduce the overall delivery time

 **Entity**
County Government of Nyamira

 **Region / Location**
Africa, Kenya

 **Date of Launch**
2023



Description:

In 2021, Zipline International Inc., in collaboration with the Kenyan Ministry of Health and the County Government of Nyamira, launched the groundbreaking “FlyZipline” initiative. This program utilizes autonomous drones to deliver essential medical supplies, including blood products, vaccines, and emergency medications, to remote and underserved communities within Nyamira County.

The Challenge:

Before FlyZipline, accessing critical healthcare supplies in Nyamira faced challenges due to geographical barriers, temperature sensitivity, and stock-out risks. Rugged terrain and limited infrastructure made road transportation unreliable and time-consuming, delaying crucial medical interventions. Additionally, some life-saving medications and vaccines require strict temperature control, which traditional methods often struggled to maintain. Remote health facilities frequently faced stock-outs due to logistical challenges, potentially jeopardizing patient care.

The Solution:

FlyZipline addresses these challenges with its innovative autonomous drones. These drones fly predetermined routes on autopilot, delivering medical supplies directly to health facilities within an hour, regardless of geographical limitations. Equipped with specialized containers, the drones maintain essential medications and vaccines at optimal temperatures throughout the journey. Additionally, the system provides real-time tracking of deliveries, ensuring transparency and accountability throughout the process.

Impact and Benefits:

The initiative has demonstrably improved healthcare access and outcomes in Nyamira:


- **Reduced Delivery Times:** Deliveries that previously took hours now reach health facilities within minutes, saving lives in critical situations.
- **Improved Stock Management:** Real-time data insights support optimal stock management, minimizing the risk of stock-outs and ensuring availability of essential supplies.
- **Enhanced Vaccine Coverage:** Faster deliveries enable timely vaccination campaigns, reaching remote populations and improving immunization rates.
- **Boosted Healthcare Equity:** By bridging geographical barriers, FlyZipline promotes equitable access to quality healthcare for all communities in Nyamira.

SEHA Virtual Hospital

Largest Virtual
Hospital in the world
connecting 170
local hospitals with
72,000 beneficiaries
and 60+ specialized
services

 **Entity**
Ministry of Health

 **Region / Location**
Asia, Saudi Arabia

 **Date of Launch**
2022



Description:

Launched by the Ministry of Health (MoH) and implemented by SEHA, the Kingdom of Saudi Arabia's largest healthcare network, SEHA Virtual Hospital (SVH) represents a pioneering initiative transforming healthcare delivery. Leveraging telemedicine and cutting-edge technologies, SVH provides remote access to specialized medical services for patients across the Kingdom, aiming to improve healthcare accessibility and optimize resource utilization.

The Challenge:

Prior to SVH, several factors challenged healthcare access in Saudi Arabia. Distance and limited healthcare infrastructure in remote areas posed significant challenges for patients seeking specialized care, often requiring travel and extended stays. This, coupled with the uneven distribution of specialized medical professionals across the country, created disparities in access to crucial expertise.

The Solution:

SVH tackles various challenges through a comprehensive approach. Firstly, they offer a secure and user-friendly telemedicine platform for virtual consultations with specialists. This eliminates geographical barriers and makes remote care readily available. Secondly, the platform integrates AI-powered tools, such as diagnostic algorithms and virtual assistants, which enhance consultations and streamline processes. To ensure access to top specialists regardless of location, SVH connects patients to a network of highly trained professionals across various disciplines.

Finally, accessibility is further improved by a mobile app allowing patients to conveniently schedule appointments, manage healthcare records, and access medical information on the go. This multifaceted approach addresses various barriers to healthcare access and aims to provide an efficient, convenient, and personalized experience for patients.

Impact and Benefits:

Since its launch, SVH has demonstrably impacted healthcare delivery in Saudi Arabia:

- **Improved Accessibility:** Patients across the Kingdom, especially those in remote areas, now have easier access to specialized consultations, reducing travel and wait times.
- **Enhanced Quality of Care:** Virtual consultations and access to specialist expertise directly benefit patient outcomes and contribute to improved healthcare quality.
- **Efficient Resource Allocation:** Utilizing telemedicine optimizes resource usage by enabling specialists to serve a wider patient population remotely.
- **Reduced Costs:** By minimizing travel and resource utilization, SVH contributes to cost reductions for both patients and the healthcare system.

AI-Powered Government Services

Featured Projects

AI-driven initiatives **revolutionize and enhance diverse public services**, optimizing efficiency and **elevating the overall quality of delivery**


AI-Powered Government Services

iRASTE

AI-software used for road safety that prevents potential collisions and lowers the fatality risk by 40%

 **Entity**
Ministry of Road Transport and Highways

 **Region / Location**
Asia, India

 **Date of Launch**
2021



CATEGORY WINNER
AI-POWERED GOVERNMENT SERVICES
2024

Description:

Launched in 2021, iRASTE (Intelligent Solutions for Road Safety through Technology and Engineering) stands as a groundbreaking initiative to combat India's alarming road accident rates. This collaborative effort between government, industry, and academia leverages Artificial Intelligence (AI) and advanced technologies to transform road safety practices nationwide.

The Challenge:

India faces a grim reality on its roads, recording over 11% of global road deaths, with roughly 426 fatalities reported daily. Accidents are often attributed to driver fatigue, speeding, poor road conditions, inadequate signage, and lack of pedestrian infrastructure. Additionally, limited and inconsistent data hinders comprehensive analysis and targeted interventions.

The Solution:

iRASTE tackles these challenges leveraging an AI-powered solutions. For vehicle safety, Advanced Driver Assistance Systems (ADAS) in public buses and private vehicles provide real-time alerts for lane departure, drowsiness, and collision risks. AI algorithms analyses traffic patterns to identify accident-prone "black spots," informing targeted interventions. On infrastructure safety, data-driven road design improvements address concerns in high-risk areas, while predictive maintenance prevents infrastructure failures that contribute to accidents.

Impact and Benefits:

The initial phase of iRASTE in Nagpur city has yielded promising results:

- **Reduced Accidents:** A significant decrease in accident rates reported in areas with ADAS-equipped buses.
- **Improved Driver Behavior:** Training programs led to noticeable changes in driver awareness and responsible driving practices.
- **Data-Driven Insights:** Enhanced data collection and analysis are paving the way for proactive safety measures.
- **Enhanced Public Confidence:** Increased use of public transportation due to improved safety perception.

AI-Powered Government Services

FinTraffic

is an AI-powered traffic services company delivering significant value through traffic optimization, road safety, and reduced CO2 emissions



Entity

Ministry of Transport and Communications



Region / Location

Europe, Finland



Date of Launch

2021



Description:

Embodying Finland's vision for a seamless and sustainable transportation system, Fintraffic consolidates various transportation authorities under one roof. This national entity encompasses:

- Finavia: Overseeing airports and air traffic control.
- Finnish Transport Agency: Managing roads, waterways, and railways.
- Vaisala: Providing meteorological and aviation safety solutions.

Fintraffic aims to create a unified traffic management system, leveraging innovative technologies to enhance safety, efficiency, and sustainability across all transportation modes.

The Challenge:

Prior to Fintraffic, separate entities managed different transport modes, leading to inefficiencies and siloed operations. Limited data sharing hindered real-time information exchange and analysis, making it difficult to implement proactive traffic management. Additionally, a seamless travel experience across different modes, with integrated ticketing and information systems, was lacking.

The Solution:

Fintraffic addresses these challenges with an holistic approach:

- Unified Management: Centralized planning and coordination facilitate smoother operations and optimize resource allocation.
- Digitalization: Implementing cutting-edge technologies like big data analytics, artificial intelligence, and connected vehicles enables real-time data exchange and predictive maintenance.
- Sustainability Efforts: Promoting electric vehicles, green infrastructure, and multimodal transport options contribute to reducing carbon footprint.
- Passenger-Centric Focus: Developing integrated ticketing platforms, multimodal journey planners, and real-time travel information systems enhance passenger experience.

AI-Powered Government Services

VieProcure

is a digital platform transforming the medical supply chain in Africa, making healthcare more affordable & accessible



Entity

The Rwanda Innovation Fund (Managed by the Government of Rwanda)



Region / Location

Africa, Rwanda



Date of Launch

2021



Description:

VieProcure, a Rwandan technology platform, is revolutionizing medical supply procurement and management for healthcare facilities nationwide. Partnering with the Rwandan Ministry of Health and the private sector, VieProcure aims to improve access to essential medicines and medical equipment through efficient and transparent procurement processes.

The Challenge:

Rwanda's healthcare system faced significant challenges in medical supply procurement. A fragmented system with complex and decentralized purchasing procedures caused inefficiencies, delays, and stockouts. Lack of visibility into supply chain data hampered effective planning and resource allocation, while outdated logistics systems resulted in high transportation costs and unreliable delivery times.

The Solution:

VieProcure addresses these challenges by connecting hospitals, clinics, and suppliers, facilitating streamlined ordering and efficient communication. Data analytics provide real-time insights into inventory levels, demand forecasts, and delivery tracking, enabling improved logistics management for efficient transportation and reduced delivery times. Stringent quality control measures guarantee the safety and efficacy of procured supplies.

Impact and Benefits:


VieProcure's innovative approach has yielded significant benefits for Rwanda's healthcare system:


- **Reduced Stockouts:** Improved forecasting and efficient procurement minimize stockouts of essential medicines and equipment.
- **Cost Savings:** Optimized logistics and transparent pricing mechanisms lead to cost savings for healthcare facilities.
- **Improved Patient Outcomes:** Timely access to quality medical supplies contributes to better patient care and treatment outcomes.
- **Enhanced Transparency:** Data-driven insights enable informed decision-making and improved accountability throughout the supply chain.

Aerial Detection for Undeclared Properties

Through AI-enabled aerial imagery tools, the French Tax Authorities are detecting undeclared and illegal home extension, raising tax revenue



 **Entity**
Ministry of Economy and Finance

 **Region / Location**
Europe, France

 **Date of Launch**
2022



Description:

Launched by the French Ministry of Economy and Finance, the “Aerial detection of undeclared properties” initiative takes to the skies to combat tax evasion. Leveraging high-resolution aerial imagery and advanced data analysis, it aims to identify undeclared swimming pools, extensions, and other structures across the country. This data-driven approach ensures fair contribution to property taxes, ultimately supporting public finances.

The Challenge:

Previously, relying on manual investigations and tip-offs for identifying undeclared properties led to incomplete data and potential bias. Traditional methods were time-consuming, resource-intensive, and ineffective in covering France’s vast territory. Additionally, privacy concerns and the potential misuse of data necessitated careful communication and ethical implementation.

The Solution:

The initiative utilizes various technologies and strategies. First, high-resolution aerial photos of France are acquired using planes or drones, capturing detailed information about properties. Then, artificial intelligence and machine learning algorithms analyse this imagery, identifying potential discrepancies between declared and observed structures. Combining aerial data with existing property records and on-ground verification ensures accuracy and minimizes false positives. Finally, public outreach and clear communication policies address privacy concerns and promote understanding of the program’s objectives.

Impact and Benefits:

This solution provides several benefits:


- **Increased Tax Revenue:** Identifying undeclared properties leads to fairer tax collection, potentially generating significant additional revenue for public finances.
- **Improved Efficiency:** Automating detection processes significantly reduces time and resources required for tax authorities.
- **Enhanced Equity:** Ensuring all property owners contribute fairly fosters a more equitable tax system.
- **Data-Driven Decision Making:** Analysis of undeclared property trends informs policy decisions and resource allocation within the tax system.

AI Based Bridge Defect Detection Model

Ensuring public safety by leveraging a novel AI-powered bridge defect detection model

 **Entity**
Seoul Digital Foundation

 **Region / Location**
Asia. South Korea

 **Date of Launch**
2023



Description:

The Seoul Digital Foundation, dedicated to smart city initiatives, launched the “AI-Based Bridge Defect Detection Model” project. This initiative leverages artificial intelligence (AI) and computer vision to automatically detect and identify potential defects in Seoul’s bridges, promoting proactive maintenance and ensuring public safety.

The Challenge:

Many Seoul bridges require close monitoring due to their age and high traffic volume. Traditional visual assessments can be susceptible to human error, inefficient, and pose potential safety risks. Additionally, deterioration and damage often occur internally, requiring intrusive and expensive inspections with significant manpower and financial resources.

The Solution:

The process begins with collecting high-resolution images and sensor data (e.g., vibration, temperature) from bridges using drones, ground vehicles, and fixed sensors. Deep learning algorithms then analyse this data, automatically identifying potential defects like cracks, spalling, and corrosion. The AI model estimates the severity of detected defects, prioritizing maintenance needs. Interactive dashboards and reports present findings to bridge authorities, facilitating informed decision-making.

Impact and Benefits:

The initiative is providing the following benefits:

- **Enhanced Detection Accuracy:** AI surpasses human accuracy in identifying and classifying defects, especially minor ones that might be missed.
- **Cost and Time Savings:** Automated inspections reduce reliance on manual methods, saving time and resources.
- **Improved Safety:** Early detection and prioritization of repairs minimize risks of bridge failures and accidents.
- **Data-Driven Maintenance:** AI insights inform targeted maintenance plans, optimizing resource allocation and extending bridge lifespan.



Inclusive Digital Transformation

Featured Projects

Initiatives aiming to **foster disadvantaged citizens** ensuring universal accessibility and **widespread benefits**

Digital Family Card

Visionary tool that
creates a more
equitable society
by providing equal
access to social
security and benefits



Entity

Ministry of Labor and Social Protection
of Population



Region / Location

Asia. Kazakhstan



Date of Launch

2022



CATEGORY WINNER
**INCLUSIVE DIGITAL
TRANSFORMATION**
2024



Description:

The Digital Family Card (DFC) is a flagship initiative from the Kazakh government, aiming to revolutionize social protection and welfare delivery for families across the country. This innovative program leverages digital technology to create a universal platform, streamlining access to various social benefits and empowering families to manage their welfare effectively.

The Challenge:

Kazakhstan's social protection system is facing several challenges. Diverse government agencies manage different social benefits, leading to bureaucratic complexities and inefficiencies. They are also relying on traditional methods, like paper applications and physical visits, limiting accessibility for residents, especially in rural areas or with digital literacy challenges. Moreover, the identification and support of vulnerable families is effectively difficult due to limited data and targeted interventions.

The Solution:

The DFC tackles these challenges through a holistic approach, providing a single digital platform that integrates data from various agencies, offering citizens a centralized access point for social benefits. Utilizing sophisticated algorithms and data analysis, the platform automatically assesses family eligibility for various benefits based on pre-determined criteria. The system proactively identifies vulnerable families and automatically initiates necessary support measures, eliminating the need for individual applications. An interactive dashboard provides families with personalized information about their benefits, application status, and available support programs.

Impact and Benefits:

With over 6.3 million families digitized and proactive services provided to approximately 12 million people, the DFC underscores Kazakhstan's commitment to inclusive development and societal well-being.

Since September 2022 more than 10 thousand families were provided with targeted social assistance. More than 12 thousand schoolchildren were provided with hot meals. 300 thousand students were exempted from going to the military registration and enlistment office.

The DFC has led to significant improvements in Kazakhstan's social protection system:


- **Increased Efficiency:** Streamlined processes and automated assessments significantly reduce administrative burdens and processing times.
- **Enhanced Accessibility:** Mobile availability and user-friendly interfaces ensure easier access to benefits for all citizens, including those facing digital literacy barriers.
- **Improved Transparency:** Real-time information and clear communication foster trust and accountability within the system.
- **Targeted Support:** Proactive identification and automatic enrollment ensure timely intervention for vulnerable families, improving their well-being.
- **Cost Savings:** Efficient resource allocation and reduced administrative costs optimize financial resources within the system.

Doctor For Everyone

Telehealth initiative
that leverages the
power of digital
to promote equal
access to healthcare
in Vietnam

 **Entity**
Ministry of Health

 **Region / Location**
Asia. Vietnam

 **Date of Launch**
2020



Description:

“Doctor for Everyone” is a pioneering telehealth initiative sponsored by the United Nations Development Programme (UNDP) in collaboration with the Vietnamese Ministry of Health. This program leverages digital technology to significantly expand access to quality healthcare services, particularly in remote and underserved areas throughout Vietnam.

The Challenge:

Rural communities in Vietnam often face barriers to timely medical care due to geographical limitations, inadequate infrastructure, and a shortage of healthcare professionals. High healthcare costs pose a significant challenge for many Vietnamese citizens, especially in disadvantaged communities. Additionally, limited digital literacy and access to technology hinder telehealth implementation in these areas. Furthermore, fragmented healthcare data and communication gaps between different levels of the healthcare system impede efficient service delivery.

The Solution:

“Doctor for Everyone” tackles these challenges head-on through several innovative interventions. A user-friendly mobile application allows patients to connect with doctors for online consultations, manage prescriptions, and share medical records. Designated facilities in rural areas, equipped with computers, cameras, and internet access, facilitate virtual consultations. Local health volunteers play a crucial role in promoting awareness, training communities on technology use, and bridging the digital divide. Additionally, healthcare professionals receive training on telemedicine practices and effective remote consultations to ensure quality care delivery.

Impact and Benefits:

The initiative provides the following benefits:

- **Improved Access:** Telehealth expands healthcare reach, enabling remote communities to connect with specialists and receive medical attention without traveling long distances.
- **Cost Reduction:** By minimizing travel expenses and consultation fees, telehealth provides a more affordable healthcare option for patients.
- **Enhanced Efficiency:** Real-time data sharing and communication improve coordination between healthcare providers, leading to faster diagnoses and treatment plans.
- **Empowered Communities:** Local health volunteers actively participate, fostering community ownership and sustainability of the program.

Madrid is With You

A social innovation application that connects the elderly citizens with volunteers to accomplish daily tasks



Entity

General Directorate of Education,
Youth and Volunteering



Region / Location

Europe, Spain



Date of Launch

2021



Description:

“Madrid te acompaña” (Madrid is with you) is a social innovation initiative promoting intergenerational solidarity by connecting older adults (aged 65+) with volunteers in Madrid. This free mobile app facilitates requests for daily tasks, social activities, and companionship, fostering social inclusion and improving the quality of life for participating seniors.

The Challenge:

Elderly individuals, especially those living alone, often face social isolation and limited interaction, impacting their well-being as completing daily tasks can be challenging for seniors with physical limitations, leading to dependence on others. Traditional support services may not be readily known or accessible, leaving seniors unaware of available assistance.

The Solution:

“Madrid is with you” offers a user-friendly mobile app that connects seniors and volunteers through an intuitive interface. Featuring task requests, chat functionalities, and progress tracking, the app allows for specific requests and volunteer matching. Tasks range from grocery shopping and transportation to companionship and leisure activities. Integrated chat tools facilitate communication between users, while feedback mechanisms ensure transparency and continuous improvement. Volunteers undergo background checks and training sessions to guarantee safety and quality service delivery.

Impact and Benefits:

The app helped to achieve the following objectives:

- Improved quality of life: Seniors gain access to practical assistance, promoting independence, social interaction, and overall well-being.
- Reduced social isolation: The platform fosters meaningful connections, combating loneliness and enhancing senior citizens' sense of belonging.
- Enhanced volunteer engagement: Offers individuals opportunities to contribute meaningfully to their community and gain valuable experiences.
- More efficient resource allocation: Matching volunteers with specific needs optimizes resource utilization and support provision.

Probox

Large scale reform of probation system to ensure anonymity, equal access to services, easier monitoring of probationers



Entity

Ministry of Justice, National Agency for Crime Prevention, Execution of Non-Custodial Sentences, and Probation



Region / Location

Europe, Georgia



Date of Launch

2021



Description:

Launched in December 2021, ProBoxx marks a significant transformation in Georgia's probation system. This large-scale initiative leverages innovative technology to ensure anonymity, equal access to services, and streamlined monitoring of probationers, ultimately fostering rehabilitation and reintegration while enhancing public safety. Developed by the National Agency for Crime Prevention, Execution of Non-Custodial Sentences and Probation, ProBoxx addresses the challenges previously faced by the traditional system.

The Challenge:

Traditionally, Georgia's probation system relied on physical monitoring, potentially compromising anonymity and leading to social stigma for probationers. Manual reporting and frequent in-person meetings created an administratively burdensome and potentially ineffective system. Additionally, remote locations and limited resources often hindered equal access to essential services for probationers.

The Solution:

ProBoxx addresses these challenges through a comprehensive approach:

- **Anonymous Digital Bracelet:** Probationers wear a tamper-proof, GPS-enabled device that tracks location and key activities anonymously, safeguarding privacy.
- **Centralized Service Platform:** A digital platform connects probationers to various services, including legal aid, employment opportunities, and psychological support, regardless of location.

- **Real-Time Monitoring and Alerts:** The platform provides real-time updates on probationers' activities and generates notifications for potential compliance violations, enabling timely interventions.
- **Data-Driven Decision Making:** Data insights from the platform inform individualized rehabilitation plans and resource allocation, promoting evidence-based approaches.

Impact and Benefits:

ProBoxx's innovative approach has yielded promising results:

- **Enhanced Anonymity:** Anonymity fosters social inclusion and reduces stigma, contributing to successful reintegration.
- **Improved Service Access:** The platform bridges geographical barriers and ensures equal access to crucial support services.
- **Efficient Monitoring:** Real-time data empowers proactive interventions and reduces reliance on resource-intensive methods.
- **Data-Driven Rehabilitation:** Personalized rehabilitation plans based on data insights improve success rates and reduce recidivism.
- **Increased Public Safety:** Effective monitoring and timely interventions enhance public safety by mitigating potential risks.

Conclusion

As we celebrate the achievements of the GovTech Prize winners, we also acknowledge the broader significance of their endeavours. These initiatives not only improve public services but also foster collaboration, inspire creativity, and drive progress towards a more equitable and sustainable society. By sharing their successes and insights, we aim to ignite a global movement where governments worldwide embrace technology as a tool for positive change, shaping future governments that are more responsive, inclusive, and impactful in serving the needs of their citizens.

In the years to come, we anticipate that the GovTech Prize will continue to serve as a catalyst for innovation, driving governments to push the boundaries of what is possible and foster initiatives that truly have influence in the lives of people around the world. The final aim is to embrace the transformative power of technology and work towards a future where governments lead the way in shaping a brighter, more sustainable, and inclusive world for all.



برنامج الإمارات للخدمة الحكومية المتميزة
Emirates Government Service Excellence Program

www.egsep.ae

 @egsep

WORLD GOVERNMENTS SUMMIT 2024

@WorldGovSummit



#WorldGovSummit

Join the conversation
worldgovernmentsummit.org

