



CHANG DAE-WHAN

Chairman and Publisher, Maekyung Media Group, Member of the Global Commission on Internet Governance, former acting Prime minister of Korea

After much confusion of weather and timekeeping, I am finally here to deliver my speech today. It takes a long time to come here – about 12 hours to Paris and another three to Rabat. My newspaper has done a lot of research and provided some suggestions about important global issues. For instance, in 2013 we had a special interest in cities. I have a declaration of a modern city for Seoul and Pusan, two major cities in Korea, and today I will present case studies of Korean smart cities. Smart cities are emerging as global connectors that can solve problems that nations cannot.

Cities have grown extensively with large concentrations of resources and smart people, and consequently, cities have grown faster than nations. Looking at the UK, London has grown faster than the UK as a whole, and Washington DC did the same. Nations, in contrast, are becoming more divided, as seen in events like Brexit and protectionism in the US. Many smart cities are popping up all over the world, about 152, and global companies like Amazon, Google and Alibaba have their own ideas about creating smart cities. The Government of Saudi Arabia, which gets a lot of attention these days, recently launched its USD 500 billion smart city project called Neon. Therefore, many of these governments and global companies are initiating smart city projects.

What is the definition of a smart city? A smart city is referred to as a city whose infrastructures are connected in a network through information and communication technologies geared to improving the quality of services, such as energy transportation, medication and education. What are the technologies for smart cities? We have just mentioned 5G, which will be operating very soon, and big data and block chain will have a lot of impact on our lives, along with AI and robotics.

We also have the city as a platform. Building proper infrastructure is crucial for establishing a smart city. Such infrastructure, for example hyper-loops and 24-hour remote controlled medical services, even flying car roadmaps, need to be done in a direction that will both sustain and improve the quality of human life in business environments. The introduction of the car in the 19th century was a big thing, it was the first platform, and in the 20th century we had the smart phone, the second platform, and now smart cities are the third. Cities have emerged as the third platform.

The ideal city, coming from Plato, means that everybody has a digital twin which you can join with and suggest your own ideas, and the decision-maker, the mayor or vice-mayor, has an ideal city. It is possible to realise such a future city in three-dimensional cyberspace. Many urban problems will be simulated in the virtual city to find the most suitable solution. Achieving this requires a digital platform, and many countries, such as Estonia, Finland and Andorra, are doing this.

Estonia has successfully turned its administration into a digital platform and issues e-residency to any interested people around the world. I am an e-resident in Estonia – I can open a bank account and even have a company there to do business around the world. Andorra and the Finnish city of Kalasatama are both transforming their entire state and city into digital platforms.

Regarding economic growth and urbanisation, Korea is growing alongside its rate of urbanisation, and Thailand is the same, but looking at Italy, it looks somewhat stagnant, and they are throwing money at relatively poor people, which will create more stagnation. China has an economic development strategy which involves urbanisation of backward regions, and they have high-speed railroads and highways and are doing quite well with 5G. Low-cost airlines are also changing the Asian space quite a lot. Regarding Korea, we are commercialising 5G this year, which will change many Korean lives.

Turning to some smart city projects happening in Korea, we have a new capital city for the administration, and it is aiming to make a map of human emotions through neuroscience and big data analysis. Neuroscience is a big thing everywhere – for example, if a person who feels distressed gets into a self-driving car, the person will automatically be driven to a place for relaxation, whether a spa or a drinking joint or a movie theatre, but if you end up watching a



sad movie you will be more depressed, so I do not know how we can solve these emotional problems with an AI carsharing system and a 5G data space analysis. The city is building an emotional data platform.

Many platforms are being built in South Korea, and Busan is being called Aqua-Delta City. This is quite an interesting idea – the temperature of the water on the riverbeds is lower than the air temperature in the summer and higher during the winter. Therefore, if the water from the riverbeds can be utilised in the buildings, energy can be saved. Busan City is now collecting various data on water quality, quantity and temperature for water management, so that it can construct a water-friendly data resource management platform. It sounds interesting, but I do not know if it can be realised.

Not only governments carry out smart city projects. There is a smart city project a private company initiated by a private company. They call it the Green Energy Data Platform. They have solar energy panels and a smart grid system, and they want to invite many start-up companies from overseas.

There are many benefits to smart cities, but I will talk about three – quality of life, economic dynamics and sustainability. We would like to enhance these factors through smart city projects. The smart city may be a key to global governance. Let us look at a small town in Switzerland, Zug, where an initial crypto-currency offering was implemented. New jobs surged, and while the city population remains at 30 000, 40 000 jobs were created due to the creation of a virtual city with a digital platform dealing with global crypto-currency transactions. Estonia is a country with a population of only 1.3 million people, and it has predicted that it will reach 10 million e-residents by 2025.

These examples show how digital platforms can solve the problems of small populations and unemployment. Yesterday we talked a lot about North Korea's nuclear ambitions, but it is a very interesting country when it comes to smart cities. It can become a smart city testbed because it is very poor, and if North Korea abandons its nuclear ambitions and the US lifts economic sanctions, a lot of things will happen. The Japanese reparation fund is almost USD 80 billion.

Since North Korea does not have any regulations on the expansion of fourth industrial revolution technologies, it is the most suitable site for implementing the ideal city. Moreover, Korea has the experience in the proper technology for exporting a new city construction model. We have engaged in a lot of construction activity in Dubai, Abu Dhabi and Saudi Arabia, and South Korea has lots of experience in building new towns, even in Iraq and Iran. The ideal city will not only solve the underdevelopment problem in North Korea, but it will also be able to contribute to global peace and prosperity.

Finally, we have four global leaders here. President Trump is a real estate developer, and I am sure he would like to convert Manhattan into a smart city. He has not said anything, but I am sure he might come out with it in his Twitter. Xi Jinping of China wants to urbanise the backward regions of China, and he is already building a smart city between Beijing and Tianjin; it is a huge project for him. Mr. Kim of North Korea wants to showcase and tell people that he is doing very well and is a great leader, after his father and grandfather. South Korean President Moon has designated two cities already, one for administration, one an eco-friendly city in Busan. Another project he now has, after meeting Kim Jong-un, is building a peace town in the military demarcation region between the North and the South.

Therefore, leadership is very important in carrying out smart city projects. All the global examples I have talked about were possible because of the political leadership that drove the projects forward. We are living in a connected world. Smart cities will connect the world faster and make the world decentralised. President Trump has big ideas about America First, and now it is becoming America Only, but his ideas will not be that successful. He will face block chain, AI and all the new technologies that will challenge him, so good luck to him.