
HKSTP
空間數據共享平台
Common Spatial Data Infrastructure
地理空間實驗室
Geospatial Lab
Spatial Intelligence
for All and by All
Spatial AI
SANDBOX
PoC Challenge

Info Pack for CSDI PoC Proposal Submission

25 Apr 2026

Version 1.0

HONG KONG'S LARGEST INNOVATION & TECHNOLOGY ECOSYSTEM

INFO

1. Eligibility
2. Selection & Assessment criteria
3. Timeline
4. Program details
5. Milestone assessment
6. Business Plan template

1. ELIGIBILITY

IDEA
An Innovative Idea
(Supported by R&D and business planning)

COMPANY
A limited company registered & incorporated in Hong Kong

OR

TEAM
A group of Innovative person
Aged 18 or Above &
at least two(2) ~ six(6) members

Geospatial Data Driven

SCOPES of PROTOTYPES

- **Banking**
- **Social Service**
- **Land Use**

2. SELECTION & ASSESSMENT CRITERIA

Business Proposal Submission

Supporting Material e.g. mockup link, video

Technical competency in AI + Spatial (Address Pain Points + Value-added Solutions) 50%

Commercialisation value 20%

PoC development plan 20%

Team Competency 10%

Shortlisted Teams will be presented to Judges in Jun 2026

3 Teams

JUDGE PANEL

CHAIRMAN

Mr. Raymond CHOI
Head of Spatial Data Office,
Development Bureau

空間數據共享平台
Common Spatial Data Infrastructure

Mr. Martin LIU
Assistant Director,
AI & Data

HKSTP

Mr. Franklin SO
Deputy General Manager

中國銀行(香港)
BANK OF CHINA (HONG KONG)

Ms. Janelle CHAN
Heads of Elderly Service,
Hong Kong Children & Youth Services

香港青少年服務處
HONG KONG CHILDREN & YOUTH SERVICES

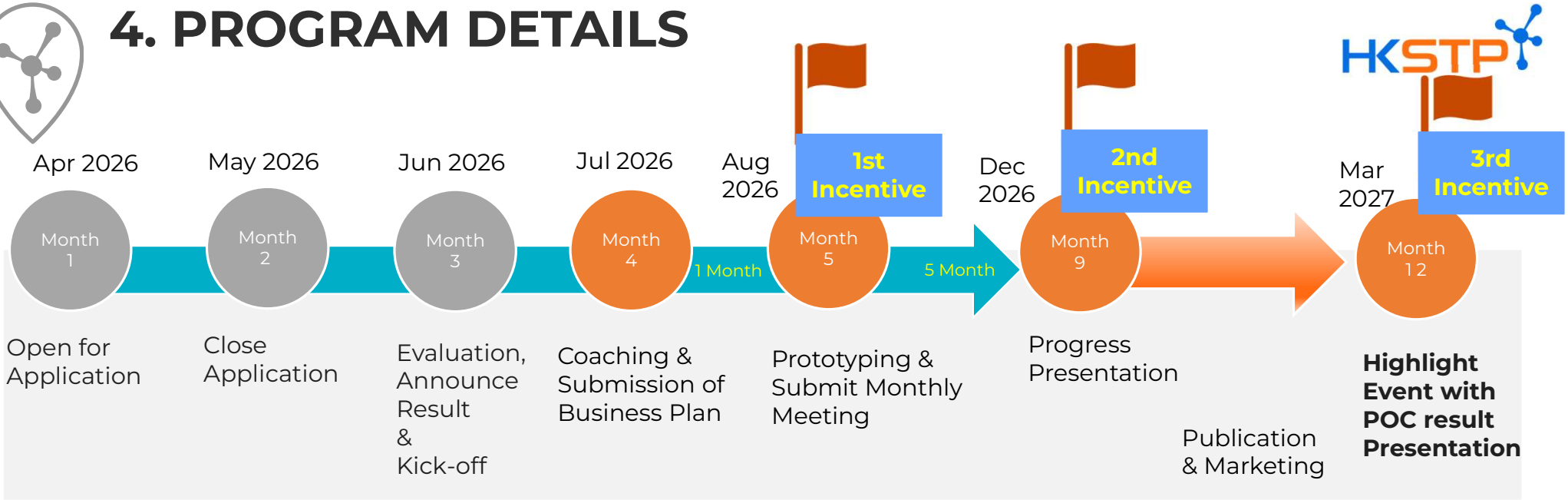
Mr. Gary LUI
Senior Town Planner
Planning Department,
HKSARG

規劃署
Planning Department

3. TIMELINE

27 April 2026	26 May 2026	June 2026	End of June 2026	July 2026
Application Start	**Submission Deadline**	**Proposal Evaluation**	**Result Release**	**Programme Start**
Open for Application	Close applications (4 weeks)	Assess shortlisted applications	Notify outcomes	Commence kick-off

4. PROGRAM DETAILS



Technical partnership
Tech experts to support

FUNDING & SUPPORT
HK$60K for each team Support

BUSINESS MATCHING
Exposure to Business Opportunities

Mentors & Advisors
Corporate and industry partners

5. MILESTONE ASSESSMENT

- **1st milestone (25%) – Mentor Meet-up HK$15,000 Each Team (Tentative Aug 2026)**
- Proposal submission : Structured 6 months plan
- Satisfactory progress on Prototype development
- Proactive Meeting with mentors

- **2nd milestone (25%) – Progress Presentation HK$15,000 Each Team (Tentative Dec 2026)**
- Proactive meetings with mentors
- Prototype ready for presentation (Mentors)

- **3rd milestone (50%) – Highlight Event HK$30,000 Each Team (Tentative Mar 2027)**
- Join Highlight Event & Promotion
- Project Pitching – product and results

6. POC Proposal Template

HONG KONG'S LARGEST INNOVATION & TECHNOLOGY ECOSYSTEM

BUSINESS PLAN TEMPLATE : GUIDE

- A Business Plan is expected to be precise and concise, be delivered in PowerPoint / PDF format with **minimum 10 pages but no more than 20.**

- You can **embed supporting material including video clip, mockup screens or URL link** into this proposal

- NOTE: You are **highly recommended** to include ALL the information as illustrated in the following template as such information are expected from the proposal assessment. You may of course, vary the sequence, format, style, etc. and add other relevant information as appropriate.

POC PROJECT NAME

Presented by :

Date :

PROJECT SUMMARY

- Introduction of your product within 30-40 words :

- Expected contents:
- What is your idea / initiative/ product?
- Which is your key industry: Banking/Social Service/Land Use?
- What are pain points you are trying to solve?
- What are value-added solution you propose?

TECHNOLOGY COMPETENCIES

- How can the product **solve industry's pain points**?
- Any **additional functional features** to be provided?
- What are the **key spatial data and Spatial AI technology** to be involved and how they can be used? (Spatial data and MAP API at the CSDI portal should be used)
- What is the Innovativeness?
- If the product is already "**Go to Market**", can this PoC Program **enhance** its **spatial data driven functionalities**, and make it more **functionable, valuable, well known** to the market?

COMMERCIALIZATION VALUE

- Who are your target customers? (those who will pay) and target end-users? (those who will use the product)
- What is the potential market size?
- What are the marketing channels?
- Is the business model (revenue and pricing strategy) sustainable?

POC DEVELOPMENT PLAN

Is the project schedule **reasonable, measurable and achievable**?

- APP Development

EXAMPLE	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month
APP Development	Obtain User requirements	UI/UX and graphics design	App Development	App Development	Software Testing & Finetuning	Prototype ready for testing and fine tuning

TEAM COMPETENCY

- Does the team have good mix in technical (in particular Geospatial and AI expert) and business expertise?
- Does the team have Founders, Management, R&D Team, Development Team and Advisors?
- Any investors / partners involved in the project?

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KICK-OFF CEREMONY

Spatial Intelligence for All and by AI

Mr. Franklin So

Deputy General Manager, Data Strategy & Science,
Customer Experience, Personal Banking and Wealth Management

Bank of China (Hong Kong)

Speaker – Mr. Franklin So

MR. FRANKLIN SO

Deputy General Manager,

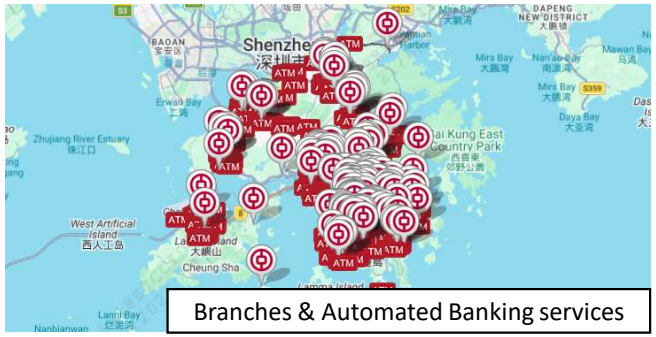
Data Strategy & Science, Customer Experience,

Personal Banking and Wealth Management

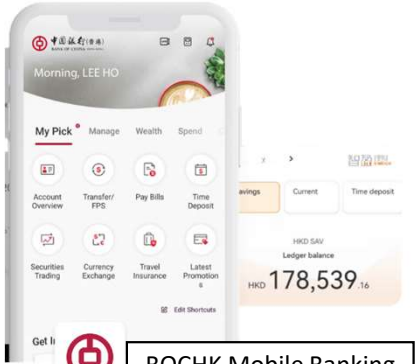
Bank of China (Hong Kong)

Introduction of Bank of China (Hong Kong)

- BOCHK is one of the note-issuing banks in Hong Kong.
  Our personal banking provides comprehensive financial solutions to individual customers and SMEs
- Largest branch network in Hong Kong, over 160+ branches
- Extensive ATM network - over 280+ self-service banking centers and over 1,000+ machines
- Comprehensive Digital Banking services, including Mobile Banking, BoC Pay+ and Home Expert
- Credit card & debit cards services for 24/7 worldwide transaction across the globe

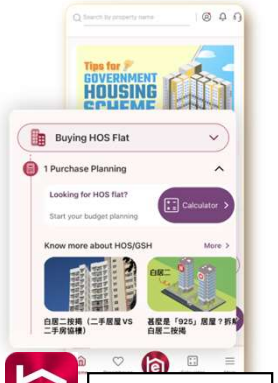


Branches & Automated Banking services



BOCHK Mobile Banking


BoC Pay+



Home Expert

Credit Card & Debit Card

Data Strategy & Science, Customer Experience

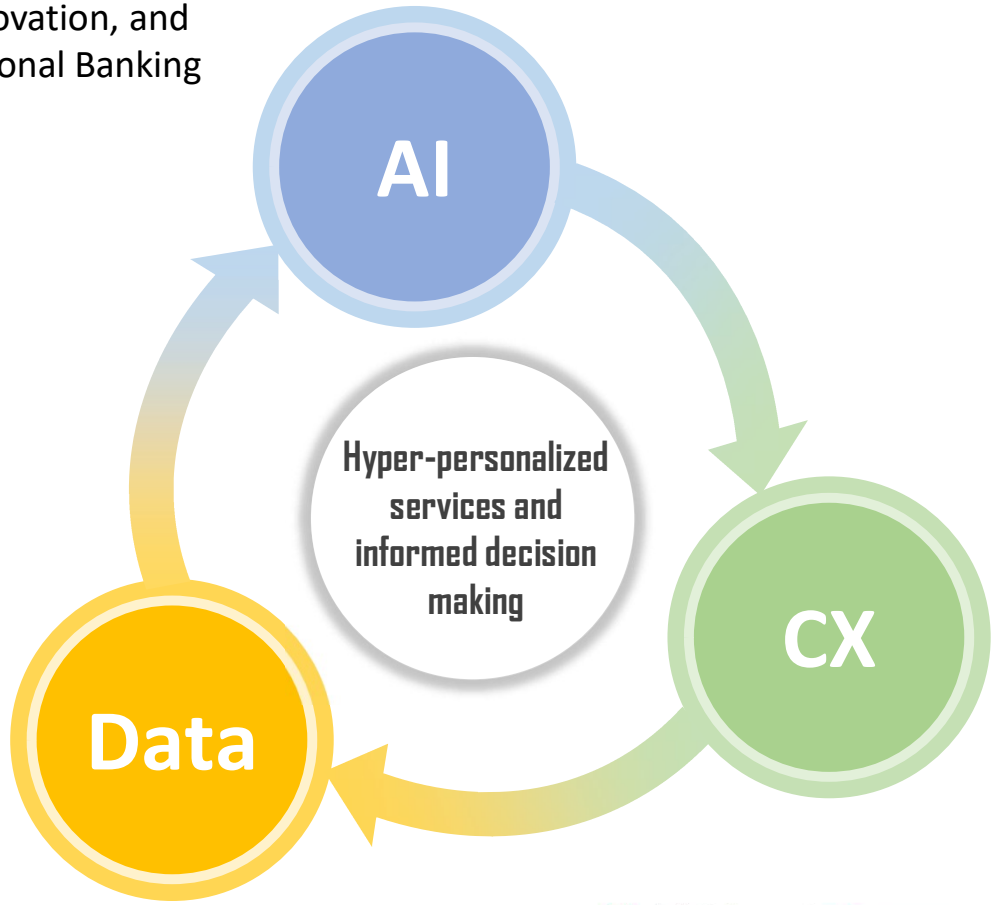
- Deliver customer value through Data-driven Insights, AI, Innovation, and seamless Customer Experience (CX) across channels for Personal Banking and Wealth Management

  - Driving **hyper-personalized services** by leveraging advanced data analytics, machine learning, and generative AI for digital engagement and customer experience

  - Promoting **end-to-end digitalization** by integrating generative AI and data-driven decision-making into business processes, scaling use cases and optimizing operational efficiency

  - Establishing a **unified, reliable data foundation** through data governance and visualization tools to empower real-time informed strategic decision-making

  - Designing **seamless customer journey** using a holistic approach that combines customer voice, usability testing to identify pain points and deliver consistent experience across channels



PAIN POINTS

1. Branch Accessibility & Staffing Resource

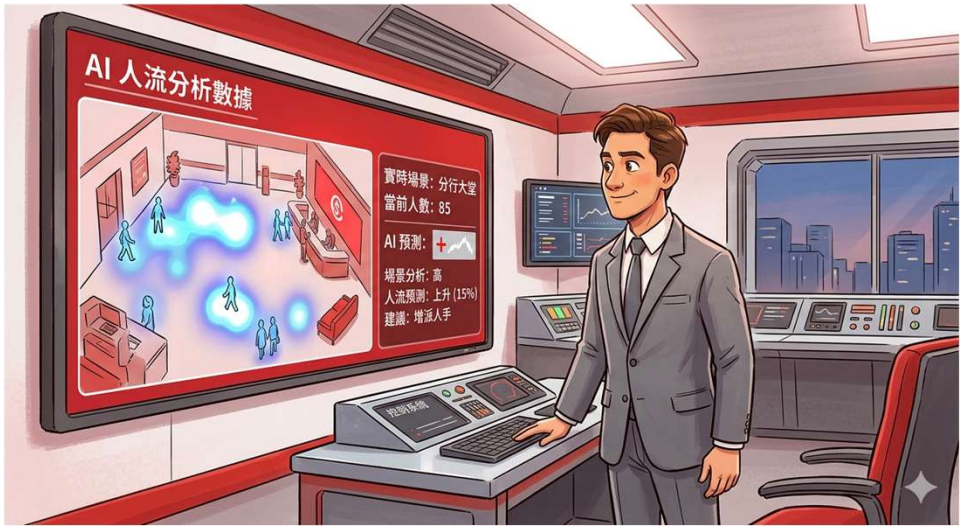
- Banking access depends heavily on branch location and population movement shift, causing variations in branch traffic and leaving some communities less conveniently served
- Branch traffic and staffing levels may result in extended queue times, impacting customer experience

2. ATM Cash Replenishment / Logistics

- Efficient delivery routes and schedules are essential for quickly adjusting replenishment amid fluctuating demand (ATM cash-outs and service interruptions)

3. Geo-location Data usage & Wealth Management Prospecting

- POS terminal geolocation data is essential to improved visibility into spending locations, enabling richer insights into customer transaction patterns and spatial behavior
- Behavioral and spatial data can enable a more comprehensive understanding of customers' financial needs, supporting personalized and context-aware banking solutions
- Enhancing detection capabilities allows for more accurate recognition of complex spatial-temporal transaction patterns, particularly in card-not-present and cross-border scenarios, supporting a more secure customer experience.



SPATIAL AI USE CASES

1. Branch Network Planning & Operation Resource Projection

- **Branch location planning:** integrating customer mobile signal and GPS data, demographic profiles, and commercial-residential traffic patterns to optimize site selection based on spatial demand dynamics
- **Footfall prediction and Queue Modeling:** By using AI to analyze branch footfall, customer movement, and real-time branch transaction data, banks can identify peak hours, optimize staffing, and even guide customers to less busy nearby branches

2. ATM Replenishment Optimization

- **ATM demand forecasting:** Spatiotemporal demand using historical ATM data and location-based features; Vehicle routing & scheduling optimization based on real-time ATM usage demand forecasting

3. Location-based Marketing Intelligence & Personalized Wealth Management Services

- **Geofencing Triggers**: event-based trigger around high-intent locations (e.g., travel agencies for FX/Insurance); "just-in-time" push notifications when a target segment enters the zone
- **Lifestyle & POI Affinity**: Analyze Point-of-Interest (POI) density around a customer's frequent transaction locations; elevated activity at premium venues such as private clubs, specialty hospitals, or international schools provides a spatial indicator for wealth segmentation

4. Transaction Pattern Detection

- **Velocity & "Impossible Travel" Logic**: Implement spatial-temporal checks that flag transactions occurring in two distant locations (e.g., Central, HK and London, UK) within a timeframe that is physically impossible to travel
- **IP-to-Location Mapping for CNP**: For Card-Not-Present transactions, cross-reference the merchant's registered location with the user's mobile GPS and IP geolocation. Significant divergence acts as a high-risk trigger for additional authentication

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Spatial Intelligence for All and by AI

Ms. Janelle Chan

Head of Service (Elderly Service)

Hong Kong Children & Youth Services

香港青少年服務處
HONG KONG CHILDREN & YOUTH SERVICES

Core values of "user-oriented and care",
"pursuing excellence and striving for **innovation.**"

20+ Service Units & Centres

Total Revenue: HK$182.3 M
Diversified funding from government, trusts, and donations provides robust financial health and operational resilience.

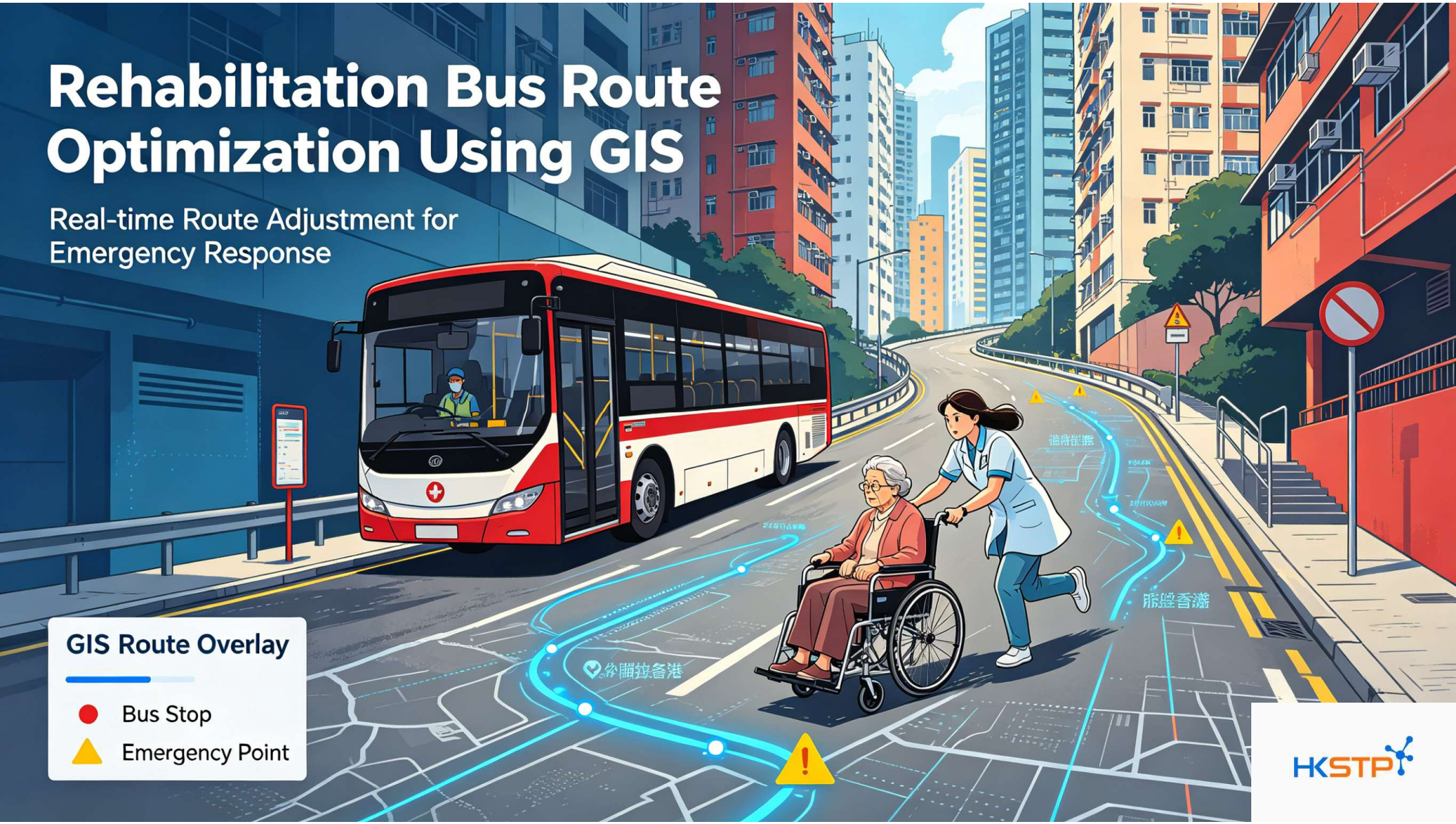
預期效益

keeta drone

- 複用科學園起飛點人員、設備，開展更多無人機配送業務
- 參與香港公益事業，豐富香港低空經濟應用場景，履行企業社會責任

香港青少年服務處
HONG KONG CHILDREN & YOUTH SERVICES

- 減輕送飯壓力，釋放前線員工參與更多其他更有價值的工作
- 提升送飯效率，滿足更多鄉村長者的送飯需求
- 以該條航線為試點，與其他社會服務機構共同探索更大範圍、乃至全港範圍開展無人機送飯的可行性


Rehabilitation Bus Route Optimization Using GIS
Real-time Route Adjustment for Emergency Response
GIS Route Overlay
Bus Stop
Emergency Point
HKSTP

Smart Planning of Elderly Home Care and Day Services

Leveraging GeoAI to Optimize Operations for HKCYS

Current Challenges

Inefficient Route Planning

Manual daily planning leads to excessive travel time and suboptimal caregiver scheduling.

Difficulty in Prioritization

Lack of system to identify high-risk/isolated elders, delaying critical interventions.

Staff Resource Strain

Constant pressure leads to fatigue and potential service gaps.

GeoAI-Powered Solution

01. Intelligent Route Optimization
Automatically calculates the most time-efficient daily home visit routes for staff.

02. Data-Driven Prioritization

Uses health & demographic data to prioritize care for the most vulnerable elders.

03. Enhanced Safety & Accessibility
Considers terrain, weather & access for safer navigation.

Transformative Impact

Enhanced Operational Efficiency

Significant reduction in travel time, allowing staff to serve more elders daily.

Reduced Staff Fatigue

Smarter routes alleviate physical burden, boosting team morale and retention.

Improved Service Quality

Ensures proactive, consistent care for the most vulnerable.

PAIN POINTS

HKCYS provides **home care and day care services for the elderly**

1) Inefficient Route Planning

- Daily tasks (home visits / meal delivery / escort) are **geographically dispersed**
- Manual scheduling struggles with **multiple constraints**: safety of pick-up points, uncertain travel time, jammed, etc.

2) Hard to Prioritize Urgent Elderly Cases

- "Urgency" is often **judgement-based**; criteria are not consistent, standardized, or transparent.
- Case information is **fragmented** and not always updated in real time, while risk can escalate quickly (health / emotional / social).

3) Limited Staff Resources Create Constant Operational Pressure

- Staff frequently **multi-task** (frontline service + coordination + admin), reducing time available for direct care.
- High coordination overhead (calls/messages with staff/volunteers/drivers); changes trigger **rework**, especially with sudden absences or vehicle issues.
- Limited ability to track operational KPIs (on-time rate, travel time, productivity) weakens continuous improvement and resource justification

SPATIAL AI USE CASE

- Utilize **geospatial route optimization and demographic mapping** to:
- Plan **daily home visit schedules** that minimize travel time while prioritizing high-need elderly based on health risk, mobility issues, or living alone.
- Route planning for Rehabilitation and Food Delivery Cars from time and safety manner in particular on stop place in hilly roads or uncovered area.
- Overlay spatial data such as **elevation, building access, and weather conditions** to support safe and timely service delivery.

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Spatial Intelligence for All and by AI

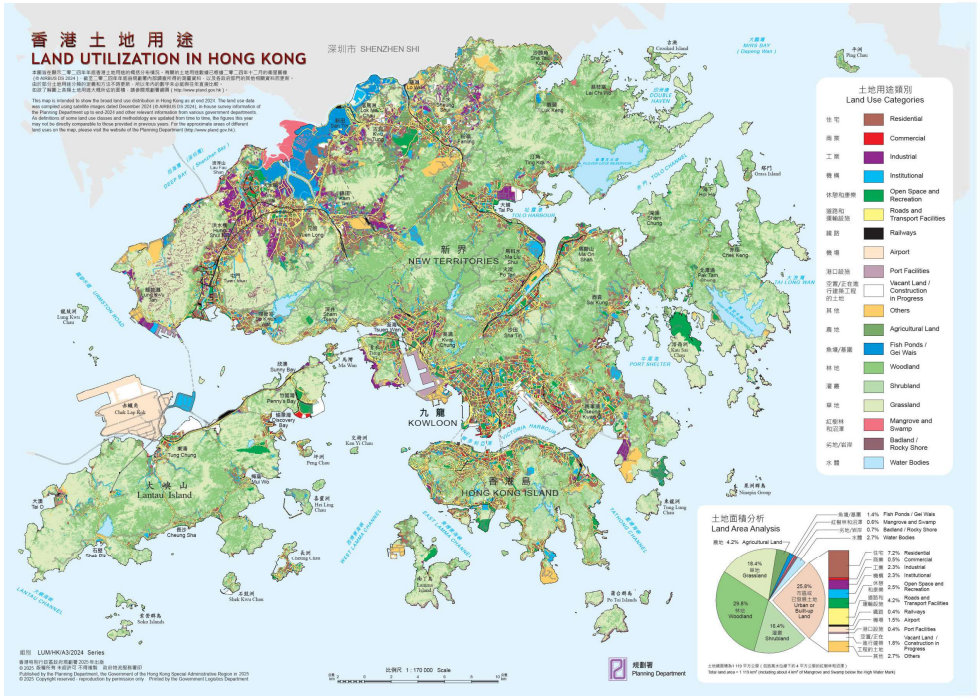
Mr. Gary Lui

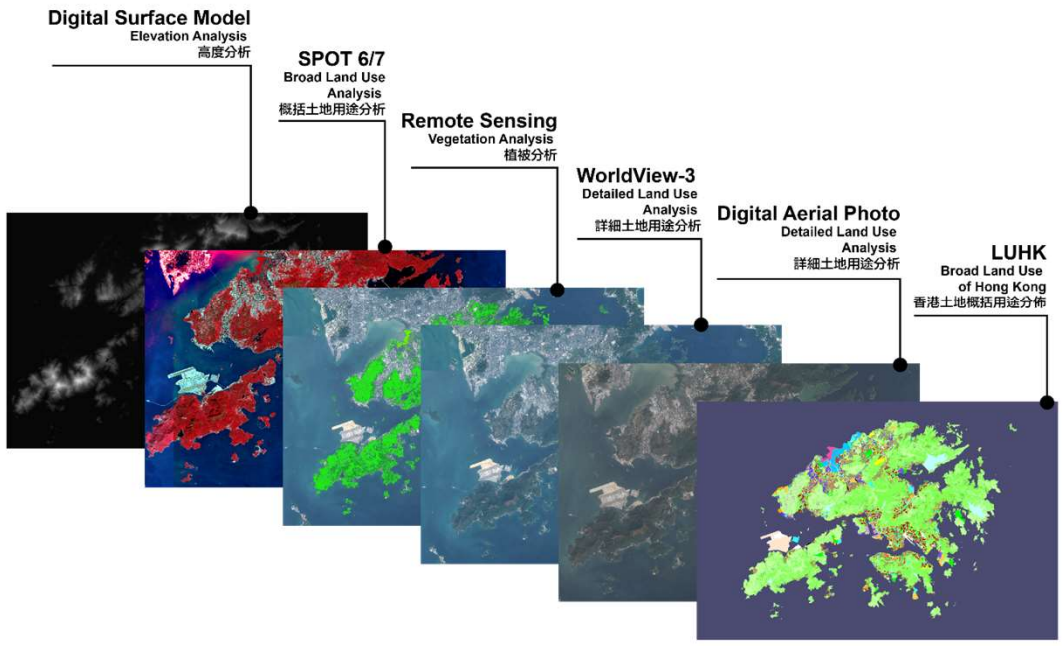
Sr Town Planner/Infn Technology 4
Planning Department
HKSAR Government

LAND UTILIZATION IN HONG KONG

Planning Department
The Government of the Hong Kong Special Administrative Region

- An annual update on the broad distribution of land uses in Hong Kong based on various spatial datasets, including those from CSDI portal
- AI is adopted for Vegetation Analysis, using mainly satellite image





PAIN POINTS

1) **Limited updating frequency of datasets**
   - Vegetation Analysis (i.e. classification of Woodland, Shrubland and Grassland) requires up-to-date data on vegetation height, which is mainly captured by drones/Small Unmanned Aircrafts (SUAs). Infrequent updating (every 5 to 10 years) would lead to inaccurate classification

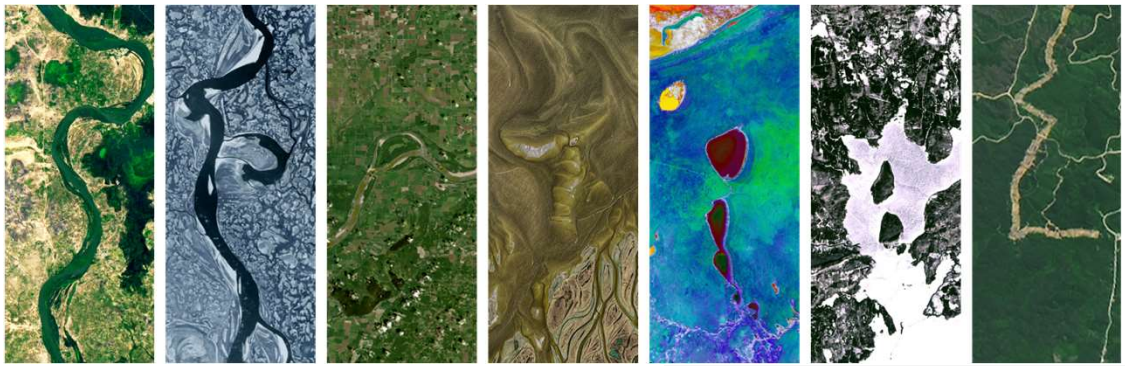
2) **Limited field validation**
   - Difficult to distinguish between Woodland, Shrubland and Grassland
   - Lack of staff to conduct field validation on Vegetation Analysis generated by AI, reducing the reliability of AI Vegetation Analysis
   - Most of the land covered by natural vegetation are not easily accessible for field validation

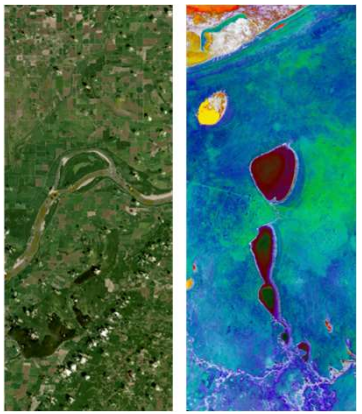
SPATIAL AI USE CASE

1) **Data acquisition**
   - Capturing vegetation height data more frequently by leveraging SUAs and/or low orbit satellite imagery to improve the accuracy in classifying Woodland, Shrubland and Grassland

2) **Vegetation Analysis by AI**
   - Using Spatial AI to:
     - classify natural land uses into woodland, shrubland and grassland
     - prioritize areas with ambiguity for on-site field validation
   - Using drones/SUAs for field validation in areas with limited accessibility

PLEASE JOIN





Submission Deadline

26 May 26 (noon)

Enquiry: dsh-events@hkstp.org

Source: https://landsat.gsfc.nasa.gov/apps/YourNameInLandsat-main/