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Good morning. This is my third time joining the WPC and I would like to congratulate Professor de Montbrial for organizing such a great intellectual event in Seoul. I know many Korean participants have joined him to help him out as well.

The title of my presentation, Mobile One Asia Momentum, is about the big data business happening in Korea, in the Asian region. In downtown Seoul, we have a newly built design house by the famous architect Zaha Hadid called Dongdaemun Design Plaza. It is a huge structure which can hold more than 3,000 to 5,000 people, and holds lot of functions, but looking at the structure closely, you will find that small, individually made plates have been put together to form this gigantic structure. I would say that big data comes from small data and small pieces in the same manner.

In the past, when a baby was born, families gathered around and they had to pray, because in the olden days, babies suffered from many diseases and difficulties, such as famines, so that they did not live long enough. However, in modern days, when a baby is born, everybody pulls out their tech devices, such as smartphones or tablets. The amount of information recorded and stored on the baby's first day is actually 70 times the amount of data in the Library of Congress in the United States. This is just one example of how big data is collected.

Also, now that we are entering the world of IoT, Internet of Things, our everyday lives will change. The Internet of Things is a new, emerging power. There are approximately two billion connected devices in the world today and this number will increase tenfold by the year 2020 but we still have a long way to go. Some people say, 'Data is the new oil'. It is a good thing that the price of oil is dropping to the 60s and maybe 50s, lately. Who makes profits out of the oil business and out of the big data business? Is it the oil producing countries or refining companies? Mostly it is the refining companies. Using the big data may bring about the opportunity to create much greater added value similar to the oil industry.

Some things are spreading very rapidly in Asia. One example is "the selfie stick." In Korea we call it selca bong. Bong means "a stick" and selca means a "self picture". The important point to remember is that a considerable amount of big data is expected to be created in Asia with these new technologies. If you look at the Google search trend, the word "selfie stick" was introduced quite recently, but the stick was used here in Korea three years in advance. Many say that new things mostly come out of New York City or Paris or London, but lately, many new ideas including innovative technologies are coming out of Asia.

At the 2010 Barcelona Mobile World Congress, Eric Schmidt, executive chairman of Google, said, 'Mobile is going to be the first thing in the marketing landscape', but last month in Taiwan he corrected his statement and said, 'It is going to be a mobile only era, mobile only time and Asia will lead the world into this particular era'. In the Oxford English Dictionary the word the selfie first appeared in 2013. Therefore, I would say the West was a little bit behind in the trends in selfie cameras.

What about Korea's taste for the bigger screens? We call them phablets. When the Korean company Samsung first introduced bigger smartphone screens, their competitor Apple resisted. Steve Jobs did not want to use the bigger screen for his smartphones and he also did not like electronic pens. They failed to introduce all these new ideas early and that is how Apple lost market share to Samsung smartphones. The big screen of phablets makes it much more convenient to use search engines, maps, videos, photos and so on. Now Apple is introducing bigger screens in their products again.

Let us look at which devices people use the most. People in Hong Kong, Malaysia, Singapore, South Korea and China use more smartphones than elsewhere. Many Asians think personal computers are outdated and that smartphones

which has access to internet services are much more convenient. Therefore, I would say that the data explosion from Asia is happening now and a data storm is coming to Asia.

We just opened up the Asia Pacific Gateway in Busan. Its capacity is huge. It can transmit 7,000 movies that are 700 megabytes in size in one second, with a total of 11,000 km of submarine cable, which connects nine countries, including Korea, China and Japan. Now, we are planning to produce a new cable which connects Korea and the U.S. as well.

In 2010, I introduced my vision of One Asia Momentum and now I believe it is Mobile One Asia. Mobile is not a simple technology or equipment. It will be the central tool to bring social changes, democratisation and economic growth in Asia. Mobile One Asia will unite Asia, create prosperity and enable active communication. After all, the biggest mobile messenger companies in the world, such as Line, KakaoTalk and WeChat, all started in Asia.

Interesting example were these convenient stores at subway stations. The idea was that when you go home you just take a picture with your smartphone and order what you need and have your groceries delivered home. This was a great idea, but unfortunately, the company failed to last.

Big data will transform Asia in many ways. A cosmetics company in Korea introduced a DRESSER index which shows the proportion of sales of specific products by using big data technology. This company subdivided the customers into 11 groups by analysing their purchase patterns and their sales grew considerably by using personalized marketing strategies for each customer.

Borderless shopping is rampant. We had Black Friday sales in the United States and many Korean consumers went online, ordered items from stores like Target, Walmart or Amazon. This is an example of innovated retail businesses through the big data. China has a similar company called Alibaba Group and recently they made record breaking sales on Singles' Day on 11th of November.

What about transportation? Big data was used to re route Seoul City night bus routes. Because most of Seoul's citizens use smartphones or electronic cards to pay their transportation fees, every person became a big data item just by riding public transportation.

What about local governments? I learned that the Koreans complain a lot. The Gyeonggi province of Korea has analysed about 46 million complaints since 2012 and they have been providing the necessary information from big data to their administration services. By responding to these complaints effectively, city governments and local governments are working more efficiently than before.

Big data is also applied to manufacturing and it positively affects productivity.Thanks to big data, together with radio frequency identification systems, productivity is increasing rapidly.

However, only 1% of Asia is connected by big data and 99% of Asia is still not connected. This means that there is a big potential market in the future in this area and there are lots of hurdles which still exist. Big data has a relatively steep learning curve, so it will take a little more time than you expect. Asia has many different languages. You need to analyse at least 10 to 15 distinct languages to retrieve useful information out of big data. There is also a lack of skilled workers. Korea is interested in big data services, but we are still relying on the U.S. companies' services in this field. The U.S. is probably by far the most advanced in this area at this point.

What about the issue of government surveillance? Many Asian countries have authoritarian government structures, so censorships on telecommunication lines still hamper the big data industry growth. We are also facing geopolitical risks which could slow down the development of big data.

My next question is how can we make more opportunities in Mobile One Asia, using big data service? We need to promote more local professionals. Many seminars and conferences are happening in this region and some people suggest One Asia's big data alliances are needed. What about providing roaming free services in Asia? The United Kingdom and France have this idea; they will eventually have a free roaming service covering the whole European

Union region. The upcoming 5G Era will eliminate roaming fees, I think, and this will eventually increase the flow of data and communication much more.

How are we going to make big data more usable for Asian communities? Again, it is education. I learned that education is important, especially in science, technology, engineering, and mathematics. We call them STEM fields. I think this will be the most essential and practical approach to narrow the gaps in education, the economy, and the big data industry in Asia.

In conclusion, as a business management person, or maybe a consultant, we like to give our lines, whether you take it or not. I suggest six points here. You start from small data first and make special Asian partners and things like that, but I would like to suggest to you to benchmark great companies like UPS, AT&T, Procter & Gamble, Google and Amazon.

Amazon's founder Bezos acquired the Washington Post several years ago. I, as a newspaper publisher, closely followed him, to watch how he is going to innovate the Washington Post. However, he has not come out with new flash ideas yet. I am still following him, to see how he is going to integrate the Washington Post with the Amazon service.

Companies must be data driven. The fast data DNA must be endorsed by every level of a company. Last, but not least, employees must actively share data. This idea has turned into reality at Procter & Gamble, where they share the same data analysis with all employees, regardless of their positions. The company analysed the data of about four billion clients, which is about 200 terabytes in total, and shares this information with all of its employees through a work index to solve even a single problem as a group. An employee could access the Decision Cockpit page through the company's intranet and set up its personalised work index which helps him with his daily tasks and decision makings. I think this is an excellent example of how big data technology could be implemented.

This is what is happening in Korea, in Asia, and in the rest of the world. Next week in Busan, southern port of South Korea, the 10 ASEAN countries and South Korea will gather together and hold summit meeting and I am sure that they will talk about Mobile One Asia based on big data. I believe big data may be a tool for our future survival and prosperity. Thank you.