EDITORIAL

Digital economy offers unique opportunities, but also challenges

As the year draws to a close the contours of Singapore's "Smart Nation" dream have become clearer.

Trials at the Jurong Lake District of technologies such as HetNet (heterogeneous network) show that ubiquitous connectivity is the key to rolling out digital services. HetNet is a system whereby a signal is seamlessly delivered to a device via the best available means, be it WiFi, 4G or any other network. This ensures total connectivity in all environments, even basement carparks and lifts.

Even if Singapore had no ambition to become the world's first Smart Nation, connectivity would still be important as the digitalisation of economic activity takes centrestage. Four major technology trends have converged over the past few years. They are mobile connectivity via smart phones and tablets, use of social networks such as Facebook and LinkedIn, cloud computing and advanced data analytics, also known as big data. Any one of these would have brought about fundamental changes in the way companies do business. Together they are changing the paradigm with disruption not seen in several decades. This year another tech trend has become mainstream, the Internet of Things or IoT for short. All manner of devices are being connected to the Internet. Research agencies reckon that IoT can provide a potential global economic opportunity to the tune of US\$17 trillion by 2020. Around 20 billion "devices" are expected to be connected to the Internet by 2020.

In 2015 digital business, which is the creation of new business designs which no longer differentiate between the digital and physical worlds, has emerged as one of the top technology trends of the year. What does this mean for Singapore companies? For one it means that IT is no longer a backroom function which just helps to "keep the lights on". It is at the centre of business strategy and must be a C-level priority, irrespective of the size of the company. This has been so for the past couple of years but it has acquired a new urgency this year and the trend will continue going forward. All companies need to be IT savvy, irrespective of size or the industry they operate in.

The other major trend is that the customer is now at the centre of the new digital economy. Mobile apps and connectivity provide unprecedented information to customers to help them make the right choices. Simultaneously, a huge amount of data on customer behaviour is captured in a digital economy. This can be analysed in real time with the help of big data analytics and cloud computing to provide actionable information to companies. Using data analytics, many banks, for instance, are already providing services such as loans to customers who need them even before they request these services.

The competition is intensifying. Size is no longer a unique advantage in this new digital age. It is now possible for a small start up to challenge an incumbent with the use of technology. This could, potentially, be a boon for Singapore companies which have been at a disadvantage on the international stage because of size constraints imposed on them by a small domestic market. However, it has also lowered barriers to entry – which is why, for example, a new entrant such as MyRepublic can aspire to be the fourth telco in Singapore's saturated telecoms market.

In the new year and in the years to come, the technology paradigm shift will provide unprecedented opportunities but also challenges, and the companies which fail to adapt will fall by the way-

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An Asean plan for corporate citizenship?

Such a regional national action plan, in the wake of the Paris Agreement, could tackle issues of climate change and human rights. BY THOMAS, MAHDEV MOHAN & JAYA ANIL KUMAR

HIS month, 196 State parties to the United Nations Framework Convention on Climate Change (UNFC-CC) met in Paris to agree upon a historic agreement to combat climate change. The Paris Agreement is designed to limit global warming to less than two degrees centigrade. It sends a clear signal to the fossil fuel industry: their unchecked expansion must end.

The handwriting has been on the wall for a while. Ahead of the Paris conference, The Guardian reported in September that "institutions worth US\$2.6 trillion have now pulled investments out of fossil fuels". Although it has its fair share of critics, the Paris Agreement is revolutionary and has widespread acceptance. It expressly acknowledges that countries should respect and promote human rights in addressing climate change. Of course, uncertainty is associated with each link of the causal chain of climate change and transboundary pollution. But the agreement reiterates the importance of the precautionary principle enshrined in the UNFC-CC decades ago, which states that uncertainty is not a reason for inaction.

Around the world, legislators have introduced bills urging countries to divest from fossil fuels. Closer to home, the Philippine Human Rights Commission will investigate the climate change impacts of more than 50 of the biggest fossil fuel companies. It accepted a petition, filed by Greenpeace Southeast Asia, requesting investigations of these companies for human rights violations resulting from impacts of climate change, and to recommend legislation that will provide for accountability mechanisms relating to human rights and the environ-

The Paris Agreement is welcome news to low-lying island states, such as Singapore, which are particularly vulnerable to the adverse effects of climate change. The precautionary principle enshrined in the Paris Agreement implies an emphasis on the need to prevent such adverse effects. The link the agreement draws between climate change and human rights is especially crucial, and has positive implications. As Singapore prepares for its Universal Periodic Review by the UN Human Rights Council in January 2016, we think that our 50-year-old nation ument that reflects Asean's commitment to admay be ahead of the pack in terms of the nation al action plans (NAPs) it has put in place to engender and reinforce corporate citizenship, including respect for human rights.

Climate change & human rights

NAPs are policy guidelines by which a country articulates actions that it will adopt to implement a particular prerogative. It comes as no surprise that Singapore has forward-looking NAPs which underscore its environmental and human rights commitments. After all, sustainable development took root in Singapore long before the Sustainable Development Goals were adopted by the UN General Assembly in September 2015. Singapore launched its first Singapore Green plan soon after its participation at the "Rio" Earth Summit where the UNFCCC was negotiated.

That summit's preparatory committee was chaired by Professor Tommy Koh in 1992. That year, Singapore launched the Singapore Cooperation Programme, which extends technical assistance to developing countries on issues pertinent to sustainable development. It remains a committed participant of international and regional forums on sustainable development, and has ratified the UN Framework Convention on Climate Change and the Kyoto Protocol.

Our report

The UN Working Group on the issue of human rights and transnational corporations (Working Group) promotes, among other things, corporate citizenship, and encourages dispute resolu-



In September, when the PSI crossed into the "hazardous' range, the NEA issued "preventive measures notices" to several allegedly errant companies under **Transboundary Haze Pollution** Act. PHOTO: **REUTERS**

tion mechanisms for victims of business-related human rights abuse. In 2013, the UN Working Group commissioned, for the first time, a coalition of African and Asian researchers, to study the prospect of NAPs in the Global South (Coalition). We are privileged to have been part of this coalition, which included members of the Centre for Applied Legal Studies in Johannesburg, the Asian Business and Rule of Law initiative at the Singapore Management University and the Asean CSR Network to study the prospect of NAPs in the Global South.

Last month, we submitted our empirical report to the Working Group at the Asean Responsible Business Forum. A summary of the report has been published. We highlight a few findings

NAPs & sustainable development

We found that large-scale infrastructure projects that were carried out without adequate safeguards have led to local communities being evicted without free prior and informed consent. There is also currently little public access to concession contracts in several countries in the region. Fortunately, several progressive businesses interviewed seem to understand that inclusive and sustainable growth is necessary. These businesses, supported by like-minded business associations, have had a critical role to play in devising NAPs in their countries.

It may make sense to integrate an NAP for corporate citizenship or responsible business into an existing regional plan, such as the Bali Concord III Plan of Action, which is a policy docdress global challenges. Notably, this regional NAP states that Asean countries shall, "where appropriate, integrate the programmes and activities of the Plan of Action into their respective national development plans".

Soon to be launched, the Asean Economic Community (AEC) aims to transform Asean into a single market. Asean represents a market of about 620 million people, with a combined GDP of about US\$2.3 trillion and upwards of US\$1.2 trillion in trade flowing throughout the region.

In light of the AEC, NAPs should look to regional and mega-regional agreements. The Trans-Pacific Partnership and the Asean Comprehensive Investment Agreement contain provisions that allow states the right to regulate in the public interest. That is, to ensure that investors respect environmental, health and other regulatory objectives. NAPs should reference these provisions, which oblige foreign investors to respect environmental and social govern-

NAPs & haze pollution

Are NAPs ineffectual without laws or treaties? We do not think so, as each mutually reinforces the other. We believe NAP processes in Asean should first identify gaps in existing legislative and regulatory frameworks, and then outline ways in which to bridge them.

This is precisely what Singapore's sustained national strategy to combat haze pollution has sought to do. Singapore's Inter-Agency Haze Task Force was set up in September 1994, after the UNFCCC entered into force, to coordinate efforts across the Singapore government.

Today, the Transboundary Haze Pollution Act (THPA) gives wide powers to environmental regulators and is based on the precautionary principle. In September 2015, the Pollutant Standard Index had crossed the 300-mark, into the "hazardous" range. Environment ministers from Asean countries attended a meeting on transboundary haze pollution on Oct 29. In a joint press release, they expressed concern over the "unprecedented severity" and geographical spread of the haze. Referencing Singapore's efforts, Singapore's Foreign Minister Vivian Balakrishnan has described the haze as a man-made tragedy and a crime. Singapore's National Environment Agency has also issued "preventive measures notices" to several allegedly errant companies under the THPA. These notices require the firms in question to take specific action to prevent, reduce or control haze pollution in Singapore on penalty of prosecu-

NAPs & TIP

Our research shows that where norms are enshrined through NAPs, and have tri-sector support, laws and remedies follow. There are other examples. The National Plan of Action against Trafficking in Persons was the brainchild of the Singapore Inter-Agency Taskforce on Trafficking in Persons (TIP). This National Plan of Action recommended that Singapore should review its legislation to ensure a legislative framework that facilitates the achievement of key TIP objectives. In November 2014, Parliament passed the Prevention of Human Trafficking Act that was designed to deter and punish TIP and to protect and assist trafficked persons

Other Asean states should also consider have ing NAPs to combat regional problems such as haze pollution and TIP. We believe NAPs processes in Asean should first identify gaps in existing legislative and regulatory frameworks, and then outline ways in which to bridge them. A regional NAP for corporate citizenship, in the wake of the Paris Agreement, could be seen as an important source of cross-cutting standards for the humane treatment of migrant workers.

In summary, we find that unprecedented foreign investment and trade in Asean bring considerable benefits as well as potential environmental and human rights risks. To understand the true value of an NAP, policymakers must understand the background to what has prompted, and perhaps, continues to prompt a response to a national or global challenge.

As Asean countries develop climate change NAPs in response to the Paris Agreement, dialogue is key. Responsible businesses and other relevant stakeholders should have a seat at the table. NAP processes should also be subject to domestic reporting and periodic review to ensure that they remain relevant. With this in mind, Singapore should continue to play a major role in the regional conversation about climate change and corporate citizenship.

■ Thomas Thomas is the CEO of Asean CSR Network. Mahdev Mohan and Java Anil Kumar are director and research associate, respectively, of the Asian Business and Rule of

Law initiative at SMU School of Law

■ THE BOTTOM LINE

Creating a region of cooperation

By Sundeep Waslekar

HE Asian Infrastructure and Investment Bank (AIIB) will begin its operations in 2016. Its opening for business coincides with the launch of the Global High Level Panel on Water and Peace (Global HLP) by the governments of 15 countries from all continents. The AIIB has indicated that water, sanitation, hydro-power, agriculture and environment will be five of its 10 priority areas. These are precisely the sectors which will be addressed by the work of the Global HLP.

The government of Switzerland, which brought together the 15 countries, is also a subscriber to AIIB capital. Out of the 4.4 billion people in Asia whom AIIB aims to serve, about a third or 1.5 billion people live in shared river basins. Where waters are shared between neighbours, incremental capital output ratio for water, agriculture, hydro-power and related sectors - which is currently at 2.5 globally - can decline to 2 if there is collaborative management instead of conflict. This can considerably improve the returns on capital. Cooperation can reduce cost overruns by avoiding disputes and judicial processes. Therefore, the Asian Development Bank (ADB) places premium on regional water cooperation in all parts of Asia. If the AIIB also makes regional water cooperation a priority, it can hope to substantially increase the returns on its capital.

Singapore is a classic example of combining transboundary cooperation with good governance of the water sector. When Singapore became independent in 1965, it was fully dependent on Malaysia for its water. By 2065, it will not only be self-sufficient but will also export water to Malaysia and other countries. Singapore has made this possible with a policy of peace and cooperation with Malaysia, sound domestic management and the use of new technologies for treating waste-water.

On the other hand, the countries in South, Central and West Asia have lost considerably due to their failure to pursue regional water cooperation and good water governance. In the case of Syria, the failure to cooperate with Iraq, Jordan, Lebanon and Turkey on shared water weakened the capacity of the Assad regime to respond to drought, adding to simmering discontent. In the last six years, the government, its armed opponents and the ISIS have together destroyed 60 per cent of water pipes and other in-

frastructure. Several billion dollars of investment have gone down the drain.

In Central Asia, there is no violent conflict. However, the failure of the countries to cooperate has delayed dam projects and resulted in the desertification of the Aral Sea by 30 per cent since the collapse of the Soviet Union in the 1990s, and polluted rivers. The region is on the brink of natural disasters. If they cooperate, AIIB can fund projects worth a few billion dol-

For AIIB to succeed in its five sectors related to water and agriculture, it is essential for the Global HLP to succeed. It is mandated to propose a new global architecture for water cooperation including financial incentives, dispute resolution mechanisms, collaborative management institutions for all shared river basins in the world, streamlining of international law, and improvement in the management of water and related sectors.

The panel has been conceived by the Strategic Foresight Group, an international thinktank, with the government of Switzerland and is co-convened by 15 countries from Asia, Europe, Africa and the Americas. If the panel succeeds in proposing an operational architecture, it can

potentially benefit about 2.3 billion living in shared river basins of the world, with gross economic output of US\$10 trillion. If on the other hand, the panel fails to propose a cooperative architecture that can motivate the rulers in the East, South, Central and West Asia to foster regional cooperation, the depletion of water resources - currently at the rate of 320 billion cubic metres per year - will continue. In the next 15-20 years, countries in the region will face food shortages and place an additional demand of 200-300 million tonnes of food grains in the international market. This will drive food prices sky high, causing social and political turbulence. Most of the losers will be in Asia. An unstable Asia will make it difficult for AIIB to invest.

It is therefore essential that the AIIB and the Global HLP have a dialogue on their respective visions and strategies. Together, they can create outstanding opportunities to spread the spirit of cooperation today seen in South-east Asia to other parts of the continent.

■ The writer is president of Strategic Foresight Group, an international think-tank based in India. which has worked with or on 50 countries across four continents

If the Global High Level Panel on Water and Peace panel succeeds in proposing an operational architecture, it can potentially benefit about 2.3 billion living in shared river basins of the world, with gross economic output of

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