As Japan’s former Minister of State for Internal Affairs and Communications a decade ago (2005-06) – with responsibility at the time for IT policy – Professor Takenaka reflected on the changes in emphasis and complexity of issues surrounding the Internet, from an earlier, logistical focus on expanding the broadband infrastructure, to current concerns with Internet governance.

Concerted innovative efforts are needed to accommodate an anticipated tripling of Internet users to 1.5 billion in coming years, building out capacity while grappling with complex issues. As the Offsite would be taking place four years to the day of the March 11 disasters in 2011, Professor Takenaka poignantly reminded participants how vital a role the Internet played in the immediate relief effort, and the role the Internet continues to play today in the ongoing reconstruction of the Tohoku region and Japan’s economy as a whole.

In transition remarks prior to Session One, participants were encouraged to make the Offsite “disruptive, like the Internet – interrupt with points, questions, and keep it active rather than just listen; the key term will be Interactive.” The concepts to grapple with were encouraged to include Governing the Internet Economy, with a conscious, systematic search for synergies and areas of convergence among a triangle of key players – the corporate, academic, and regulatory communities – rather than earlier models of ad-hoc dialogue and cooperation.

As host, Keio University’s International Center for the Internet & Society (KICIS) is pleased to provide a summary of the Internet Business Offsite’s proceedings, inviting others to join this timely, forward-looking dialogue.
The Internet Economy in 2025

The Internet Economy is rapidly becoming a major driver of economic growth.

Cloud Computing, Big Data, and the Internet of Things are rapidly emerging as new opportunities for growth, disrupting established business models and blurring the borders between national economies.

The questions presented for discussion were “what will the Internet Economy in Asia look like in 2025” and “how are companies in and out of the region thinking about and preparing for that future?”

Each in the panel of nine participants was specifically asked to provide a single word or brief phrase to highlight their central concern as they anticipated Internet developments going forward – “what is key to the future of the Internet?”

A dynamic dialogue – brainstorming at an intense level – ensued from the listing of the following key terms:

- Fragmentation Risk
- Privacy
- Singularity
- Fairness
- Solution-Driven Innovation
- Human-Centric
- Policy
- Harmonization

Although the session was ostensibly focused on the Internet Economy, an early and surprising emphasis on issues of Fairness was triggered by the challenging question: “how can the Internet create more fairness?”

With two-thirds of humanity not yet connected to the Web, a range of inequality gaps – including the uneven distribution of media and technology literacies – are apparent, and if not addressed are likely to become exponentially more problematic. The reality of an existing digital divide challenges the Internet-capable to engage in countries and locales with less digital access or literacy, striving to close the digital divide – including through education – rather than permitting it to widen. Is the Internet already situated to reduce the inequality gap, or is there a danger that it will have the opposite effect?

Fairness – and the important dimensions of procedural fairness and outcome fairness – propelled the discussion in several directions. One was a reminder that Fairness is not a unified concept based on universal values – it depends on where one stands and how one sees things. Fairness can be complicated by ideas of sovereignty as well as by questions over collective interests as opposed to individual, private, and business interests. This led to the suggestion that the real issue is not fairness, but openness. Twenty-five years into the Internet era, it can be convincingly argued that its decentralized and open character – without gatekeepers – drove the Internet’s success thus far, creating equal opportunity and promoting fairness through its inherent openness.

As governments increasingly focus on an operational layer of interest to policy-makers, proponents of the Internet need to carefully advocate for its continued openness. Fairness and openness, in turn, require a high level of neutrality – device neutrality, platform neutrality, among others – yet these central tenets of an open Internet raise related issues of regulatory structures, social norms, and the like. It was proposed that the promotion and spread of the Internet going forward must strike a balance in appealing to the widest possible audience. This would include those sovereign forces seeking to regulate the Net and those advocating for its inherent qualities.

It was argued that openness and governmental involvement are not necessarily contradictory, nor should the role of government be seen only in a regulatory context. While technology is inherently global, policy is inherently national. In this sense, what are the key principles each country should adopt and how do they work together in thinking about, promoting, and regulating the opportunities of this new economy, without falling into the trap of rigid global rules that fail to provide flexibility or reflect the diversity of social, cultural, and national perspectives? Policy-makers – including those of us who can provide insights into the long-term impact of decisions at both the national and international level – need to recognize that regulating the “digital” economy does not take place in a vacuum. The “digital” economy is increasingly the economy, with virtually every sector – traditional and otherwise – closely tied in to and dependent on the Internet. Similarly, there is a danger in thinking the regulatory climate for the “digital” economy needs to start from zero. It is necessary to recognize that privacy and copyright laws, already exist, and can serve as templates for discussions on Internet economy questions. Offsite participants were encouraged to think innovatively about policy itself – seeking a paradigm shift that utilizes existing rules and norms to identify key issues that facilitate a more open and connected global market, recognizing regulatory jurisdictions without impeding cross-border economic transactions. Crafting the proper regulatory environment, in turn, is an important factor in promoting economic innovation itself.

Privacy and security were recognized as crucial dimensions of the Internet’s success, as commercial transactions across the Internet began and can only take place within a context of trust in its security mechanisms. Safety, in turn, is not limited to business transactions, but runs the full gamut of protection of the privacy of its end-users – consumers and the general public – including children and youth. The human element was a recurring theme, both in terms of data-breach and privacy concerns, and in ensuring broadest involvement by civil society in discussions about access to and regulation of the Internet. This led to an emphasis on thinking about what constitutes “good policy”, including political accountability, and asking tough questions.

In what way is the Internet emancipatory or controlling, and will it allow us to empower people—or silence them?

The diversity of topics deemed crucial while technology is inherently global, policy is inherently national.
to the Internet’s continued evolution – particularly in the Asian region – made for an animated, lively discussion. In a global context of openness, access, and trans-border transactions, would local jurisdictions and regulatory control in some economies lead to a further fragmentation of the Internet over the decade ahead? While Asia has not been in the forefront of policy considerations and Internet governance thus far, what directions should it take going forward?

The compromise between those optimistic and skeptical in finding common ground was to encourage Asia to not to look to other regions for solutions. In many ways Asia is ahead and embodies the future dynamic of the Internet and should not replicate models designed elsewhere for different issues and contingencies. Rather, as an established global leader on emerging and disruptive technologies (for instance, wearables and mobile connectivity), it can demonstrate leadership in devising policies that address these technologies and help set global standards.

**KEY TAKEAWAYS**

What is uniquely “Asian” in the evolution of the Internet, and how might Asian “best practices” influence global discourse in the coming decade?

What steps would enable Asia to nurture innovative technologies – including increased programming capabilities – through the ideation—research—development—production cycle, reflecting a greater global role?

Being mindful that openness and competition are not universal values, and that sovereign actors or vested interests may pursue tighter regulatory goals – how can we promote the inherent principles that have contributed to the Internet’s success thus far?

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**AN AMERICAN VISION FOR THE INTERNET IN 2025**

In recognition of the dramatic changes under way in the global economy, and the exponential increase in the role and proportion of economic activity conducted via the Internet, remarks were shared reflecting both the U.S. Government’s vision and its policy directions vis-à-vis the Internet for the decade ahead.

The vision: An Internet that is open, accessible to everyone, globally inter-operable, and supportive of free trade and free expression.

**POLICY AREAS ADDRESSED INCLUDED:**

1. **Support for a multi-stakeholder model of Internet Governance**, with a transition from the current U.S. stewardship role to the international community in a multi-stakeholder model.

2. **Trade policies conducive of the free flow of data** and Internet-enabled trade, through international trade agreements, and the promotion of an open, global Internet. This in contrast to sovereign state actors that would prefer to interfere with open markets and an open

3. **A commitment to shared prosperity and regional economic integration** through proactive efforts to overcome the “digital divide” internationally and within societies, while promoting global consumer and privacy protection, trans-border flow of information, and economic development.
RESEARCH PERSPECTIVES:
WHAT WILL THE INTERNET
BECOME IN 2025?

The Internet was born in a laboratory and retains an “experimental” character, with its governance in many ways still rooted in the simple, university-based managerial format of its original design.

This is changing rapidly — and perhaps permanently — as governments assert their cyber sovereignty and civil society offers an alternative vision of transnational, multi-stakeholder governance. How does the research community assess the current state of the Internet and how might pressing opportunities and challenges be addressed (or transformed) over the next decade?

As a point of departure, it was observed that 80 percent of Internet users in 2025 will live in Africa and Asia. The center of the Internet economy will be Asia and inevitably the governance of the Internet will follow this trend. Is Asia ready — and how will it exercise this role? Research indicates that we already know most of what is required to manage the Internet and it is based in our experience with international trade and other sectors of our economy. For example, we already have privacy principles inside of trade packages and the WTO settlement mechanism is available and experienced in adjudicating disputes over such principles.

Privacy has of course been transformed in many respects by the arrival of the Internet. However, 123 countries now have privacy laws related to the Internet. Privacy is a key part of our discourse on human rights and on corporate governance. What kind of privacy framework is suitable for Asia as a whole remains to be seen, and given the diversity in the region one size clearly does not fit all. Yet we can approach this problem from the perspective of international benchmarking, the state of technology and local culture.

With this understanding, the impact of some one trillion devices (according to conservative estimates) tracking us by 2025 has yet to be fully realized. Who has ownership of this data? Can we apply existing models, such as limits of liability and intellectual property to the use of data? The linkage to cybersecurity also requires fuller exploration. Can we precisely measure what is being tracked and analyze vulnerabilities? Researchers have recently exploited numerous privacy issues associated with “smart vehicles” whose increasing connectivity to concierge and emergency services generate in-depth data profiles on drivers whether intentional or not. How do we balance utility with privacy?

Academics in the region clearly have a role in offering guidance based on research through this thicket. Key research questions range from what kind of check and balances need to be built into ICANN and what kind of accountability and transparency is required to achieve it. What happens to local “competition” when Internet service companies operate on a truly global scale? Is a fragmented Internet an existential threat to the integrity of the Internet or problem that can be managed — after all we have experience with managing a fragmented electrical grid through mechanisms, such as built-in redundancies, emergency power sharing agreements, and labor-sharing contracts.

This session was conceived as a discussion of what the current state of research might tell us about what the Internet might look like in 2025.

The honest conclusion is that we simply do not know. The pace of innovation can make huge companies irrelevant overnight. The rapid transformation of the smartphone has surprised us again and again—is it a mobile phone, a camera, an interactive map, a device for consuming content (newspapers, movies and music), or all of the above? We will have to live with considerable uncertainty and learn to build flexibility into our research models and into the ways that we think about the Internet.

As an example, the Internet was born in a laboratory and retains an “experimental” character, with its governance in many ways still rooted in the simple, university-based managerial format of its original design. This is changing rapidly — and perhaps permanently — as governments assert their cyber sovereignty and civil society offers an alternative vision of transnational, multi-stakeholder governance. How does the research community assess the current state of the Internet and how might pressing opportunities and challenges be addressed (or transformed) over the next decade?

KEY TAKEAWAYS

Research indicates that we already know a lot about how to manage the Internet, based on our experience with international trade.

Privacy is also a well-researched area. 123 countries now have privacy laws on the books. However with nearly a trillion devices tracking us in 2025, more research and thought is clearly needed.

Key issues for the academic research agenda include practical recommendations for ICANN reform, an explication of how “competition” is changing in the context of the global Internet, and a balanced assessment of the risks and opportunities associated with the ongoing fragmentation of the global Internet.

The key learning is that much of what the Internet might look like in 2025 is currently unknowable — the pace of innovation is simply too fast and unpredictable.
The Internet and Asia Regional Integration: How Will the Next Decade Unfold?

2015 is an important year for efforts aimed at greater economic integration in the Asia region, with both the Regional Comprehensive Economic Partnership (RCEP) process and the Trans-Pacific Partnership (TPP) facing important expectations if not exact deadlines.

Session Three took up the question of where the Internet fits into the current process of regional integration in Asia. Will enabling the unrestricting flow of data in the region play the same catalytic role that coal, steel and nuclear power did in laying the economic basis for the European Union? Moreover, can “virtual” integration through the Internet offer a way forward for Asian integration despite the palpable political tensions and large economic disparities in the region?

An initial round of table by the discussants revealed considerable skepticism regarding the role of the Internet in promoting regional integration. The problem in the view of many comes down to “capacity.” Infrastructure for the Internet must exist before the economic and political benefits of connectivity can be realized – and that requires money. The Philippines and Indonesia are good examples where infrastructure bottlenecks are keeping both countries from realizing the full benefits of the Internet.

A related issue is the problem of access. What kind of content should be permitted given the multiplicity of cultures and religions – and who sets these norms? In a recent instance, Indonesia contacted the US government asking them to block a site offensive to Muslims. The US government refused, but the Indonesian government later prevailed directly upon Google to take the site down. There are 700 languages in Indonesia and the languages used on the Internet are becoming increasingly diverse. This improves access, but it also segments the Internet reinforcing the digital divide occasioned by educational and economic differences.

National policies can also be a roadblock to further integration through the Internet. For example, despite the EU’s efforts to promote a common European agenda on the Internet, there is a countervailing trend among European governments to require that companies offering Internet services within their borders to operate a local data center. This threatens the value proposition behind cloud computing, which depends critically on scale and the free flow of data across borders. A parallel concern is an effort by the US government to require US companies to surrender data on customers held at data centers outside US borders on request—ignoring traditional mechanisms for law enforcement cooperation among countries, such as Mutual Legal Assistance treaties (MLAT). If such a request is recognized by the US courts, it could undermine the ability of US Internet companies, which are the driving force behind much of the innovation and growth on the Internet, to offer services across Asia.

This is why there is still a great deal of attention being paid to discussions within TPP and Asia Pacific Economic Cooperation (APEC) with regard to new rules and principles for supporting cross-border data flows in the region, particularly with the advent of the Internet of Things. One less obvious challenge is the need for more education. There is still a tendency even for businesses to accept unnecessary government restrictions on data and an inadequate understanding of how everyone suffers when regulatory obstacles are placed in the way of data flows. Yet, while limits on cross border data transactions can be found in democracies (e.g. restrictions on credit card companies storing information abroad), such issues are generally linked most closely to authoritarian regimes, which have tended to treat cyberspace as part of their territorial jurisdiction. The recent events in Hong Kong have shown that the liberalizing influence of the Internet is no match for state power. The free flow of data does not necessarily mean the free flow of ideas and for many countries in the region Internet security equals national security.

In the context of the role of “pathfinders” especially within APEC needs to be encouraged. “Pathfinders” are governments that take steps unilaterally or in conjunction with like-minded partners on issues that have yet to gain broad consensus in the region. Countries like Japan, Korea and Singapore, which are advanced economies and whose companies depend critically on their growth on the Internet, should show the example and take the lead on contentious issues related to privacy, security and standards. The fact is that Asia with just a 4.5 hour difference between New Delhi and Tokyo is one Internet “time zone.”

KEY TAKEAWAYS

Asia may be the new center for the Internet, but infrastructure capacity and access remain an obstacle to addressing a vast digital divide throughout the region.

Nation states will remain the predominant face of Asia and will seek to manage the Internet in line with their national economic and security interests.

Regional institutions, such as TPP and APEC can help support closer alignment (if not harmonization) of policies related to the Internet, but ultimately it will be business and users that will demand and drive greater integration within the Asian Internet time zone.

EU policy on the Internet is not necessarily a model for Asia, but more research can help illuminate areas where European practices are both worth emulating and avoiding.
The "multistakeholder" process is neither deeply rooted nor widely understood in Asia. Civil society is still weak and fragmented and the UN-based Internet Governance Forum (IGF) process is far less robust than in North America and Europe. The Asia Pacific region was significantly under represented at NETmundial from the perspective of its rapidly growing Internet subscriber base. Is the "multistakeholder" process truly congruent with Asian values and culture and how might it be more deeply "embedded" over the next decade in national and regional Internet governance institutions in the region?

The concept of a formal role for multiple stakeholders concerned with the future of the Internet in managing and growing this new technology is both a progenitor and a driving force behind Internet governance discussions within the United Nations over the past decade. The nature of this multistakeholder process has received increasing scrutiny as result of the April 2014 NETmundial conference in Brazil and the concurrent announcement by the US government that it will be transferring its oversight of the Internet domain name system functions by September 2015. This year is also the occasion for a review by the UN General Assembly of the World Summit on Information Society (WSIS) process.

There was general agreement among participants of the “dialogue” that the work of preparing for the transfer of these largely technical functions is well in hand, although the “deadline” of September 2015 was regarded as "aspirational" rather than fixed. There was also recognition that these discussions have been complicated by national assertions of cyber-sovereignty and the global debate on how the multistakeholder principle might be operationalized in other aspects of Internet governance, including on privacy, cybersecurity, the monitoring of conduct online, and standards. At the core of this discussion is the whether the global character of the Internet requires a different set of institutional arrangements.

Does the global character of the Internet require a different set of institutional arrangements?

The issue is complicated by concern that the multistakeholder process is not adequately realized in national government decision-making settings and has yet to resolve serious questions of accountability and transparency, i.e. who does the multistakeholder community represent and how are they selected. Recent research led by Harvard’s Berkman Center for the Internet & Society has begun to look at this stage of development in the process, both at the level of principles and through illuminating case studies in areas outside the Internet. More remains to be done, especially in the Asia Pacific region.

In this context, there was discussion as to how the APRU academic community might also serve as both a catalyst and center for further developing and supporting the multistakeholder process in Asia. The conference brought together – probably for the first time in Asia – leading experts on the Internet from the global business community with academics representing Internet research centers from APRU member universities. The success of this new engagement will depend on the extent to which it can be linked to other elements of the multistakeholder community in the region.

Other programs under the APRU Internet Governance Initiative include an August 2015 Internet Policy Summer Seminar that will bring regulators from around the region to Tokyo for a one-week intensive course on the Internet economy and government. In November 2015, there are also plans to hold a “dialogue” between the academic community and elements of civil society active on the Internet in the Asia Pacific. The challenge for the APRU academic community is to serve as a source of expertise and as an honest broker in defining and supporting the multistakeholder involvement in Internet governance.

**KEY TAKEAWAYS**

Progress is being made on the transfer of technical function related to the Internet domain name system to the global Internet multistakeholder community – although September is not a fixed deadline.

The transfer process has been complicated by unilateral assertions of national cyber-sovereignty and the challenge of trying to assure greater accountability and transparency from the multistakeholder process.

Harvard’s Berkman Center for the Internet & Society has created an excellent benchmark study on the multistakeholder concept, but more research is needed as to how the process has worked in other settings, particularly Asia.

A key focus of the APRU Internet Governance Initiative is to develop programs that promote greater engagement of the academic community with other elements of the multistakeholder community in the region so that it may serve as a source of expertise and as an honest broker offering unbiased and data-based views.
Looking Back from 2025

Internet in Asia:
The Future of the Global

The Internet may be “global”, but users are “local.”

Even ubiquitous connectivity is limited by the immutable reality of differing time zones, i.e. Asia wakes up when North America falls asleep. The question for discussion is whether a distinctly “Asian” model for the Internet might emerge over the next decade, to what extent it will converge or diverge from trends elsewhere in the world, and how state and non-state actors in the region will interact to define and shape that future.

Looking at the Internet from a global perspective, it is the interconnectivity that appears to be its defining characteristic. However, its reality today is that national economies and politics dominate and we need to design for the Internet with that reality in mind. One step might be to have countries begin to accept certain common rules for data localization. There is no necessarily an “Asian” model for the Internet — yet there is both a lack of dialogue and the absence of a common set of values. Increased “fragmentation” of the Internet is not a risk but a reality — and one that is unique to Asia. The essence of the Internet in Asia is its “diversity,” as more countries, more languages, and more cultures come online.

Simultaneously there is a powerful trend toward convergence especially in the service and manufacturing economies. There is a need to guard against is the emergence of “walled gardens” that inhibit the movement of data across borders. That is why privacy is fundamentally a trade issue. While the US and EU have their “safe harbor” arrangements, an agreed framework has yet to emerge in Asia. In part, this is because there are varying conceptions of privacy in the region. The laws and regulations may look similar in principle, but operationally they are quite different.

For this reason, it is at the level of government policy on privacy and others related to the Internet, where there is the most proximate danger to the future of the Internet from fragmentation. The fundamental architecture of the Internet will not change dramatically soon. However, the assertion by national governments in Asia regarding access, surveillance and data localization are real issues that can derail innovation and growth on the Internet.

This is where the academic community can make a contribution. There is a fair amount of literature on fragmentation and interoperability and how it impacts on different levels of the Internet, e.g. infrastructure, network, application and the user level. The academic community must become more intelligent about how and where to intervene, to map out the issues, and to provide policymakers, business and ordinary users with the data they need to make decisions — so we can avoid what can be avoided. We also should recognize that, while fragmentation hurts innovation by undercutting scale, ubiquitous connectivity could leave both nations and individuals vulnerable to threats ranging from cyberwar to cybercrime and further accentuate the digital divide.

In thinking about the future of the Internet in Asia and the problem of fragmentation, Chinese government policies with respect to the Internet also need to be part of the discussion. There are concerns that Chinese authorities are tightening control over the Internet through introduction of new terrorism laws, new controls on transfers of banking data and toughened cybersecurity standards that require in certain instances access to source code. Politically, strong arguments can be made against these laws, but changing these policies will require a solid economic case for how future innovation and growth depend fundamentally on greater openness.

China is not immune to the transformative aspects of the Internet. The growth of the “app” economy is phenomenal and there is an increasing integration of the Internet and the manufacturing economy thought it will be slow and organic. For this reason, it is important that we be vigilant against the diffusion of current Chinese practices with regard to the Internet to other countries in Asia in the name of “culture” or “national security.” Academics have a key role in keeping the channels of communication open with China.

We need to discuss issues from a common analytic perspective and present well-evidenced arguments from an economic not just political point of view.

More—not less—exchange is the starting point for real discussion.

KEY TAKEAWAYS

There is not necessarily an “Asian” model for the Internet, i.e. a common set of values and institutions unique to the region. Diversity is what distinguishes Asia most.

The greatest risk in Asia is the emergence of “walled gardens” to mitigate risk. Rules may look similar but are operationally quite different.

There is a need for more granular research on the trade-offs between fragmentation and interoperability, mapping out issues and providing policymakers and users with more actionable data.

China’s Internet policies may be moving in a problematic direction; this requires more—not less—engagement; the academic community in particular has a role in this through joint research, faculty exchange and evidence-based discussion.
The APRU Internet Business Offsite was designed to be the start of a conversation and a process—an offsite that would bring together leaders from the business and academic communities in the region for an informal but broad-ranging discussion about the future of the Internet in the region. We very much appreciate your active participation. The challenge now is how we maintain the momentum and follow up on the many ideas and thoughts shared around the room over the two days we were together.

We will be forwarding to you a brief survey along with this conference report. We would appreciate your taking the time to tell us what worked and what didn’t—and what you would like to see at a future event of this sort. Our ambition is to make this an annual event, inviting the same group of business leaders and academic experts with the goal of nurturing the “habits of cooperation” that can help bridge the many divisions and tensions and take full advantage of the many factors promoting greater convergence and integration in Asia Internet “time zone.”

Along with other programs under the umbrella of the APRU Internet Governance Initiative, we hope over time to bring the full weight of the 45 universities that are affiliated with the APRU behind an agenda for the Internet that can draw on the traditional strengths of universities in the region, most importantly an objective and careful use of data and experience in facilitating dialogue, prioritizing issues and thinking long term.

Jim Foster
Executive Director