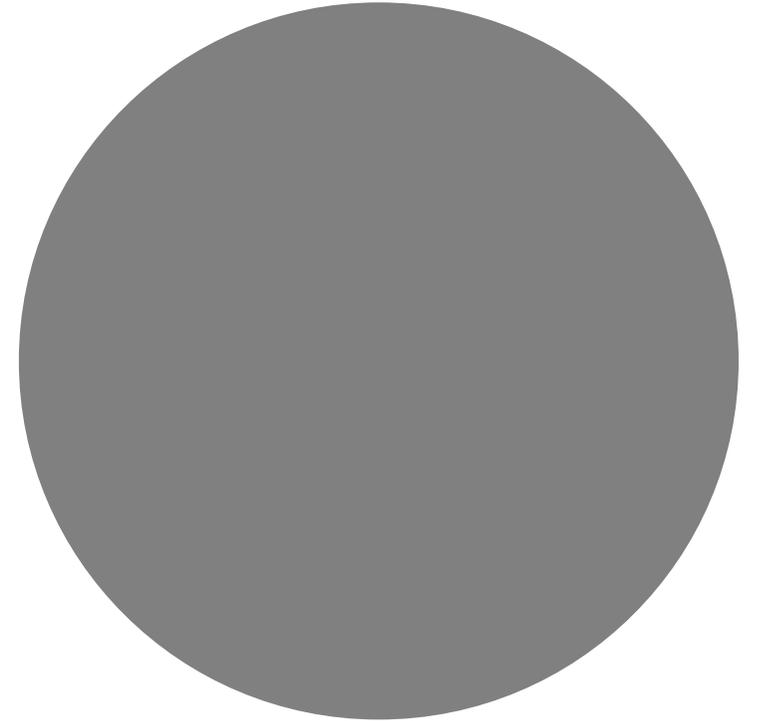


Innovation Hub - Highflying for Smart Lifestyle

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Hong Kong position



HONG KONG AS THE **MAIN HUB FOR INNOVATION IN ASIA** FOR INTERNATIONAL INVESTORS AND TECHNOLOGY COMPANIES



UNDER THE BACKDROP OF GBA, AN **INTERCONNECTED AND SEAMLESS REGION** WILL BE BUILT FOR A POPULATION OF 70 MILLION



HONG KONG SHOULD FACILITATE LOCAL AND OVERSEAS COMPANIES/ INSTITUTIONS **TO EXPLORE THE NEW MARKET OPPORTUNITIES IN GBA**

To develop a GBA strategy to strengthen and foster the development of an Innovation Hub, creating synergies and alignment among the cities in GBA in the development of key technology areas.

To begin with *Smart Cities* for GBA



Source : CB Insights

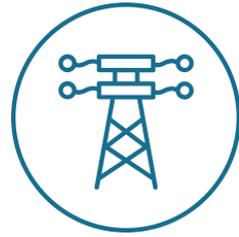
- Harness a future driven by **5G-connected applications** → A connected world made possible
- To leverage on the **speed and scalability** of 5G network, **smart city applications** can be optimised and made feasible → An era to connect everything
- Data will become everything. The **data-driven world** will be always on. Tracking, monitoring, listening and watching so that it can keep learning → The age of analytics
- With 5G providing an enabling environment, it will **unleash the power of AI** without the limitation of processing speed for data collected on real-time basis → A livable, sustainable and workable city

With 5G , the concept of a Smart City is gaining momentum with a more wide scale deployment. It is growing extensively in the Asia, and it will spearhead the GBA development.

Focus areas for the Innovation Hub



Connectivity



Energy Management



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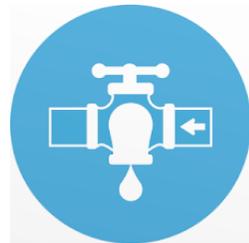
Security



Data analytics



Smart mobility



Water Management



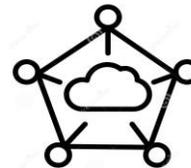
Public safety



Traffic & navigation



Urban planning



Edge computing

Technology focus



Connectivity : Connectivity is the key. Building and maintaining a reliable wireless network infrastructure is of utmost importance for a smart city



Smart Mobility: 1) Smart transportation is fundamental in creating a smart city; 2) Disruptive car ownership concept (*Sharing is the most transformational, on-demand service model*); 3) Alternative and disruptive travel can decrease congestion ; 4) Is the infrastructure smart and connected?

→ Smart transportation means tying policy and process innovation to revenue generation

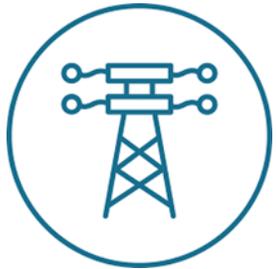


Traffic, navigation and smart parking: 1) Technology to tackle inefficiency in city traffic, navigation, and public transits system; 2) How to make parking easier and more efficient with the use of AI; 3) How to maximise limited parking space in city using big data analytics
→ Reduced congestion through traffic data analysis, and reliable autonomous vehicle communication infrastructure in future.

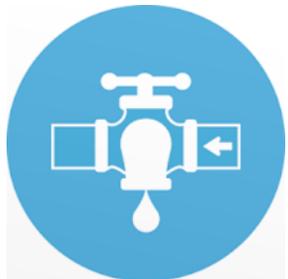
Technology focus



Urban planning: A smart city is a city where urban planning is conceived with the ultimate goal of connecting everything to each other using the state-of-the-art technologies.
→ what the technologies involved in building smart cities are and how they can help achieve the ultimate goal of urban transformation into truly smart cities of the future?



Energy management : 1) how to enhance the effectiveness and efficiency of electrical grids, 2) will AI be able to help in energy storage by pulling energy from source more intuitive, automating grids by responding to fluctuation in demand?
→ Reduced electricity prices and automated, reliable, decentralised electricity grid



Water management: 1) Develop technologies to improve water quality, distribute and recycle water; 2) A smarter water networks is required to collect detailed data on water consumption to identify trends and patterns, and develop effective engagement plan to encourage users to conserve water.

Technology focus



ANALYTICS

Big data analytics: It's the next frontier for innovation, competition and productivity. Big data's potential keeps growing, there is a need to incorporate analytics into strategic vision and use it to make better, faster decisions (*Preventative vs predictive*)
→ Creating smart city depends on how well organisations share and analyse the vast amount of data being generated



Public safety/Security : We should leverage on the faster and more robust 5G network to develop next generation technologies to keep cities safe
→ storage issues to manage collected data, hardware compatibility to 5G may be a concern



Edge computing: Edge computing allows the development of applications that can operate independently of an Internet connection. Networking a number of these boxes together creates a distributed computing resource and Wi-Fi network spread across parts of a city.
-→ autonomous operation if backhaul coverage is lost, lower latency as application is close to the source of information, data is being processed locally, facilitate an open platform enabling 3rd party developers to create new applications.

Conclusion

Data is the lifeblood of a smart city

→ The effective management of data is not limited to data capture and storage, but must also include data that is shared and combined so it can be accessed, analyzed and used across departments, between organizations, and even with the community at large.

The competition for talent

→ We need to maintain a high intensity and global share of total flows of goods, services, finance, people, and data and communication with the ultimate goal to create significant opportunities with high quality jobs and economic output in order to attract talent.

A vision for future cities

→ In order to succeed, we need to build a vibrant, fluid and flexible ecosystems where people can live, play and work with good opportunities