

Introduction

A smart city leverages various innovation and technologies (I&T) to improve the quality of life of citizens (such as improving the quality of medical care, libraries and parks), optimise efficiency of resource utilisation (such as clearing traffic jams) and enhance city management and services (such as urban planning, waster management). Globally, governments, businesses, academics and citizens are increasingly recognising the role of I&T in enhancing all areas of urban life and addressing urban challenges.



In the GBA "Outline Development Plan", it calls for

- the "promotion of new smart city pilot demonstrations as well as the development of a national big data integrated pilot zone in the Peal River Delta (PRD)
- strengthening cooperation among Guangdong, Hong Kong and Macao on smart cities
- exploring the establishment of common standards
- opening up of data ports,
- developing interconnected public application platforms
- developing information infrastructure facilities including a comprehensive intellectual sensor network with full coverage and ubiquitous internet, a smart city spatiotemporal cloud platform and a spatial information service platform, and
- devoting great efforts to develop smart transport, smart energy, smart municipal management and smart communities



Smart city trends and implementation considerations

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Going forward, governments and relevant stakeholders should take the following factors into account when charting the journey and milestones of its Smart City implementation:

Accelerated pace

Governments have to keep pace with the global development and trends on "smart city", in order to remain competitive for FDI and talent against neighborhood countries.

Business case

Governments and businesses are looking for promising use cases and business models that present a clear path to financial sustainability through revenue generation and/or cost saving.

Coordination

Vision is just the start, delivery is the hard part. At present, Governments are facing challenges like too much choice and too many cooks. Cities need to have an effective mechanism to coordinate and govern the approach to and contents of Smart City implementation.

Cybersecurity

As a city pivots towards a digital operating model, data is generated on an exponential basis and shared among stakeholders. Incidents related to cybersecurity and/or leakage of personal data is a question of "when" not "if". Multiplying cyber threats have made an effective cybersecurity policy and programme a critical component to Smart City implementation.

Differentiation

Technologies are increasingly affordable (and commoditised) and cities can no longer compete on "hardware" alone. Cities have to look for ways to differentiate themselves and stand out from the crowd, implying a need for a holistic view of what a city can offer and its branding.

A vibrant and complete ecosystem is key to the development of I&T and, in particular, development and retention of talent as well as key industry/research clusters.

Financing

Governments are findings ways to effectively leverage the financing capabilities of the private sector that help accelerate the implementation of multiple smart initiatives concurrently while offering an appropriate degree of protection of the public interest.

Global

Leading governments (e.g., Singapore) are actively looking for opportunities globally to export their experience on Smart City implementation and thereby promoting products and services (often developed by their homegrown companies or startups) underpinning the implementation.

Opportunities in developing Smart Region

Smart City promises great opportunities for all relevant parties to co-create solutions that address urban challenges and improve quality of living.

There are 2 specific areas of opportunities for the GBA:

Artificial Intelligence (AI) application



Benefitting from the advancement of computing power, storage capacity and data availability, AI is making inroads into our urban life – from customer acquisition, healthcare services, manufacturing, banking services and autonomous driving to public services. It is one of the key initiatives that drives I&T competitiveness and underpins Smart City implementation. The GBA needs to consider the long-term impact of applying artificial intelligence and develop strategies to maximise the benefits of applying AI in smart cities while addressing potential challenges (such as impacts on jobs and income inequality). The GBA must develop into a smart region with a people-oriented approach to maximise the value of the GBA and enhance the global competitiveness of the GBA.

Innovation & Technology (I&T) solutions application



Innovative technology becomes a commodity in which every cities will likely have a similar set of "smart city hardware". The GBA will need to seamlessly integrate I&T with urban life, deliver a high quality of life for citizens and ensure the completeness and continuous development of the innovation ecosystem. As a highly urbanised city, Hong Kong's experience would be very relevant to startups and companies who are interested in developing algorithms and innovative services/products to serve urban cities.

Conclusion

The construction of a smart Greater Bay Area city cluster should take into account the entire framework and overall development direction of the entire region, and at the same time cater to the special circumstances of individual cities. Therefore, cities in the Greater Bay Area can further strengthen the infrastructure ties among cities by adopting different development strategies and deepening cooperation. This will ultimately enhance inter-regional interactions and connectivity, improve the flow of factors of production such as personnel and capital in the region, promote the exchange of information and smart capital, improve urban efficiency, improve business operations, enable residents to enjoy better quality of life, and attract talent and enterprises to enter the market, create unlimited business opportunities and promote economic development.



Albert Wong
Partner
Public Sector Consulting
PwC Hong Kong

albert.wong@hk.pwc.com +852 2289 1807

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