Land Area
36,193KM^2

Household
8.83 million

Population
23.57 million (69% resided in urban area)

Per capita income (2020)
US$ 28,317 (GDP)

Taiwan is known for the delicious food, friendly people, and 1st ICT Industry worldwide.

Top-notch ICT Landmark

ICT hardware market share ranks World No. 1

NB	Tablet	Wearable	LCD Monitor	Mother board
85%	39%	35%	67%	85%

Over 80% ICT service penetration rate & Internet usage rate

4G penetration	Smartphone Ownership	Household Internet Adoption	Wireless Internet Adoption
100+%	97.2%	82.3%	80.2%

Smart City Project Framework & Achievements

Smart Mobility

Smart Education

Smart Healthcare

Smart Retail

Smart Governance

Smart Agriculture

Central Policy

Smart City Project

Local Needs

Top-Down
11 Topics Address Industrial Needs
- Autonomous Driving
- Artificial Intelligence (AI)
- 5G Innovative Solution
- …

Field Trials for Fine Tune Solutions

Bottom-Up
158 Requests from Local Governments
- Healthcare for rural areas
- Air pollution detection/prediction
- Parking solutions
- …

294 Enterprises

70 Startups

223 Projects

6,764 Jobs

USD 1.1B Investment

32 Export

A New Model for Smart Cities in Asia

- **3 cities** (Taoyuan, Taichung and Taipei) were selected as the **Top 1** "Intelligent Community of the year" in 2019, 2013 and 2006.

- **15 of 22 cities** in Taiwan have been nominated as the intelligent communities.

SMART21 COMMUNITIES OF THE YEAR

TOP7 INTELLIGENT COMMUNITIES OF THE YEAR

1INTELLIGENT COMMUNITY OF THE YEAR

ICF
Intelligent Community Forum

15

8

3

Technology x Service x Governance

Two Empirical Cases in Taiwan…

Environmental
Monitoring

Epidemic
Prevention

Air-Pollution Monitoring in Industrial Parks

Combining **IoT sensors** and **AI** to build a **Smart Air Quality Monitoring System**.
Smart inspections can **report air pollution automatically**, establishing a new model of city governance.

Collect Air Quality Data	Data Analysis with AI	Target & Track Pollution Sources	On-site Evidence Collection

Collect Air Quality Data

Auto-detection every 5 sec. (PM2.5, VOC, CO, O3, NO2)

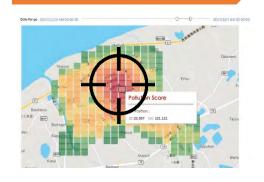**3 Industrial Parks Install 400 air boxes**

Data Analysis with AI

Data Analytics Engine

- Sensor data verification
- Integration of sensor data
- Multi-dimensional testing
- Predictive AI model

4-hour Prediction of air pollution

Technological Law Enforcement
6x Inspection Efficiency

Assisted local environmental department in the discovery of illegal emissions from **11** factories in 1 yr.

(Air pollution fines **USD$4 million**)

Cross-departmental cooperation expands the service scope

- AI prediction accuracy reached **70%**
- Partnered with the **Environmental Protection Administration** to expand to **7 cities**

COVID-19 Smart Epidemic Prevention

Early 2020 – Open Data for Masks Map Service

- IDB worked with industry, expanded mask daily production capacity from 1.8M to **18M** within 3 months.
- NHI worked released masks to the public in community pharmacy and convenience store, and also disclosed **mask inventory open data**.
- Startups and software engineer can develop their own **mask map** service with real-time searches and collection appointments.

Middle 2020 - Smart Quarantine Monitoring

- The location of quarantined persons are monitored 24/7, by **electronic fence** using wearable devices and cellphone positioning.
- Introduced the **GSM positioning system** with 80,000 base stations to grasp the movements of COVID-19 confirmed cases with big data.

Now - Diverse Smart Epidemic Prevention Products

- Domestically produced **infrared thermometers**, **automatic disinfection robot**, etc. to detect body temperature, Implement flow control, and environmental cleanup.

What we can do Together…

Build a working platform for Smart Service innovation.

Share experiences in Smart City Development.

Provide many kinds of ICT partnership opportunities.

One person walks alone can be fast.
Many people walk together, mind our steps, so we can go far!

Thank You!!