MS KIT BOEY CHOW:

Good evening. I am very, very happy to be here tonight and in Hong Kong too. It's such a vibrant economy.

Well, my happiness is because from what I have heard tonight it kind of supports what we have done and I can go back to tell my sponsors that "Our work has been justified", that, "Your views are being reflected".

We started this project some time ago, about a year ago, through looking at the literature and we built on what Hong Kong has done. Apart from that, we thought, "Is there another way of looking at creativity?" What is important is it's so difficult to measure creativity so are there factors that we can identify the impact on creativity, and knowing that are there ways in which we can change those factors to enhance the environment on creativity?

We read that creative people have a high tolerance for ambiguity, that they are open to experience, they have a broad interest in life, they like to take risks, they go for independence and autonomy and they adapt very well to changing environments. So these are the things that I have observed in my past day, interacting with the people here who are creative.

Apart from that, you also know that there must be domain experts because these are the experts to determine what is creative. It is very difficult to measure creativity but we can measure creative outcomes which is what the Hong Kong study has covered too. And there is political stability that is important as identified by some studies.

Then one that is not conclusive is crisis resolution. Does crisis lead to enhanced creativity or does it give conflict and therefore hampers creativity? So that we did not take into account in our model.

Training is important. Diversity at work is important

too and how do organisations adapt to change? If they can adapt well, then creativity is being enhanced too. There should be a rich flow of information because that would lead to more connectiveness and therefore more creative outcomes.

One of them which leads to Florence being a very creative period in the 15th century is that there should be some income level in which to support creative works and also, there should be support of time and attention. That's why measuring cinema attendance is one of the indicators on creativity. You must have the support from the audience.

Well, that leads us to the model that we have. We thought that we would take a holistic and dynamic approach and look at it in terms of process, in the sense of coming out with ASAT. We first start with availability. What is the availability of resources that input to creativity. They also include the outcomes of creativity because that measures like copyright industries, the size of it.

The next is can these resources be sustained? Sustainability is important and that is, for example, measured by the number of students enrolled in arts courses, for example, so that in future you will have this group of creative people.

Next is, as we have seen in the literature, that adaptability is very important; the more adaptive you are the more creative. It reflects our creativity and that leads to competitiveness.

The response to changes and how do we measure that? Many of these indicators that we have used come from surveying work and it's not our survey. Because we want to do this project to be updated regularly and we want to do it so that we can benchmark against certain global players so that we know where we stand too in Singapore, and therefore, we published international sources. Like the world competitiveness report, the Global Competitiveness Report and some others that are produced on a wide basis and regularly.

Then the last one is tenacity. Tenacity is what is the potential of creativity? One can see it in some people's predictions. Others will be like in the past what has it been so it may be a reflection of the future. So we take, for example, the growth in all these indicators that we have done from the past and see what it is like as an indication of what it will be in the near future.

Countries we took to compare, we look at the core innovators. Core innovators are defined by the Global Competitiveness Report as economies with 15 US utility patents per population, and we look at it from the most recent data when we first started, that was 2004, and since we need to look at change, we take 2002, a two-year difference. We didn't take 2003 because that is the SARS year and that may impact on many of the economies. So we think that 2002 will be more like a normal year.

From 2002 to 2004, from the Global Competitiveness Report there are more countries than what we have here but we have only selected these because the data that we have collected is more complete for this set. It's just that there is one country which did not have certain data.

So from Asia we have four countries: Singapore, Hong Kong, Japan, South Korea. From Oceania, Australia and New Zealand. Europe has the most number of countries or economies. The Middle East as well, and North America, United States and Canada. So there are altogether 24 countries in our study and we have indicators, 138, into the four components of the ASAT. Actually, it's three components because tenacity is a repeat of those indicators but reflects the change.

For example, under each component we have key factors. Under availability we have a key factor of manpower and one of the indicators of manpower is human development index. For infrastructure we have a facilitator which is overall infrastructure quality. Technology, we have patent grants per 1,000 population. These are just examples of the

indicators that we have used.

Then we have a whole lot of the environment that will impact on creativity. Economy will be, for example, with GDP per capita, as from one study there must be a certain income level to support creative activities. Financially you have the value trader on stock market per capita that shows the availability is up financially.

Regulatory, we have adequate enforcement of IP rights. Political, it's consistent policy direction of the government. The more consistent the policy the more stable, and that seems to enhance creativity. Social and international culture that is open to foreign ideas, and that is how open is the economy to others. Education is highly developed knowledge transferred between companies and communities. Are there any exchanges between the two components in the economy? Under adaptability we have a general adaptability which is genuinely positive attitudes towards globalisation. Then for business it's high adaptability of companies to market changes. That shows the private side.

So altogether, 138 indicators from the three components and then this is more of how we construct the index. I think I will skip this because of time constraints. Altogether, for each country, we compiled 40 indices from the methodology and then we looked at which methodology gives a more reasonable result and we use that for analysis and that is the HDI method. The HDI method is just looking at the difference between the value of the indicator and the minimum value divided by the maximum minus the minimum value.

What we found is among those 24 countries there are indicators which ran very high. For those who reached very high in our index, and this happened to be undersustainability that has been discussed earlier on; and two under adaptability. Under sustainability we found that companies which are more aggressive in absorbing new technology, short form, firm level technology absorption, is important in those countries which

we have compiled the index and it rang high in the index.

Financially, that means access to finance is important in terms of the size of capitalisation in the stock market. Exchange rate policy that supports competitiveness of enterprises is important under regulatory. Three other under regulatory are legal and regulatory framework that encourages competitiveness of enterprises.

Another one is transparency of government policy, whether it is satisfactory or not. The more transparent or the more satisfaction about the transparency of a government policy, the higher is the ranking on creativity.

The next one is: is the public service independent from political interference? The more independence there is, the higher there is creativity. Adaptability will be the ease of doing business. If it's easier to start companies then you will find that there will be more entrepreneurs and more creativity being promoted. Under the business it is how efficient are the SMEs in an economy? The more efficient they are, then you find more creativity.

So we think that these findings allow for policy implications, policy action and that may lead to -- more work has to be done to prove as to how certain companies or those companies which have run well in those indicators, how they have gone about handling such issues and we can learn from them and hopefully Singapore can meet its target of being able to double its copyright industries which is similar to creative industries, to some extent, to double the size of the copyright based industries by the year 2012. With this information hopefully we can make Singapore the Asian creativity hub, if possible. Thank you.