

Smart Solution for Better Lives How Hong Kong's Smart Living Technologies Improve Quality of Life

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Smart City Consortium



Smart City Consortium (SCC) comprises a group of professionals from different corporations and organizations with an aim to provide opinions and suggestions to the Government for formulating related policies and standards in the development of Hong Kong as a world-class smart city. We encourage worldwide collaboration with different stakeholders to create the right ecosystem, which fosters innovation and sustainable economic growth for Hong Kong.

Our Vision

To build Hong Kong as the world's leading Smart City to foster knowledge-based economy, enhance the quality of life and to create a vibrant ecosystem leveraging relevant Information and Communication Technologies and adopting effective resources management.

Our Mission

SCC is founded to promote Hong Kong as the world's leading Smart City. We provide related opinions and suggestions based on our members' professional knowledge for the development of Smart City in Hong Kong. We are the vanguard in creating smart living culture; we collaborate with the Government in developing Smart City strategic plans.



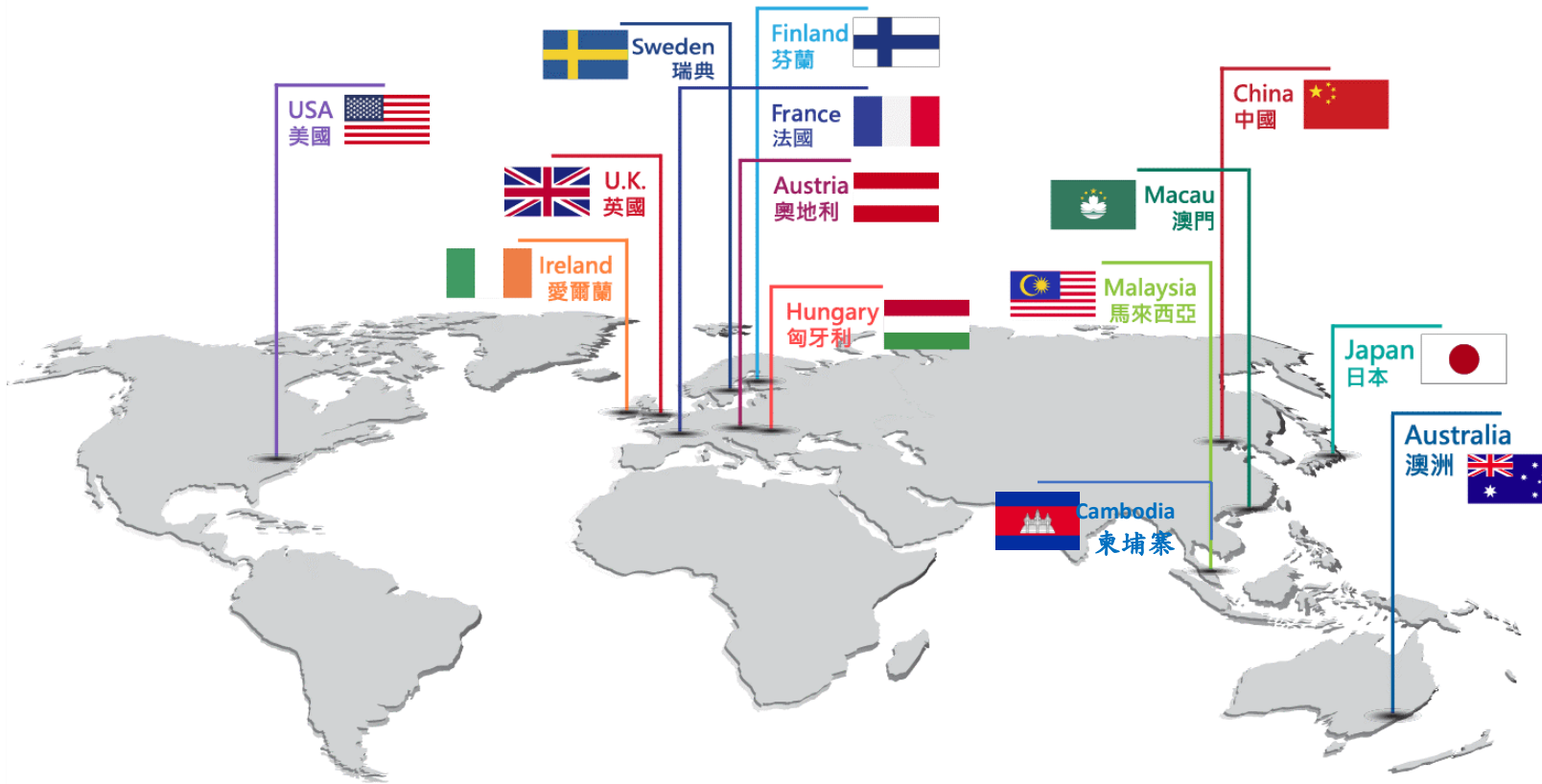


7

Years



100+
Events
Per year



45 
MoUs

15 
Countries &
Regions



300+
Members

25
Committees

3
SIGs

Why Smart City?



Urbanization Challenges



Road Congestion

Substantial economic losses caused by

- incremental delay
- excessive fuel consumption
- higher vehicle emission



Double Aging

- “Double aging” means aging people and aging buildings coexist, especially in old neighbourhoods.
- ~330K Building over 70 years old in 2046 in Hong Kong
- 34% Population age 65 and over in 2046 in Hong Kong

Urbanization Challenges

Health problems

- According to the World Health Organization, chronic diseases are diseases of long duration and generally slow progression, this give great pressure to our Health System
- Chronic disease, such as diabetes, cardiovascular disease, tumor, contributing 80% of causes of deaths

Urbanization Challenges

Municipal solid waste

- The world generates 2.01 billion tonnes of municipal solid waste annually and is expected to grow to 3.40 billion tonnes by 2050.
- Much of the increase will come in rapidly growing cities in developing countries

- World Banks Urban Development department

Urbanization Challenges

Air pollution

- Polluted air poses a global health threat, and kills 4.2 million people worldwide every year
- Around 91% of the world's population live in places where air quality levels exceed WHO limits

Smart City address to these problems?

We need to create smart cities to make these urban areas more liveable and truly sustainable.





Smart City 1.0 – Technology-driven

A smart city is an urban development using Information and Communication Technology (ICT) and Internet of Things (IoT) to provide useful information to effectively manage resources and assets.

One of the indicators of a successful smart city is the sophistication of its IoT network.

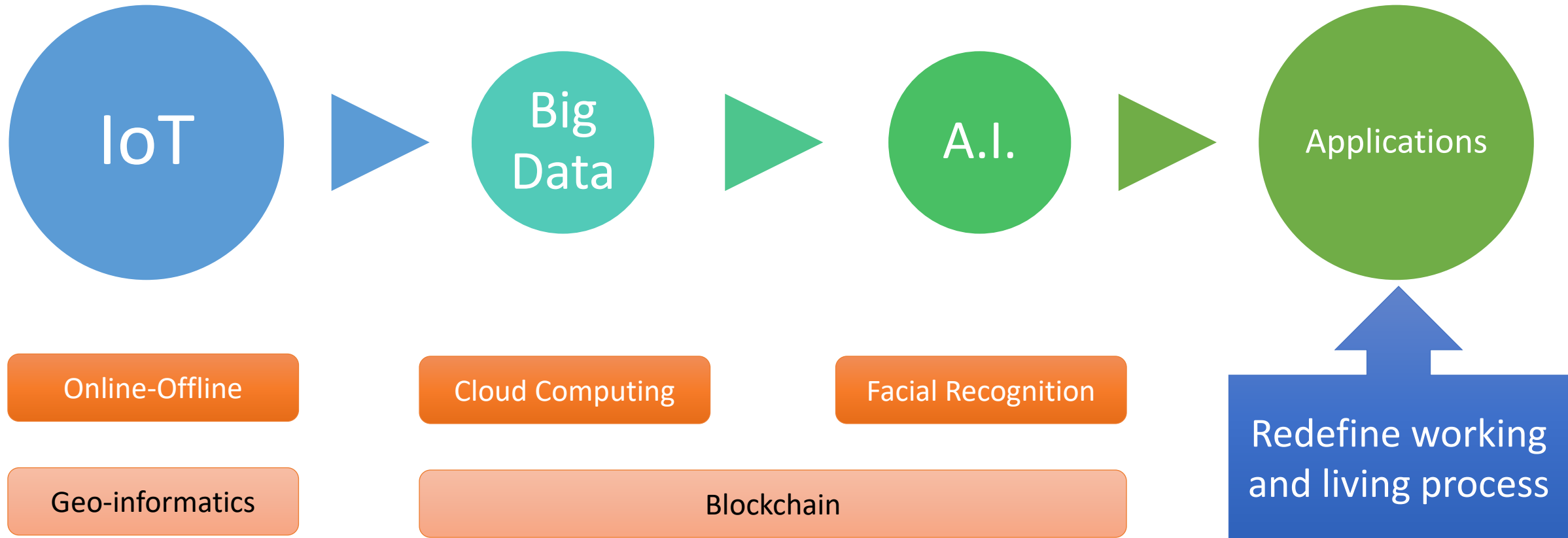
The rollout of 5G technology will be another catalyst.

Data is “New energy”

A key enabler of sustainable smart cities is that all participants in the complex ecosystem share information and combine it with contextual data that is analyzed in real-time.

This includes data collected from citizens and mechanical devices, that are processed and analyzed to monitor and manage traffic and transport systems, power plants, water supply networks, waste disposal, etc.

Collect Data, then Trim



An aerial night view of a city with glowing digital lines connecting buildings. The city lights are a mix of warm orange and cool blue, with white digital lines arcing across the scene, suggesting a smart city or data network. The background is a dense urban landscape with many skyscrapers and buildings.

Smart City 2.0

Government-driven

Governments have started to implement 'smart city' policies by leveraging IT infrastructure and incorporating innovative solutions in urban planning.

DR. BOYD COHEN:
'THE SMART CITY WHEEL'
(智慧城市輪)



History for Smart City Development in HK





[Hong Kong] Smart City Blueprint

[Home](#) [Vision & Mission](#) [Development Plans](#) [Open e-Blueprint](#) [Download Blueprint](#)

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< Smart Hong Kong >



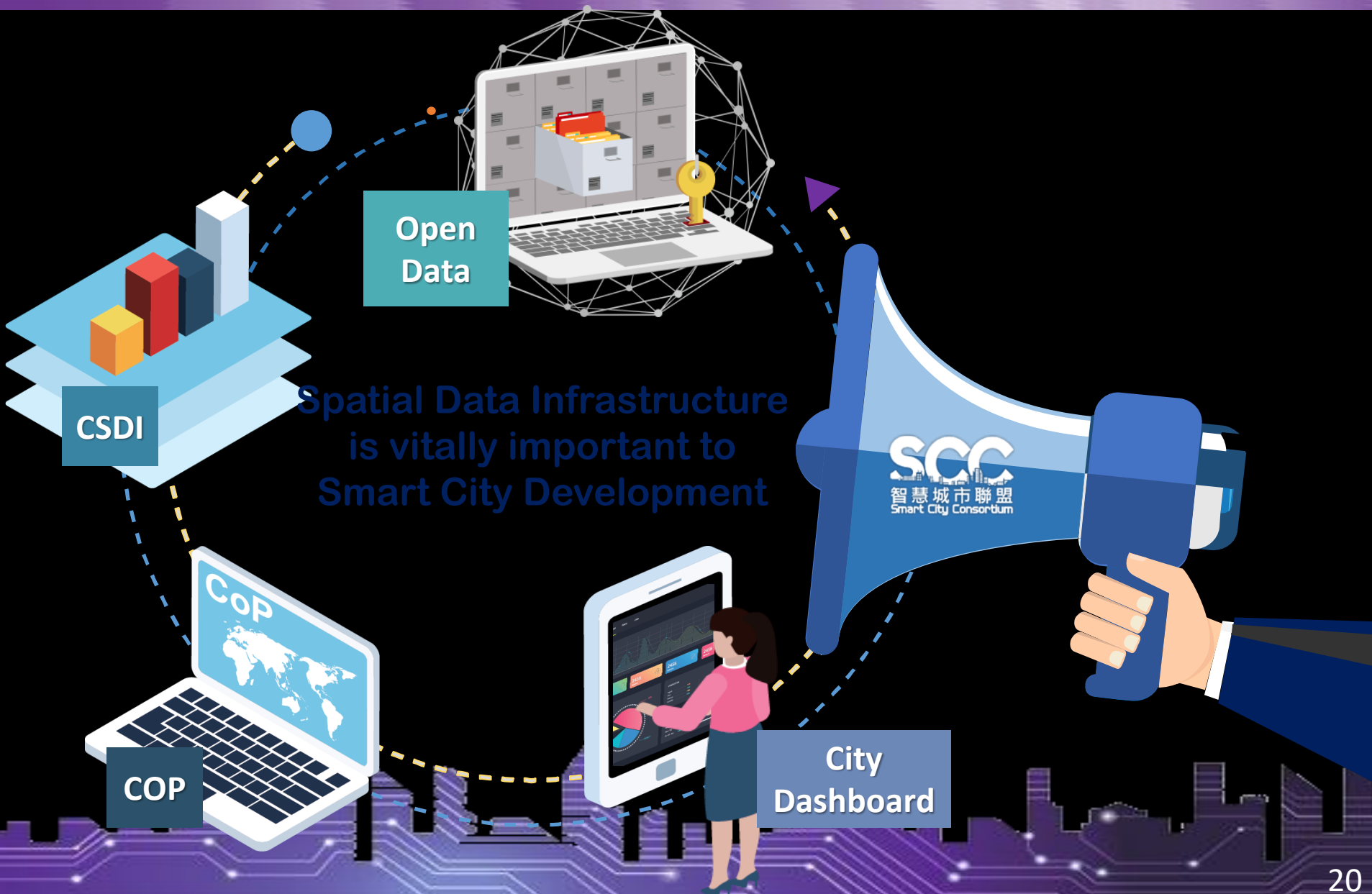


Open Data

Common Spatial Data Infrastructure (CSDI)

Common Operation Picture (COP)

City Dashboard



Smart Mobility Roadmap for Hong Kong

SIGMA Vision - integrates five key objectives of smart mobility for Hong Kong, and shall be adhered to when formulating new smart mobility initiatives



Smart City 3.0

People-Centric

People-Centric

Smart City is driven not just by technological expertise, but also by the citizens' overall demand for a better quality of life.

Applications in Smart Living



Health Solution



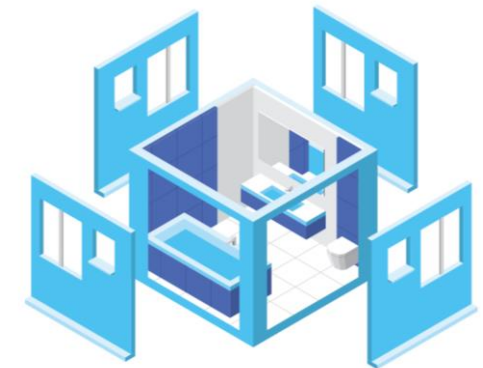
Ageing Products



Smart Management
(3)



Building Inspection



MIC Construction

水中銀
VITARGET



Vitargent (International) Biotechnology

- Applying fish embryo-based toxicity testing technology to ensure product safety.
- We've genetically modified the medaka with jellyfish DNA so they glow fluorescent green when exposed to Estrogenic Endocrine Disrupting Chemicals.



Acacia Evergreen Technology Limited

Acacia Evergreen Technology Limited
is a technology company which engages in provision of elderly care and
healthcare services

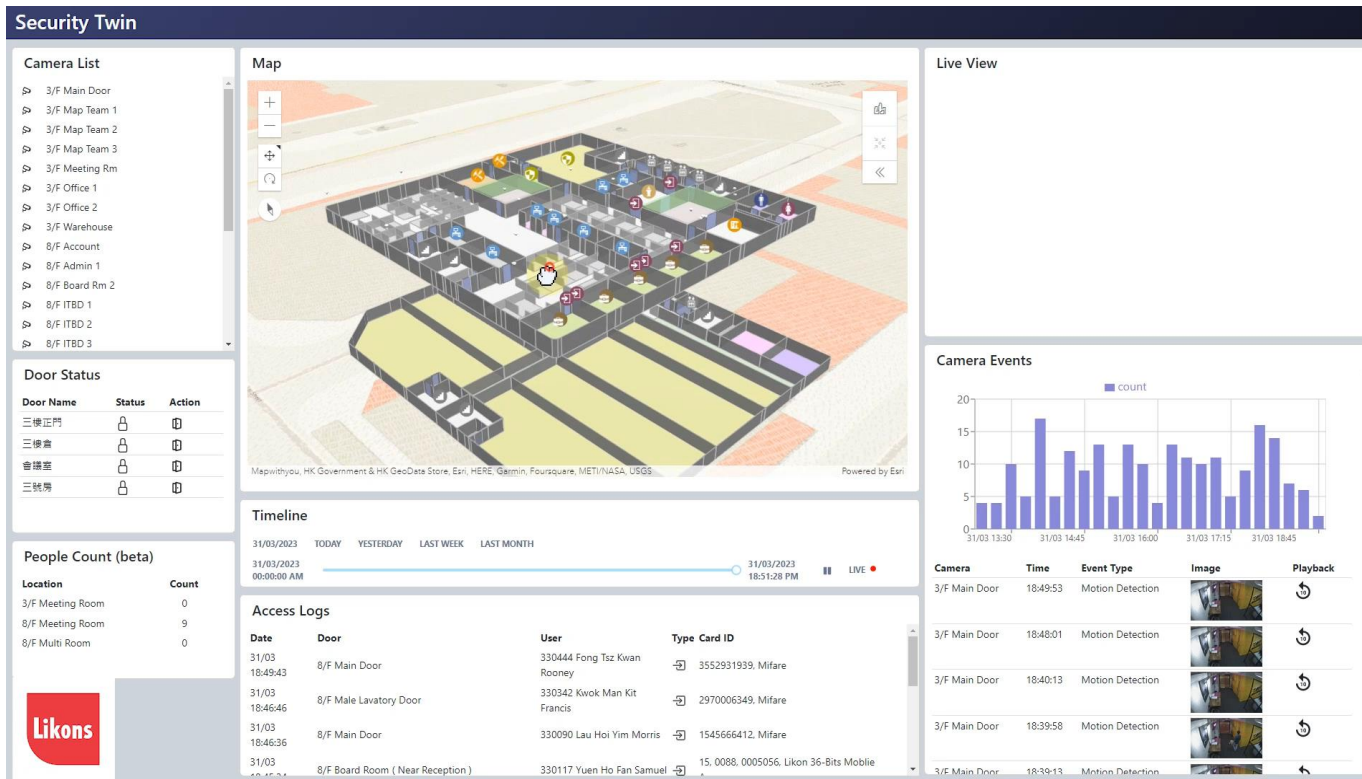
Acacia Evergreen Technology Limited
是一家致力提供医疗保健及老人关顾的科技公司

Acacia Evergreen Technology

- Elderly care and healthcare services.
- It operates through fall detection with semi or fully automatic warning to emergency services
- Intelligent environment sensing system.

Lik On Technology

- Security Twin integrates CCTV, access control, alarm systems, intercom, and people counting technologies into a 3D indoor map.
- Security Twin enhances situational awareness, improves response times, and reduces risk.



Security Twin

Camera List

- 3/F Main Door
- 3/F Map Team 1
- 3/F Map Team 2
- 3/F Map Team 3
- 3/F Meeting Rm
- 3/F Office 1
- 3/F Office 2
- 3/F Warehouse
- 8/F Account
- 8/F Admin 1
- 8/F Board Rm 2
- 8/F ITBD 1
- 8/F ITBD 2
- 8/F ITBD 3

Map

Mapwibyou, HK Government & HK GeoData Store, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS
Powered by Esri

Live View

Door Status

Door Name	Status	Action
三樓正門	🔒	🔓
三樓書	🔒	🔓
會議室	🔒	🔓
三號房	🔒	🔓

People Count (beta)

Location	Count
3/F Meeting Room	0
8/F Meeting Room	9
8/F Multi Room	0

Timeline

31/03/2023 TODAY YESTERDAY LAST WEEK LAST MONTH
31/03/2023 18:31:28 PM LIVE

Access Logs

Date	Door	User	Type	Card ID
31/03 18:49:43	8/F Main Door	330444 Fong Tsz Kwan Rooney	🔒	3552931939, Mifare
31/03 18:46:46	8/F Male Lavatory Door	330342 Kwok Man Kit Francis	🔒	2970006349, Mifare
31/03 18:46:36	8/F Main Door	330090 Lau Hoi Yim Morris	🔒	1545666412, Mifare
31/03 18:39:58	8/F Board Room (Near Reception)	330117 Yuen Ho Fan Samuel	🔒	15_0088_0005056, Likon 36-Bits Mobile

Camera Events

Camera	Time	Event Type	Image	Playback
3/F Main Door	18:49:53	Motion Detection		🔍
3/F Main Door	18:48:01	Motion Detection		🔍
3/F Main Door	18:40:13	Motion Detection		🔍
3/F Main Door	18:39:58	Motion Detection		🔍
3/F Main Door	18:39:13	Motion Detection		🔍

Likons

Problems & Opportunities:

Due to climate change, our regional economies are dealing with extreme heat and the consumption of electricity is rising due to the increase in household income



Japan soars to an all-time high of **41.4 C** on July 23, 2018

Seoul also set an all-time high temperature in Aug 5, 2018 with temperature reaching **39.6 C**

Taiwan's Hualien County registered a temperature of **40.3 C** on July 11, 2018

Hong Kong also set an all-time high temperature on Aug 22, 2017 with temperature reaching **36.6 C**

Record-breaking Events (since records began in 1884)	Date / Period	New Record
1. Highest Monthly Mean Temperature for January	January 2017	18.5°C
2. Highest Monthly Mean Minimum Temperature for January	January 2017	17.0°C
3. Highest Daily Mean Temperature for July	30 July 2017	31.8°C*
4. Maximum Temperature	22 August 2017	36.6°C
5. Highest Monthly Mean Temperature for September	September 2017	29.0°C*
6. Highest Monthly Mean Minimum Temperature for September	September 2017	27.2°C
7. Hottest Mean Temperature for Winter	December 2016 to February 2017	18.4°C*
8. Highest Annual Number of Hot Nights	2017	41 days

Singapore's highest recorded temperature is **41.0 C** on 17 April 2019 at Tiong Bahru

Smart AirCon and fan circulation
智能空调及风扇方案

Airxed Technology

- Control most home devices that uses infrared remote controllers - Air Conditioners, Fans and even TVs.

Yeefung Technology

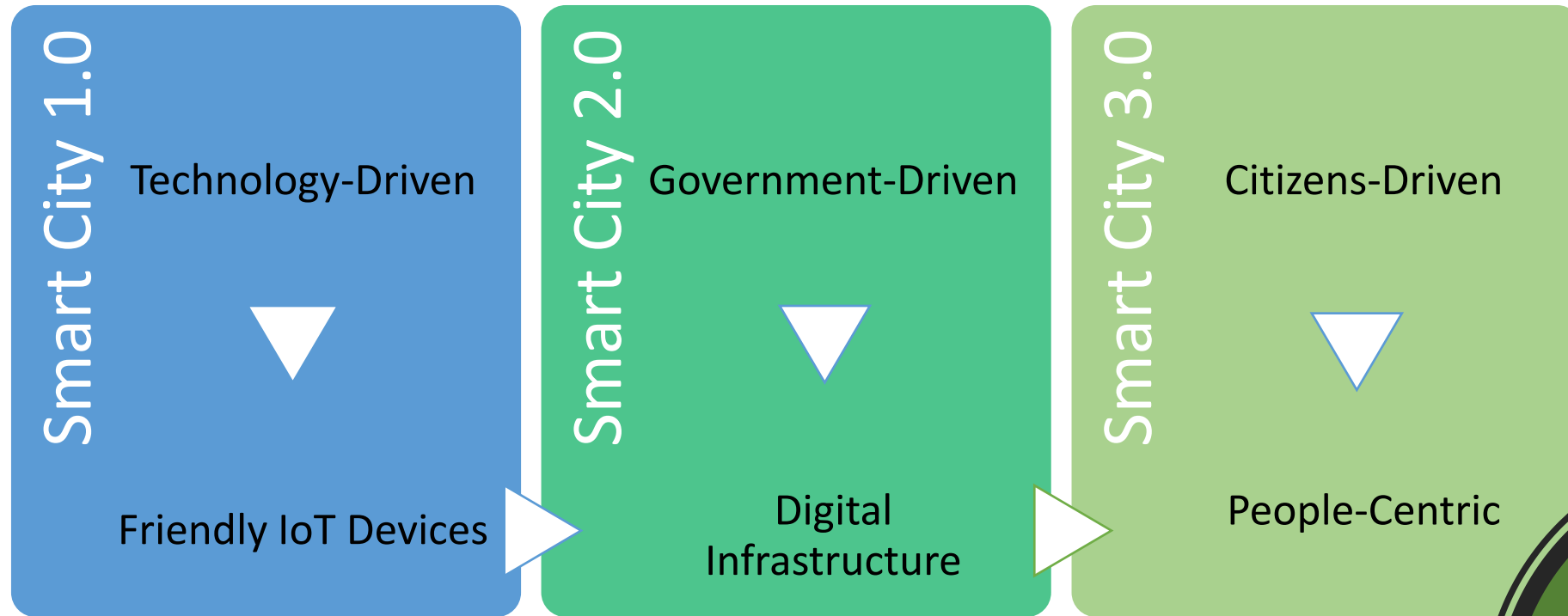
- Through the integration of robotic and traffic management, the car park systems are efficient to provide more parking spaces with safe and convenient parking process.
- The multi-directional movement of this AGV is suitable for irregular site and non-linear running path.

RaSpect Intelligence Inspection

- Provides an AI-powered software platform for the management of the safety inspection process of built infrastructure.
- Mainly caters for the drone inspection of high-rise buildings including residential, commercial, industrial and heritage buildings.
- It can also be used for inspection of other structures such as bridges, tunnels, towers, embankments etc.

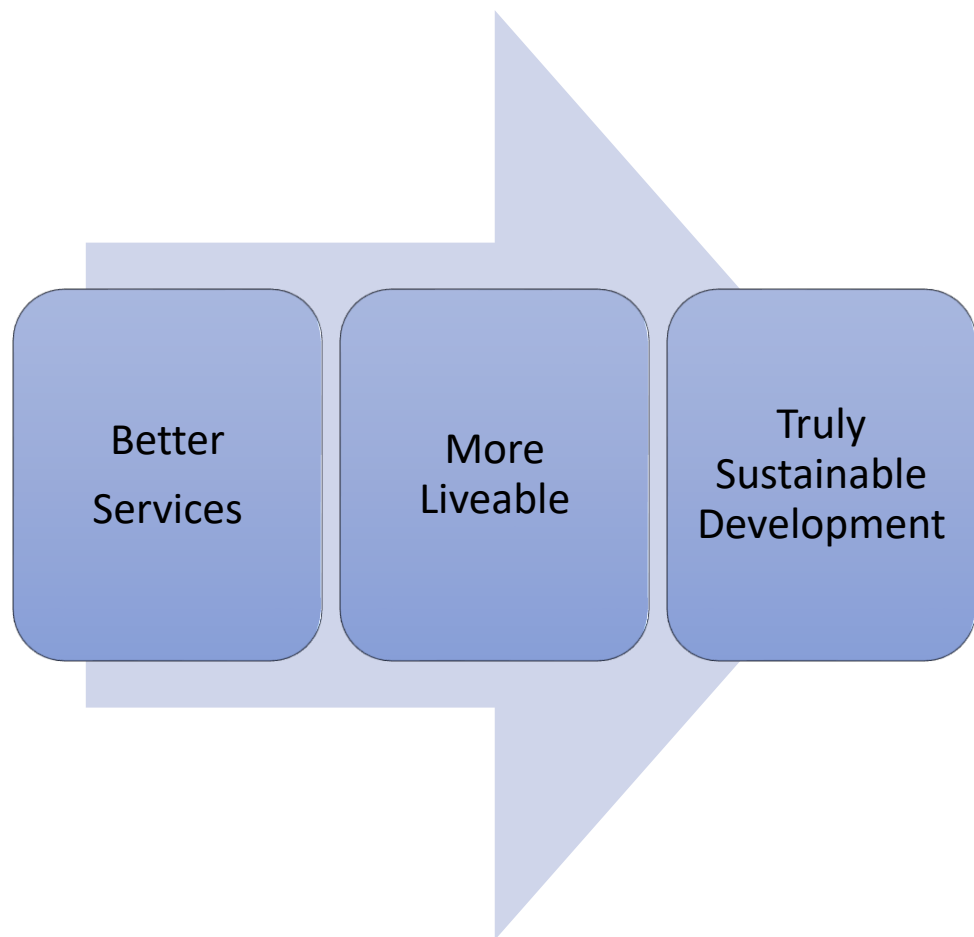
Yau Lee Holdings

- BEANiE, Hong Kong's first BIM-enabled Blockchain Multifunctional Platform, can improve the supply chain of MiC in terms of traceability since RFID, BIM and blockchain technologies are used for data information processing in tracking and monitoring from manufacturing, delivery, installation to handover.



**Smart City 3.0
is our ultimate
goal !**





SUSTAINABLE DEVELOPMENT GOALS



※ 此表由CSRone永續報告平台翻譯與製作

We need more liveable and truly sustainable future cities

Smart city technologies, which help redefine our priorities,
will be crucial to achieve these goals.

Thank you !

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