

INTERNATIONAL TRANING WORKSHOP

# Chiang Main Magic City

Mr. Pradya Komanee , Ms. Anongnart Panyajaroen Date: May 13-15, 2025





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## **Digital Driven City** Smart Nimman & B & CMU & depa



**Behavior detection** and analysis using Al Edge Terminal technology from **CCTV** cameras.





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1. Face detection and recognition

- 2. Detection of unauthorized area access
- 3. Detection of mobile phone usage
- 4. Detection of vehicles in no-parking zones
- 5. Detection of not wearing a safety helmet
- 6. Detection of available parking spots
- 7. Detection of individuals entering the area
- 8. Detection of motorcycles entering restricted zones
- 9. Detection of more than two people entering the area
- 10. Fire detection
- 11. Weapon detection
- 12. People counting

> Smart Economy >> Smart Mobility >> Smart Living

**SMART SIGNAGE** 

จอโฆษณาดิจิทัล

### **Smart Signage Solution**

Smart Signage is more than just a display - it's Al-powered, capable of understanding and responding to customers in real time! With an intelligent AI camera that analyzes gender, age, and viewer behavior, content and advertisements can be automatically tailored to the target audience. This empowers businesses to communicate more effectively, increase sales opportunities, and deliver a next-level experience that goes far beyond traditional digital signage.







Kids detected

Elder detected

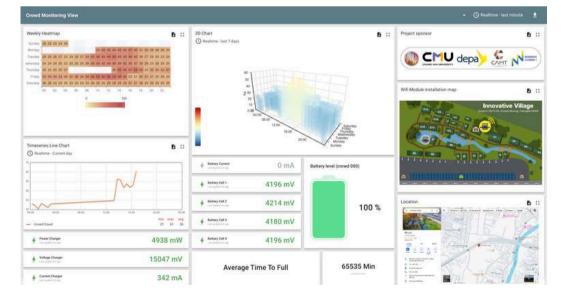
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### **Creating a 3D Model of Nimman City**

A data analytics system leveraging Wi-Fi Location-Based Services (LBS) will be used to analyze and map tourist behavior. This system enables the visualization of visitor density in specific areas, providing valuable insights that support the development of a 3D city model of the Nimman district.









"Building

# Every country have a 3 Season But Chiang Mai have 4





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# Our Season 4 is ....

Chiang Mai ranks 1st in the world for PM 2.5 exceeding the standard level.

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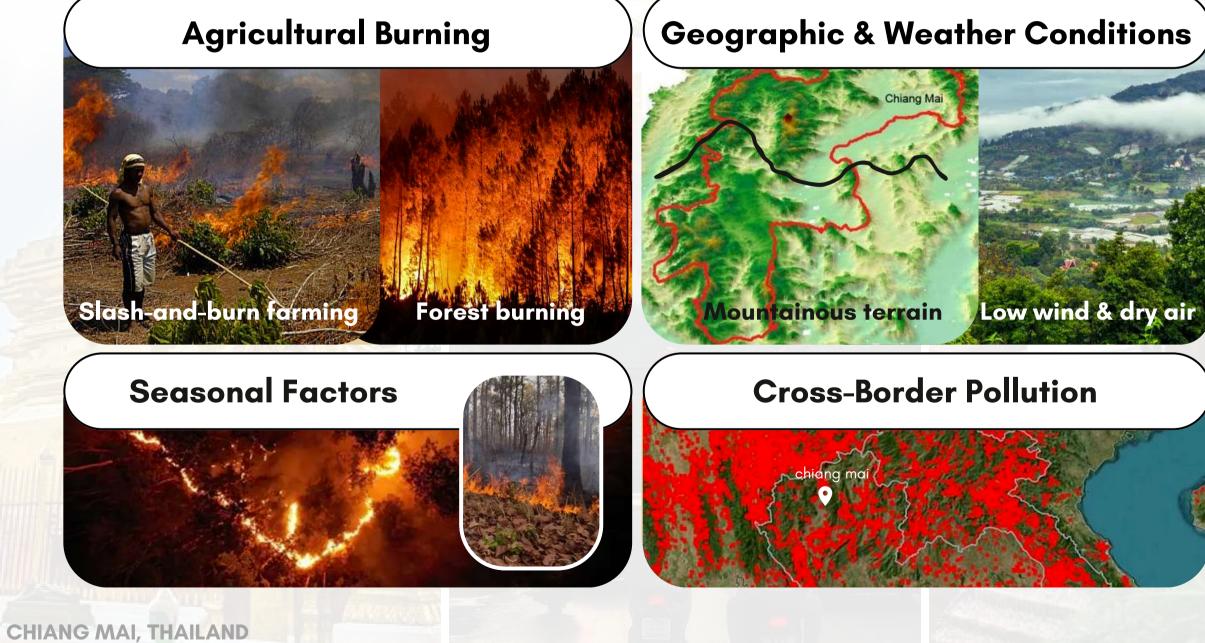
depa

4.5M

CHIANG MAI,

# PM 2.5 PROBLEM

Chiang Mai ranks 1st in the world for PM 2.5 exceeding the standard level.



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### **Urban Pollution Sources**

Vehicle emissions

### **Construction & industry**

Chiang Mai ranks especially in the Santitham Road.



# 2024, CHIANGMAI FACED DEVASTATING



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# FLOODING

that caused widespread impacts on the economy (society) and (infrastructure) (particularly disrupting transportation networks and damaging residential areas.)

Chiang Mai frequently faces flooding issues, especially during the monsoon season (around August to October). The main causes and solutions are as follows:



Chiang Mai has low-lying plains surrounded by mountains. Heavy rainfall causes water to flow down.



### **Climate Change**



unusually heavy rainfall

### Insufficient **Drainage Systems**



Urban expansion has outpaced the development of proper water drainage infrastructure

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> Kok River, **Chiang Rai**

> > **Ping River**

### Deforestation

Reduces the soil's ability to absorb water







# Digital solution PM 2.5 PROBLEM on process

# Command Center for prevention and resolution of forest fires and PM2.5, Chiang Mai Province





### Web application "CMDSS PM2.5" and "FireD"



Web application "CMDSS PM2.5" and "FireD"

- 2020: Start of support as the integrated control center
- 2021: Development of application "FireD 2022: Development of application "CMDSS
- PM2.5" and web database Authority to manage applications, etc. was delegated to the Chiang Mai Provincial Administration so that the Administration itself could manage them.
- Source: Chiang Mai Provincial Administrative Organization

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Generate negative ions to capture dust using solar power, reducing PM2.5 by 50% in a 30 sq.m. area within 1 hour.

### Smart DustPole, **Chiang Mai University**

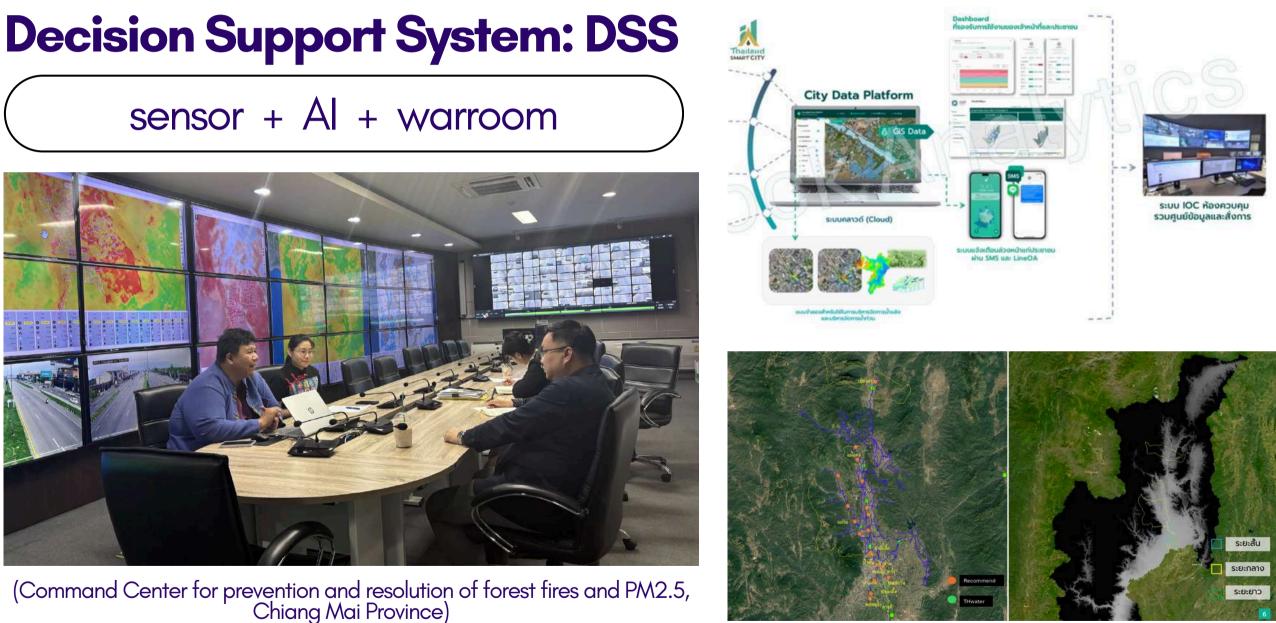


# Digital solution FLOODING on process

## Automated Telemetry Water Level Monitoring **System**



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# Chiang Mai is a truly captivating city

Captivating Atmosphere S Affordable Living **O** Delicious Cuisine **Vibrant Neighborhoods** S Ideal for Lifestyle & Work

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# Join Us in Advancing **Chiang Mai Smart City**

We are currently seeking innovation prototype solutions that can drive urban development, enhance quality of life, and support data-driven city planning. Let's co-create the future of Chiang Mai together.

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