Institute of Policy Studies

**IPS Corporate Associates Breakfast:
Anticipating Strategic Surprises – Insights from
the Government Strategic Futures Network
26 May 2014**

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The Institute of Policy Studies (IPS) held a Corporate Associates Breakfast on 26 May 2014. The event was titled "Anticipating Strategic Surprises: Insights from the Government's Strategic Futures Network" and chaired by IPS Senior Research Fellow Dr Gillian Koh. It was attended by 36 people, including members of IPS Corporate Associates programme.

Introduction to the Government's Futures Work

Tiana Desker, Deputy Head of the Centre of Strategic Futures and Assistant Director at the Strategic Policy Office under the Prime Minister's Office, commenced the session by giving a broad overview of the Singapore Government's use of futures research over the past two and a half decades.

Futures units that conduct such research can be found across several government ministries. They provide the space to review the operating assumptions behind government work and policies; develop the discipline of thinking long-term in government; and foster cross-disciplinary and inter-ministry thinking.

The mainstays of this work are first, scenario planning that typically operates in the long-term horizon of 15 to 20 years; and second, risk assessment and horizon scanning that operate in a planning horizon of three to five years.

The basis of this futures work is that it encourages planners to consider how trends might turn out in a totally different manner from what they might ordinarily assume, not just by looking at different sources of data but also by looking at the same data in different ways. Planners can discuss issues in the frame of the future, even if they are already beginning to take place, and are given a space to talk about how they might react or respond differently.

Ms Desker said that while the work is future-oriented, the objective is to shape present strategic policy actions of the present.

There were three presentations to illustrate the work of various futures units. The first was by Mr Lee Chor Pharn, Deputy Director of the Futures and Strategy Division at the Ministry of Trade and Industry (MTI), who spoke about "The Automation of Knowledge Work". The

second was by Mr Jansen Wee, Head of the Risk Assessment Horizon Scanning (RAHS) Think Centre, RAHS Programme Office in the National Security Coordination Centre (NSCC), who spoke on the topic of "Surveillance from Below". The third was by Ms Desker, on the topic, "Interpreting the Nostalgia for Kampung Days". These were followed by a question-and-answer session.

The Automation of Knowledge Work

Mr Lee explained that the work of the MTI unit focused on jobs and economic growth. The unit seeks to identify weak signals "from the future" and check if there are "dynamic feedback loops" among such trends that could increase the disruptive power on the current economic situation.

One such signal that has gained prominence is that of the automation of work, specifically, knowledge work. While the futures group at MTI wrote about this two to three years ago, this subject came to the forefront recently when Oxford University released a prediction that up to 47% of jobs in the United States could come under the risk of automation.[1] This study was picked up by several major newspapers including *The Economist*.

The jobs at risk ranged from non-cognitive routine work like mechanical work to food preparation, to cognitive routine work including providing legal advice. Of the latter, Mr Lee gave the example of a law firm in California that had captured a large segment of the company registrations market by automating large parts of the process and making it free. Such a trend would make lower-level staff that usually handled such procedures redundant. The firm would provide skilled lawyers if a client is willing to pay for further help or reassurance.

The Oxford study indicated that there would be a progression of the trend: within 10 years, many of these routine jobs would become vulnerable, although not necessarily removed, by these automated processes. After that, there would be a lull as technology attempts to catch up with human judgement. Thereafter, machine learning would begin to augment human knowledge. An example of this cutting-edge trend is a company of lawyers and computer scientists that has developed a way to analyse past case law to predict the behaviour of judges and highlight trends in intellectual property law, and to advise client companies accordingly. This system augments the knowledge of decision-makers.

The subsequent MTI study highlighted a number of areas of concern and opportunity, namely, that such change would mean that fresh graduates would face a broken job ladder — the low-level work which they would cut their teeth on would be overtaken by automated processes. Businesses, however, could experience a potential boost in productivity. The trend would produce an elite class, able to work in human-machine teams and able to demand high wages. The remaining lower-skilled workers will face a scramble for jobs and wages, potentially deprived of job security or other forms of benefits.

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[1]. Frey, C. B., & Osborne, M. A. (2013, Sept 17). The future of employment: how susceptible are jobs to computerisation? Retrieved from: http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

Surveillance from Below

Mr Wee's presentation was about what has been termed "Sousveillance", or "surveillance from below". (*Sous* being French for "from below", whereas "sur" meaning "from above".) Sousveillance is the monitoring of people and organisations, particularly those in positions of authority, by ordinary citizens. Sousveillance is not a new occurrence; the term itself dates back to the mid-1990s, and the concept it describes is akin to the effect of having "gossiping aunties". Sousveillance is a complex interplay between privacy law, culture, technology and security, and thus too broad for any single ministry to oversee or regulate.

Changes to technology, such as the rise of Web 2.0 and the ubiquity of mobile and wearable technology, mean that the ability to capture and transmit events has passed from the hands of those with power, whether the media or the government, into the hands of the man on the street. This occurs at the same time as people are beginning to react to the monopoly of surveillance previously held by the state. Governments across the world are facing scrutiny over actions, which affects the levels of trust that citizens have for them.

Mr Wee discussed three implications of this trend: greater awareness of mutual surveillance; the reshaping of how governments and citizens interact; and the resulting influence that interaction will have on policy. These forms of first-order impact will go on to have second-order impact — they will affect how citizens react to one another; they may have negative consequences on policymaking, particularly when governments feel forced to favour short-term populist policy; and they could erode individual privacy and societal trust as everything that governments and individuals do can be made public.

There is a range of potentially positive second-order effects too, such as the deterrence of crime, particularly in areas known for sur- or sousveillance; and the emergence of a more informed, more active citizenry; governments can also get a better grasp of public sentiment.

Over time, Mr Wee said the trend could speed up with the progress of technologies such as with "the Internet of things" or nanotechnology. Companies and governments will have to consider the implications of changes to the public and private spheres — whether a "new normal" will emerge and what the consequences of greater scrutiny will be on companies and their brands.

Interpreting the Nostalgia for Kampung Days

The final presentation by Ms Desker reviewed a study on the rising sense of nostalgia that Singaporeans have been demonstrating in recent times. There seems to be increasingly positive associations with aspects of Singapore's past, like the kampung life, even among the young although they may never have experienced anything like it first-hand.

Ms Desker attributes this to a reaction to three aspects of life that contemporary Singaporeans find they lack: Community, time and nature. Wherein the 1950s and 1960s, kampung communities had to band together to create or gain access to public services such as education. While the modern Singapore Government has worked to ensure that it delivers such public services well, this may have come at the price of the collective action and thus a sense of community.

The longing for kampung days can also be seen as a complaint against the demands of modernity. People who are nostalgic for the past see the past as the days when there were less demands on their time and labour. There is also a sense of loss when it comes to nature, which seems to have made way for development and modernisation.

The challenge facing the government is finding ways to channel such nostalgia into positive energy. Nostalgia, she notes, has a dark side in the sense that it may manifest in the form of xenophobia. Instead, ways can and should be found to tap nostalgia and encourage community activities at neighbourhood level, or help Singaporeans reconnect with nature.

Policies can be designed with these objectives in mind. Bike paths might be, in the first instance, a solution to transportation challenges but may also provide an opportunity to reconnect with nature and improve Singaporeans' quality of life.

Question-and-Answer Session

During the question-and-answer portion, two main points came up, the first relating to the future effects of technological change; the second to the overall role of futures planning in Singapore.

Questions came from the floor regarding the ability of not just governments and individuals to use the data from surveillance and sousveillance to affect behaviour, but that of malicious individuals either hacking to gain access to information or placing viruses to disrupt IT systems.

While there are government efforts in place to address threats of cyber-terrorism for instance, of particular concern was the extent to which companies could use their data to affect behaviour or important business or consumer choices without ever engaging in illegal behaviour. An example is how a large Internet company now has access to a wide range of customer data, particularly sales, inventory, utilities use and billing information that it uses in unison with its credit arm to offer loans. Similarly, someone can be denied loans with the same information. There are ways to "nudge" behaviour, without informed choice. These practices are of particular note in countries where regulations are lax and companies are not prohibited from using their access to data in this way. It is clear that companies and individuals have more than just outright malicious groups to worry about, and at this point the full effects of these technologies are yet to be clear.

The second point raised was how futures planning is used by the Government of Singapore and why despite all of it, there is a sense on the ground that the government has not planned well enough. Clearly, there are limits to the effect that futures planning can have on policy outcomes. Even if the people on the government research and planning side successfully spot and highlight a potential future issue, it is not always possible to predict how its impact will play out. In addition, policymakers prefer information that has clear outcomes before they respond. Yet futures research offers possibilities, not certainties. In addition to this, the futures units always have the challenge of effectively communicating scenarios and implications.

Conclusion

Rounding up the session, the panel emphasised that the work of futures units was not just about doing the research, but working with various ministries to try and help them prepare for different possible futures. This is done in a variety of ways, such as providing avenues for ministries to educate themselves on such issues or finding champions who will have time and motivation to take necessary action to respond to futures research.

Lastly, the panel pointed out that there is a risk, with the sheer quantity of data available, to mistake data for insight. Insight is extracted through hard work but it also requires a lot of cross-ministry engagement. The futures units provide a means through which ministry boundaries can be crossed informally and where help can be mobilised outside the circles a civil servant in a particular ministry might otherwise be bound within. Problems can be spotted and dealt with, and opportunities can be identified and tapped to improve policy work and outcomes.

Established in 1992, the IPS Corporate Associates is a network of business leaders who provide insights towards policymaking from a wide range of viewpoints. For more information on becoming an IPS Corporate Associate, visit http://lkyspp.nus.edu.sg/ips/corporate-associates.

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