



Session Title: Smart Cities

Date & Time: 4 April, 15.15pm – 16.05pm

Moderator: Dr Richard Vuylsteke, East West Center CEO

Speakers: Manjit Kaur Arjan Singh, VISA School of Public Policy Senior Director

Pankaj Lunia, IBM Watson Internet of Things (IoT) Solutions Executive - ASEAN Cognitive IoT Solutions Leader

Owen Larter, Microsoft Senior Manager of Global Government Affairs

Introduction & Purpose:

With up to 75% of the global urbanised, what matters would be sustainable development and giving everyone value add. Data and cashless payments will also play an increasingly significant role in smart cities. The session explores how governments and the business community can play their respective roles in the developments smart cities besides identifying the barriers that halt its progress.

Summary of the session

Speaker: Dr Richard Vuylsteke

Before moderating the panel discussion, Dr Richard gave a short presentation highlighting that **with 55% to 75% of the globe living in cities within a decade** or so, **issues on water, air pollution and waste disposal, health and the way we conserve energy will be intensified in urban environment.**

With small cities like Chongqing with 30 million people that is larger than the whole population of Australia or Canada, he asked, **How do governments, businesses and NGOs deliver e-commerce, e-government**

and e-services in efficient and effective ways for population of that size in concentrated environments?

As cities develop, Dr Richard said we also see the **rise of middle class globally, especially in Asia Pacific**. The expectations to provide clean water is the right thing to do and conserve it is a responsibility.

Another thing he observed is the **demographic changes** in the cities, where you can find **millennials who are more technically savvy** than their parents and grandparents. There are **business solutions that governments, non-governmental organisations and the public can work together to deliver these things cost effectively to the urban environment**.

Moderator: Give us an idea of the state of play for smart cities from your business perspective and public understanding of what it's all about.

Speaker: Pankaj Lunia

After more than a decade in the smarter city business as a consultant, Pankaj said there is still no clear definition of what a smart city is as different people look at it differently. He categorises it under Pre-2007, 2007-2012 and the digital technologies era

Why pre-2007? Because for the first time we have **50% of the world population staying in cities**. This is also when the terms **smart city and smarter city became popular and were looked at differently**.

Post 2007: Smart cities was a special area we wanted to work on. We came up with how to standardise a smart city and thought **data was the key** element to look at.

Between 2007 and 2012, we talked about **bringing businesses and data together between the city and the government** and see how the city should look like in the next three to five or 10 years.

During the **digital era**, we see growing **confidence in cloud related technologies, machine learning and 4.0 industries**. All this, including the **internet of things (IOT)**, started influencing the vision of how you **collect, manage, use and process the data**. More changes are expected in the next three to five years with **millennials** demanding very different services from gen Y or X.

Speaker: Manjit Kaur Arjan Singh

At the heart of every growth for cities is payments, which will continue to play a very **critical role in bringing the benefits of smart cities to all stakeholders across the board**. It has been proven that **cashless or digital payments contribute to cost effectiveness, efficiency, government transparency and impacts** the gross domestic product (GDP) growth.

According to Gartner study on IOT, we will have 30 billion connected devices worth US\$17.1 trillion by 2020. How do you monetise this from a business viewpoint? It's going to be cashless payments. **Digital payments will be centre stage in helping smart cities transform their landscape.**

Speaker: Owen Larter

In **City Next**, Owen said we have a smart city initiative that works with cities globally to use cloud technologies to run their operations more effectively and efficiently. It's **important that cities adopt** this mindset of using **the latest technologies** to do what they are doing. It's in cities the future of the planet and humanity is going to be decided.

Cities account for 2% of the land mass, 80% of the GDP and 65% of global tourism. They are also responsible for 80% of the energy used, 75% of the world's carbon dioxide emission. Increasingly large cities are characterised by transport congestion, pollution and having to balance competing priorities.

Coupled the rising expectations of its citizen on the volume and quality of services that are provided, **how do we help cities do more with less?** Simply defined, Owen said **a smart city uses technology in a strategic and integrated way to do things better.**

Moderator: The governments in Singapore, Hong Kong and Seoul want to be smart cities. How did these cities get started? How did their business community get involved in its implementation? Are there certain steps we have to go through? What seems to be the workable approach for developing a smart city?

Speaker: Owen Larter

To realise smart cities' potential, Owen said one of the **barriers** to overcome is **infrastructure**. It is **absolutely fundamental you have wide available and affordable infrastructure across cities.**

How do we ensure we are building the skills within cities so that people have the technical and analytic acumen to leverage on the data insights

being collected? We need to ensure cities have **pro-technology and pro-data postures** and are willing to integrate and **share the data so that the people can leverage on its insights.**

Speaker: Manjit Kaur Arjan Singh

Manjit attributed the **biggest barrier** in operationalising the idea of a smart city to **financial exclusion**, where 43% of the world's population is still unbanked and underserved. That's why Visa works with the government and public-sector stakeholders to drive financial inclusion to reach the underserved and convert the unbanked to the formal banking services arena.

He said the other major barrier is **infrastructure. Weak infrastructure makes it very difficult to drive connectivity and leverage on the potential technological advances.**

The third barrier is **legacy practices.** It's very difficult sometimes to convert people to new ways of thinking, change mindset and convert old habits. That's where financial literacy, which goes hand in hand with financial inclusion, comes in.

The fourth major barrier is **misconception and misalignment.** Manjit believed the opportunities will be realised if collectively and proactively work together to overcome these barriers in an integrated and synchronised manner.

Speaker: Pankaj Lunia

Pankaj, who looks at it differently, said, smart cities are largely focused on making lives better by improving the living assets and bringing investments to create employments. While governments are the enablers that provide the infrastructure, he thinks it is always easier to get projects executed via the private sector as skills and funding are more easily sourced. **It's really a private and public partnership.**

However, he cautioned it should not be about funding government's projects but about driving innovation and bringing new services to the people.

Moderator: Give me a success or failure where lessons can be learnt.

Speaker: Owen Larter

One is **using data to help cities drive efficiency** and another is **using new communication channels to help empower cities**. In Auckland, where we are helping to improve the efficiency in their transport sector, they have a **very forward-looking city government**.

In Televiv, Owen said we developed a **citizens' service app** for the city to push out communications to its residents. Besides its broadcast function, it also solicits inputs from the citizen via poll. This has worked very effectively. I am now consulting and soliciting for all kinds of policy outcomes, including the future of education policy. This is **a good example of how you can communicate better with citizens and empower them with more urgency on how they can shape their own communities**.

Speaker: Manjit Kaur Arjan Singh

On the **financial inclusion we have done in Africa**, she said they have converted government subsidies to cashless to make it more accessible and convenient besides providing it to those who need it in a very reliable and timely manner.

Our focus on financial inclusion goes hand in hand with financial literacy. Last October, we launched a financial inclusion campaign **in the Philippines** to teach students and young people to manage their money better and smarter. We successfully partnered with its Central Bank and a very renowned local drama company where **financial literacy took the form of a series of dramas incorporating local heroes**.

Manjit said **Visa's cashless payment city report** launched last October showed that continued development of smart cities brought net benefits of US\$470 billion that will be distributed for government sectors, businesses and consumers.

Speaker: Pankaj Lunia

Pankaj said there are two minimum requirements for a smart city project to be successful: **A strong leader and a very strong driver to move forward**. Citing **Singapore's** KPI based projects to tackle congestion and improve the chances of success, he said it is completely measurable on a daily basis.

In another approach, now **the new wave of smart measuring initiatives is driven by sustainability and improving the city itself**, Pankaj gave the example of a mayor in a small city in **Indonesia**, who wanted to do

something different in engaging with the people more rapidly. In the smart city project, he created different channels for people to reach out more directly, report and follow up on the issues. He was quite successful on that.

Moderator: Traditionally, we do not see young people involved in smart city projects. Suddenly, millennials with entrepreneurial abilities to develop apps in a smart environment are empowered to be much more active. They are developing things not just for business but also for the civic society's growth. In your experience, have you seen that sort of dimension growth?

Speaker: Manjit Kaur Arjan Singh

You've struck a cord because the transfer of digital payment takes this onboard. There's a whole new platform with whole new functionalities and features coming up just for the millennials, whose impact on the ecosystem is so huge.

Speaker: Owen Larter

Millennials are making up a large portion of the workforce and citizens of cities. Looking at how they expect services to be delivered, we are getting a generation shift, particularly when they are moving to the cities. Using technology to make cities better and easier places to live is absolutely fundamental for the young and skilled talents. **Yes, the millennials are coming and expect things online.**

Speaker: Pankaj Lunia

When we talk about millennials and the new guys on the block, it's about **fresh minds looking at the same old problems. That's where sometimes it helps us to find new ways of solving the problems.** They basically have **very strong values** and the **willingness to do something different without fear of failure because they have a long way to go.** Many are **getting into startups, starting their own business or joining some of these ideas to find new solutions.**

On monitoring the health of tall buildings, Pankaj said a start-up came with the idea of using drone. Nothing great but what they did was they automated the process using artificial intelligence. **drones They reduced the efforts of inspecting a building from two weeks to less than two hours and the cost is absolutely nowhere to where it used to cost earlier.** These

millennials are coming out with new ways of doing the same things of Gen Y and Z better and improving efficiency.

Takeaway from the session

- **Urbanisation push instrumental in the rise of smart cities**
- **Sharing of data is another key element**
- **Cashless or digital payments taking centre stage in smart cities transformation**
- **Financial inclusion and financial literacy go hand in hand**
- **Two-way interaction between cities, government and the people is the course of the future besides private public partnership.**
- **A city should be viewed as any other business**
- **Millennials not only have different expectations but are contributing to new solutions**
- **AMCHAMs and cities, be it with governments, local business communities, non-government organisations etc, will continue to be essential in the development of smart city technology.** They see the competitive advantages of attracting young people to live in ecologically safe and healthy spaces.