Session Title: Tomorrow's Technology and our Digital Economy
Date & Time: 4 April, 13.45pm – 14.45pm
Moderator: Jared Ragland, BSA Senior Director of Policy for APAC **Speakers: Ashran Dato Ghazi,** Malaysian Global Innovation & Creativity Centre (MaGIC) CEO **Dr Richard Record,** The World Bank lead economist of Macroeconomics & Fiscal Management Global Practice **Stephen Braim,** IBM Australia Vice President **Owen Larter,** Microsoft Senior Manager of Global Government Affairs **Jacob Isaac,** Fusionex Senior Vice President, Product & Solutions

Introduction & Purpose:

The presentations by Jared Ragland and Dr Richard Record sent the tone before panel discussion dwelled on how big data, artificial intelligence and other new technologies will impact foreign investment and supply chains in the digital economy.

Summary of the session

Speaker: Jared Ragland

Jared started his presentation with a brief introduction on BSA and its educational arm, BSA Foundation, Software.org, which recently published two documents. Citing case studies in **Artificial Intelligence (AI): Maximising The Benefits**, he said **unintended consequences of poorly designed regulations can have severe impact on the ability of an economy to reap the benefits of these technologies.**

Besides Al, another powerful technology is **blockchain,** most known for cryptocurrency and bitcoin. It can be used to promote smart contracts, which BSA has been advocating with the US government where trade agreements are concerned. This technology **can increase efficiency on how basic transactions are done besides helping governments to create a secured and robust virtual ID.**

In the **2018 BSA Global Cloud Computing Scorecard,** Jared said **10** out of the **24 countries ranked** worldwide are **in Asia Pacific. They represent 80% of the global IT market. Germany and Japan** are **top scoring** with **Indonesia and Vietnam at the bottom**.

The scorecard results show the leaders in the score are countries which invested in creating effective and flexible privacy and security policies that enable trust without prohibiting innovation and deploying of technologies.

He said the **seven themes** used are **data privacy or personal information protection rules, security, cybercrime, intellectual property rights, support for industry led standards and international harmonisation of rules, promoting free trade and data flows** as well as **IT readiness and broadband deployment.**

Speaker: Dr Richard Record

Dr Richard, in his presentation on Digital Dividends, touched briefly on the World Bank's role as a multinational financial institution. Headquartered in Washington DC, it is instrumental in helping developing countries achieve their goals in terms of sustainable economic growth and poverty reduction by providing primarily financing or advice to governments and the private sector.

The bank's work on digital economy, particularly in helping countries in this region tap the digital dividends in terms of growth, job creation and public service delivery, is partly captured in its World Development Report.

Dr Richard said digital economy has enabled businesses and countries to grow at a faster rate, the people to have better and more exciting, new jobs and governments to deliver faster and more effective public service delivery.

Despite such optimistic expectations, we see deep pessimism surrounding the global economy and productivity growth declining consistently over the last 10 to 20 years even with the advent of new technology. It's a **very mixed picture when it comes to income.**

A**s** to who's benefiting, when you ask the citizens about global governance, the quality of public service delivery and is your government doing better across the world, the reply most times is, "They are not."

He said one of the main impediments to be addressed by countries across the region is **digital divide as** there are still 400 million people who do not even have a mobile phone signal, let alone access to basic internet. **In Asia, the gaps are, however, not quite as large**.

Dr Richard also warned that digital technology can offer risks and benefits. For example, **motivation with the right investment in changing skills and capabilities in the workforce might lead to greater inequalities than efficiency in growth and the potential that we hope for.**

He called for a **focus on three broad buckets:**

1. Good regulatory practices to ensure healthy competition and market entry across the countries in this region.

2. Laws, regulations and education to enable the population to have the right set of skills to adopt and embrace digital technology.

3. Public sector institutions to have governance and an accountability framework.

Moderator: Give a brief introduction on what your companies do

Speaker: Ashran Dato Ghazi

As a creativity centre, MaGIC's core job is to work with parties, be it start-ups, individuals, corporations, entrepreneurs or governments on doing things differently. Ashran said we deal a lot with start-ups coming up with new innovations. Sophisticatedly put, it is **matching up the start-ups with upcoming technologies** in order **to drive faster innovation**.

We have **presence in Asean and** have been **entrusted by the Ministry of Finance to run the regulatory sand box**. W**e partner with organisations like IBM and Microsoft and have a variety of labs**.

Speaker: Stephen Braim

At the 107-year IBM, Stephen recalled learning about trust, dealing with clients and integrity. He said there seems to be a **divergence of understanding across**

the region between what the government thinks is going on and needs to be regulated to what is actually going on and the benefits to be derived.

Optimistic that **A1 will drive greater productivity, technology transfer, transformation, growth and employment,** Stephen said we do not see it as destructive and a mass destroyer of jobs. We see what blockchain can deliver even around things like food safety.

He called for a **reinvention of education**, saying that IBM **focused on producing new collar jobs through pre-tech schools, training people and trying to change the curriculum to ensure their job readiness.** We **a**lso **work with governments to** help **transform the education system**.

Speaker: Owen Larter

Discussing about the fourth industrial revolution (4IR) and key initiatives undertaken by Microsoft, Owen said its customers are using **new technologies as a potential that is being realised today** and not something that's a promise of tomorrow.

Rolls Royce, for instance, is using the Microsoft cloud platform to collect enormous amount of performance data on their jet engine. They use it to to predict maintenance and can have staff and equipment at the right place and the right time to minimise the downtown for engines.

He observed governments worldwide are also now using these new, incredible powerful technologies, citing several examples like the **US postal service,** which is using image recognition (AI) to process 1,800 mails by reading the addresses in a minute for cost and time savings.

The operational benefits of these technologies are very real. **Microsoft** is doing **research on image and speech recognition.** We have combined the output of this research to create a **new application, Seeing AI**, which is used in smartphones.

As with the previous industrial revolutions, there are challenges and big questions to be addressed like **What's going to be the impact of this technology on the world at work? How do we ensure people using this technology will make them secure?** H**ow are we going to democratise access to this technology?**

Eighteen months ago, we launched a global initiative called **A Cloud for Global Good.** Based on a book bearing the same title, it recommended to

governments how they can create an enabling environment for technology. The four priority recommendations are:

- G**overnments have an important role to play** in being leaders in this transition to a new technological era and industrial revolution. Using these technologies to increase the efficiency and effectiveness of their service delivery, they can also spur to the rest of society to have trust in such technologies.
- G**overnments need to create an enabling environment** firstly **around cybersecurity**, where people using the technology have trust in it and feel secured.
- S**kills** are **absolutely fundamental**.
- Ensure wide-ranging, cheap infrastructure in this digital tomorrow.

Speaker: Jacob Isaac

Fusionex International is a Malaysian company with a global footprint in 15 countries and strong focus on big data analytics, AI and IOT solutions. It has the **experience of working with** organisations such as the **Fortune 500 companies,** 75% of the **largest banks** in this region and the **public sector.** Jacob said it is also experienced in partitioning hybrid cloud approaches on what you can put on the premise and what can be put in the cloud, which is very viable today.

However, i**f you think that by putting your data on premise hardware is more secured, think again.** Although there will be regulatory demands and compliance issues that will be evolving and improvising, I feel that will only bring more benefits to humanity.

Moderator: There is a disconnect between rhetoric and implementation, especially at the public sector and a general reluctance to move to some of the advanced technologies. We are worried about the future of existing policies on data localisation or restrictions on data overflow. *In a region that's diverse but poised to seize on new technologies in Asia Pacific, what do you perceive as your greatest challenges for achieving those general objectives?*

Speaker: Stephen Braim

On IBM's fundamental transformation over the last six years, Stephen said half of its revenue of over US$40 billion comes from the cloud. Globally, there are

pockets of rapid adoption. In this part of the world, **part of the challenges is regulatory.**

There is **a misunderstanding on what's on offer and what it can do for governments, agriculture and trade. T**he much bigger value equation is **government transformation**. E-government, a one-way channel, is out. You have a lot more channels now that's **two-way.**

Speaker: Owen Larter

Apart from some resistance, Owen observed that governments and enterprises globally were rapidly deploying the cloud technology, citing the UK as an example.

Emphasizing on the fundamental ability to **reskill our society for the 4IR**, he said w**e need to be more creative and far sighted, looking 10 to 20 years beyond into the skills intervention we need to make.**

Speaker: Jacob Isaac

Asian countries, including Malaysia, are bullish to hop on to AI, IOT and big data initiatives. They have adopted on a small scale either a POC, POV or pilot project. The challenge is when you hop on to a pilot, it has to be successful before you move into other phases. C**hampionship is lacking here.**

Insights and intelligence, which is usually engage at C level discussion, get lost when it trickles down to the implementation and working level. They tend to return to traditional reports and transactional data. Thus, when it's presented to the higher-level executives, they say this isn't big data and kill the project from there.

Another problem is **data governance**. With **concerns about data security and governance**, questions like 'What if we host it on the private cloud, will it be safe?' are often asked. In reality, it's not something that will stop a project from progressing but it's more of championship. When that happens, they will put in the right regulatory compliance.

Speaker: Ashran Dato Ghazi

The Malaysian government realises the importance of the **4IR** but the **appreciation of what that means is lacking** because in various engagement sessions, you would hear slightly different permutations of their own interpretation of it.

When it comes to the corporations, the communications tend to start from the technology viewpoint. When your core business is not on that front, the chances are there's the fear factor that creates that lack.

In MAGIC's early days, we were seen as a pure plug & play tech style park but as we moved along, we became a creativity centre that leverage on technology. When we try to tweak the narrative, we have to do a softer play on the tech bit as the larger population of potential buyers and customers are unaware about it and don't want to acknowledge it. Hence, the lagging.

We have **the challenge of matching** the **entrepreneur community,** the **government and** its agencies, as well as the **corporates.**

Speaker: Dr Richard Record

Asia has **extreme diversities**: The world's highest living standards, extremely well-educated population with skills and are digitally savvy pitted against those with per capita income in annual terms that are still measured in hundreds of dollars and where there are fundamental issues around nutrition, basic literacy and the mobility to adopt technology. It's thus important to recognise there are different species, tracks and priorities.

Moderator: The more Individually savvy economies face many challenges with data sovereignty and regulatory regimes making things difficult. What's the solution for building from the ground up for some of these developed countries? A lot of companies are trying to develop broadband development and investment but it's tough.

At a general level, how can you improve collaboration and communication between the private sector, industries and governments so that regulations are being developed in a way that's effective and not counter- productive?

At a specific level, what's your experience and approach to reach out and get that necessary information from your stakeholders, industry and private sector about their needs?

Speaker: Ashran Dato Ghazi

On the national sand box initiative, the usual process within the government is they start doing some paperwork and say the policy has been shifted for various reasons as in the case of the national transformation 2050 plans, where we are riding on that strategy as a primary motivation to drive change because there is a strong appetite at that level.

In order to change or bring onboard the private sector, we need **to get both realigned towards the goal**. W**e try to come with what are key stakeholders need, angle them according to what's to be done and see whether we can drive it through**.

Speaker: Owen Larter

It's absolutely fundamental to get the relationship between government and industries right. **As an industry and start-up technology, we reach out, engage with the governments and educate them on the potential, challenges and opportunities.**

Ultimately, it's the governments that are accountable and responsible to understand the people and it's only they who can create the regulatory framework to realise these technologies.

Owen suggested having this broad conversation on what to do with technology at communities and societal level. In the book**, A Cloud for Global Good**, he said we try to **play the role of convenor** and **bring together** the **government, industries**, **academics, NGOs, consumers on how to shape the society and environment to deliver technology.**

Speaker: Stephen Braim

To overcome the difficulties of getting politicians to take an interest in technology, Stephen said **we have to do everything to ensure we fulfil our promises around data responsibility, trust, privacy breaches and security as it will go a long way to help the government work with us in partnership to get this conversation of technology on the front page.**

Speaker: Ashran Dato Ghazi

MaGIC drives the agenda of supporting social entrepreneurship and impactful enterprises. That is the narrative that politicians are looking for.

Moderator: Of much more powerful character in corporate behaviour are the market forces. When something terrible goes wrong, the company is often hit

immediately with market consequences. Would you like to elaborate on that and how the power of market forces can help us self-regulate?

Speaker: Stephen Braim

We should be working with the governments to find a way to develop very open and collaborative partnerships and regulations. Regulations are needed for privacy but some governments try to lower encryption standards so they can get better access to data. This is wrong and very detrimental to the industry. If we do something wrong, the market is going to punish us far more severely.

Speaker: Owen Larter

On the **importance of trust in technology**, it's **absolutely fundamental that industries and government work together to create that enabling framework, which has trust right at its core.**

Speaker: Jacob Isaac

In terms of **government** participation and their contribution where technology is concerned, Jacob said **policies can be outlined clearer,** citing that a lot of regulations on cryptocurrency and block chain have not been solidified. Hence, they are too many grey areas. If this can be strengthened and there is more clarity to the industry, people will have to be more vigilant as the rules are clearly set.

With so many **different opinions about what's regulated and how it's regulated, if all these can be further clarified, it would bring a lot of benefits to everyone.**

Moderator: One thing we didn't talk much about on the challenges in this region is the hegemony or state of regulations**.** One of the concerns I hear almost most frequently from my member companies is **the lack of coordination**, particularly in this region, so that we are not operating in an environment where in order to comply with one country's law you may be by default violating another country's law.

Takeaway from the session

- Benefits of technologies such as AI and blockchain can be weighed down by poor regulations
- Mixed outcome arising from digital economy
- Digital divide, one of the main impediments
- Transform and reinvent the education system to meet future technology needs. Reskilling is essential.
- Role of government to provide an enabling environment. Important for governments and the industries to work together to deliver technology and to have trust at the core of this relationship.
- Regulatory challenges in Asia Pacific and concern over data security