

THE REPORT OF THE HABIBIE CENTER
“DEMOCRACY 2.0” CONFERENCE
DECEMBER 6, 2007
AND
IGADD ACTION PLAN 2008

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1. INTRODUCTION

The Habibie Center annual conference served as a brainstorming event for IGADD. What is IGADD, actually? IGADD is an interdisciplinary group of institutions, operating from a small secretariat based at The Habibie Center in Jakarta, Indonesia. Though it focuses on Indonesia specifically, its formulations draw best practices from ten years of efforts in closing digital divide around the world. Though IGADD works with all of Indonesia's ICT stakeholders, it is focused ultimately soliciting funding from investors. Chaired by Dr. Ilham Habibie, eldest son of President BJ Habibie, its core organizational infrastructure is noncommercial, having emerged from a daylong seminar organized by the Harvard Club of Indonesia in 2004. Apart from The Habibie Center, ITB and DigitalDivide.org, alliance members will soon broaden to governmental partners, such as Republic of Indonesia's Department of Communications and Informatics. The secretariat for IGADD is The Habibie Center's new Institute for the Democratization and Socialization of Technology (IDST).

A key figure in the development of IGADD is Prof. Craig Warren Smith, who, in 1998 as an advisor to Bill Gates in Seattle, became a founder of the worldwide movement to close the Digital Divide. While a visiting professor of Harvard based in Singapore, Prof Smith, was invited by the Indonesian Foreign Minister to Jakarta to help the government a conference in which Indonesian strategies to close Digital Divide were first introduced. Several years later, his activity led to IGADD which was formally established as a program of The Habibie Center in 2007. Based part-time in Jakarta, Professor Smith and his team will be driving forward the strategies of IGADD in 2008.

2. THE KEY IDEAS

KEYNOTE AS CALL TO ACTION

In his opening keynote, Dr. Habibie explained that a fundamental shift in the nature of democratization was emerging from the Digital Revolution. Unlike the circumstances faced by the founders of the US Constitution (Democracy 1.0), he argued that nowadays democracy is being returned to its roots in Athenian philosophy (Democracy 0.0), producing a fundamentally new paradigm in democratic process.

As explained in the keynote, at the heart of this notion is Web 2.0, which refers to web sites that have the capacity to induce citizens to become engaged in shaping their own experiences, build their own distinct identities and allow them to form their own communities, which may or may not be linked to specific geographical locations. Interactions are not merely text-based but can use virtual reality. For example, Second Life creates powerful and so-called “immersive” experiences, that absorb the attention of tens of millions of users. Google, Wikipedia, and Facebook have established Web 2.0 communities with hundreds of millions of users in a short time.

Dr. Habibie ended his speech with an exhortation to Indonesians to bring Web 2.0 into Indonesia in ways that will strengthen formal democracy as well as to bring participatory learning into communities, schools, health care institutions and other institutions. But to turn Indonesia into a technology-induced participatory society, Indonesian stakeholders must first address an important challenge: to introduce reliable, affordable and pervasive broadband technology, accessible to those at all tiers and geographic locations in Indonesia. Thus, the conference became a “call to action”.

PREPARATIONS FOR BRAINSTORMING

Following the speech, The Habibie Center’s Vice President for Research, Dr. Dewi Fortuna, prepared participants for the brainstorming process. She introduced facilitators of each of the discussion tables, and, with Professor Smith’s explanation of the group process, exhorted participants to consider a recommendations and action steps for achieving 20% penetration of “meaningful broadband” by the year 2012. Beyond this, participants were asked how Indonesian insights on this theme could be tapped prior to, during and following the diffusion of high speed internet throughout Indonesia.

3. RECOMMENDATIONS AND NEXT STEPS: TOPICS

In breakout sessions, the conferees offered recommendations regarding two sets of topics: one concerning technology infrastructure and the other concerning Democracy 2.0 itself. Following the conference discussions continued informally, resulting in the following recommendations and next steps.

Topic #1: TECHNOLOGICAL INNOVATION: *What is the optimal “broadband ecosystem” for Indonesia, enabling that 50 million Indonesians to gain the meaningful use of high-speed internet by the year 2012?*

Description of the Problem: Ample data confirms that Indonesia has among lowest quality internet infrastructures, the most expensive internet related costs the lowest broadband penetration rates of any major Asian population, amounting to less than 1% penetration¹. At the same time, new data suggests that any organized effort to reduce poverty, fight global warming, create jobs, educate the populace, preserve cultural traditions increasingly depends upon a country’s access to broadband technology.² How could this problem be turned around? Discussants considered the most effective technological means to turning cell phones into access points for high speed internet, e.g. via GSM and CDMA, as well as consider the specific role of Wimax, in scaling up broadband. They asked each other: Can technology infrastructures be built in rural villages from the bottom-up, as well as spread top down from the cities? How can demand be aggregated so that the “price points” for all these technologies drop to within an affordable range? How can infrastructures be created with an eye toward the ultimate uses of broadband suited to the needs of Indonesians?

Recommendations Regarding Topic #1: Discussants decided that IGADD must begin with an accurate base line to determine current distribution of broadband in Indonesia. Furthermore, we need an assessment of current plans for increasing broadband penetration by private and public sectors so that we can anticipate what level will be reached by 2012, even in the absence of any outside intervention such as IGADD could make possible.

Discussants concluded that it is now technologically feasible to reach 50 million *internet* users in Indonesia, but only through slow, unreliable and expensive dial-up services. To reach a broadband-level speed of 128 kbps, 24 hours a day, full IP, with low cost, under 10 dollar per month significant technological innovations must be achieved. Besides

¹ See World Information Society Report, 2006, International Telecommunications Union, p.104.

² See International Telecommunications Union, *World Information Technology Report, 2007*, chapter 17.

basic telephone and cellular infrastructure, achieving this goal also require a satellite-based infrastructure with full IP access such as Wimax, Wifi, Cma, etc. These approaches could connect with cheap terminals, that (under conditions of vast deployment) could be low-cost, under 100 dollar and these could require little power. This satellite based system should be able to pass the important content such as education and other social requirement of people's participation on democracy. One idea was to use set-top boxes as a central feature of this infrastructure.

Next Steps:

- **KOMINFO EVENT:** The Department of Communications and Informatics of Republic of Indonesia hosted a seminar February 14, 2008 attended by the IGADD team to develop a more precise consideration of "20 by 12", divided by various tiers of society, e-government, e-learning, e-commerce, and both individual and group uses of connectivity. This seminar will then provide a benchmark and metrics to gauge the success of IGADD in achieving 20 by 12.
- **INVESTIGATION:** An investigative team created by The Habibie Center's Institute for the Democratization and Socialization of Technology, will consider technological issues needed to achieve 20 by 12.

Topic #2: FINANCIAL INNOVATION: *How can innovative financial analysis contributes to the goal of achieving "20 by 12"?*

Description of the Problem: Clearly, the solution to Indonesia's broadband problem doesn't merely require insightful choices of technological platforms, software and devices. Nor does it merely require innovative public policies. It also requires financial know-how. Two critical financial questions preoccupied participants who participated in the brainstorming session regarding this topic:

- One question concerns the economic model for achieving 20 by 12, that is, how to anticipate the costs as well as anticipate returns on investment for achieving the 20 by 12 goal. An important related financial question regards pricing. An important example regards India, where the cost of mobile telephone and internet connection has dropped dramatically since 1999. Can Indonesia follow the pattern of India in stimulating a reduction in ICT-related pricing so that private sector providers compete for the attention of very low income consumers?
- The second financial question concerned a very different economic matter: that is, how financial services could to be extended to low-income (mostly rural)

Indonesians in order to increase their jobs and wealth and contribute to the reduction of poverty. Hernando de Soto, a Peruvian economist, demonstrated the importance of low-income peasants gaining legal access to their own land in order to become credit-worthy and lessen their dependency on usurious credit services. Furthermore, the worldwide growth of the microcredit movement has emphasized the important role of entrepreneurship in the reduction of poverty worldwide.

Recommendations Regarding Topic #2: Regarding the first question (financial modeling) the recommendation was to work with experts. Four groups of experts were identified as possible financial advisors for IGADD:

- IGADD should consult top financial analysts in domestic and international retail banks operating in Indonesia to seek their advice. Since all retail and investment banks would benefit by market-opening enabled by widespread broadband, these competing banks may be willing to form a financial advisory group for IGADD.
- IGADD should also draw upon research advisory firms such as Forrester Research, Gartner Research, IDC, and other commercial services with analysts who are skilled in anticipating the near-term future of ICT penetration in Asia.
- IGADD should reach out to experts in the financial services sector in other countries, such as India's ICICI, who are able to interpret the relevance of their national experience to that of India, thereby enhancing Indonesia's ability to predict its broadband future.
- IGADD should reach out to international investment banks such as Goldman Sachs, Morgan Stanley, and Merrill Lynch. Their analysts could inform IGADD regarding the specific criteria imposed by foreign investors who may be inclined to investment in Indonesia's broadband future.

Other recommendations related to way in which broadband could expand the quality, distribution and beneficial impact of financial services in Indonesia. In the 1990s, Hernando de Soto, a Peruvian economist, demonstrated the importance of low-income peasants gaining legal access to their own land in order to become credit-worthy and lessen their dependency on usurious credit services.

One respondent emphasized the need for a public information campaign to "educate, socialize, facilitate, and train" the Indonesian populous about the urgency of ICT in the reduction of poverty". Another emphasized the importance of developing a financial plan for telecenters (including Warnets) to serve as an infrastructure for e-commerce and ability of poor farmers to gain better prices for their products. Another idea was for a

single ID card system as integrated information to simplify financial transactions. One argued for the need to optimize General Election Commission (KPU) network which has been spread over the country for used for financial flows.

Regarding the matter of broadband-enabled financial services, many discussants focused on the opportunities for increasing the effectiveness and scale of microcredit services in Indonesia, including those already provided by BRI and other Indonesian institutions.

One specific suggestion was for IGADD to form a partnership with the Center of Society Information for Local Best Product's Development (SIMPUL system, which was developed by ICMI (Association of Intellectual Indonesian Moslems). In this way, broadband could be directly integrated into efforts to achieve better prices for farmers and other rural residents who are close to the actual production of crops.

Another specific suggestion was to use the "scenario planning methodology" famously perfected by the Shell Oil Company to consider the financial flows over the next four years that could result in the achievement of the goal of 20 by 12.

Next Steps:

- IGADD should develop a financial advisory group composed of key retail and investment banks to support economic modeling by 20 by 12.
- IGADD should work with stakeholders and explore international best practices in scaling microcredit through broadband and also to link small business lending with microcredit in Indonesia.

Topic #3: PUBLIC POLICY INNOVATION: *Though the private sector seems to have the expertise needed to achieve affordable and pervasive broadband, the public sector must create internet-savvy policies that are able to induce the private sector to act on the 20 by 12 goal.*

Description of the Problem: Are new public policies needed to generate the investments, financial and technological innovations needed for 20 by 12? Does the Republic of Indonesia need help implementing or refining its own policies? What public policies of intergovernmental agencies are relevant to achieving 20 by 12? How can governments at the sub-national level act to accelerate the embrace of broadband?

Recommendations Regarding Topic #3: Some discussants insisted that, at the end of the day, the key public policy change needed was increased budgetary support for infrastructure investments needed for broadband – not just ICT infrastructure but also for electricity and other infrastructures needed to exploit the potential for broadband.

Some felt that key public policies were at the sub-national level, since only 5% of cities, towns and villages in Indonesia have access to the Internet.

Some focused on public policies concerned with competitiveness. They insisted that the incumbent government-linked mobile phone providers still had an unfair competitive advantage when contrasted to new comers. New public policies were needed, they insisted, to create a level playing field and to prevent price fixing.

Some focused on cyber crime. One participant said, “Parliament, supported by the Government, must adopt the Act that can penalize cyber crime’s actors, because until present, we don’t have sufficient regulation to combat the cyber crimes, especially the pornography that can destroy the morality of the nation.

Some discussants focused on the need for reform and refinement of the governments policies regarding “universal services”, in which 75 % of revenues from telecommunications are to be spent supporting rural infrastructure. One suggestion was to encourage USO-funded support of local projects that fostered entrepreneurship, fostered broadband, and triggered other investments at the local level. Thus, “USO policies should be linked to community development at the local level and result in measurable increases in jobs and investments”, said one participant.

Another concern was that public policies for infrastructure should keep in mind the uses to be achieved from infrastructure, such as education reform and e-health and that there should be improved coordination between broadband infrastructure policies and those promoting applications and content. To this end, one participant argued that there “must be a continuous coordination between Ministry of Communication and Information, Ministry of Internal Affairs”.

Others argued for the need to coordinate Indonesia policies fostering corporate social responsibility (CSR) with its policies regarding universal services.

Topic #4: Broadband-Enabled Education: *How can Indonesia implement more interactive, participative and effective public education approach under the scenario of 50 million people connected to high-speed Internet by 2012?*

Description of the Problem: How can this be done in ways that improve curriculum and teacher's quality as well as stimulate a more effective interaction between higher education and k-12 education?

Recommendations Regarding Topic #4: Some participants, such as Prof. Arief Rachman insisted that new government policies must be developed to promote participatory learning in ways that would take advantage of new broadband technology. The current situation of rigid curricula, characterized by "drill and kill," must be replaced by an interactive approach to education in which students, teachers and parents all participate as partners.

Another recommendation, made by Professor Hafid Abbas, concerned the need for educators to teach citizenship and generate local content in local languages. Some emphasized the importance of distanced education to improve teacher training. Prof Riza Wahono emphasized the important role that could be played by computer games in schools if broadband were widely available. Mr. Engkos Koswara emphasized the need to bring business and technology experts into the RI Department of Education's new "Teach of Information Technology", which already is conducting seven programs. These national programs must be synchronized with local governments. Some participants emphasized the need for new technology to become a way of improving the testing of students. Mr. Leo Aldianto emphasized that telecenters should be integrated into schools so that these facilities can also function as a way to promote local entrepreneurship.

Next Steps:

- As a partner of IGADD, the rector of the Institute of Technology Bandung will convene rectors of other major Indonesian universities to consider the implications of 20 by 12 for Indonesian education at upper and lower levels. The event, to be held March 18 in Bandung, will include a discussion about the higher education and k-12 role in broadband infrastructure, as well as innovations in research, curriculum, training and fields such as management education – all as they pertain to broadband technologies anticipated in the year 2012.

Topic #5: Media: *As it turns out Indonesia's media is a primary stakeholder regarding the matter of broadband technology. In regards to IGADD's strategy towards media, two issues stand out.*

Description of the Problem: It has these two aspects:

- The Media's corporate policies towards Web 2.0: The current mix of print and broadband media familiar to all Indonesians will be utterly transformed as broadband media becomes pervasive in Indonesia. As we have seen in advanced countries, blogs and social networking web sites are rapidly replacing traditional media and new hybrid forms of old/new media are emerging as established news media corporations (such as News Corp) purchase new-media properties (such as MySpace). In some cases, as these hybrids emerge, new forms of citizen participation are emerging which combined the separate strengths of old and new media.
- Media as a source of public information and "socialization" regarding the urgent need to achieve the goal of 20 by 12. Since the topic of broadband technology may not seem of importance to the broad populace of citizens, it is up to the most insightful reporters and editors to "make the case" for the urgency of broadband by explaining the opportunities that could come to Indonesia as a result of 20 by 12, as well as pointing out the problems that could emerge as Indonesia moves into the future without the aid of pervasive high-speed internet.

Recommendations Regarding Topic #5: Participants recommended that IGADD foster meetings within the major news corporations in Indonesia to explain IGADD's own strategies for achieving 20 by 12 and helping the news media "find the story" for how 20 by 12 could be achieved.

Participants recommended that IGADD reach out to Indonesia's own bloggers, as well as Detic.com (an aggregator of Indonesia's new media) to gain their support in involvement in achieving the goals of 10 by 12.

Next Steps:

IGADD will be hosted by media organizations for a discussion with writers and editors regarding the circumstance of broadband in Indonesia and the role of news media in conveying the story of 10 by 12.

Topic #6: Alumni: *What is the role of alumni and alumni clubs of domestic and international universities in advancing the role of 20 by 12 and establishing Democracy 2.0?*

Description of the Problem: The highly educated Indonesian alumni of prestigious Indonesian and foreign universities are an important resource for IGADD and for propogating the 20 by 12 goal. In fact, the concept of IGADD emerged from a meeting of the Harvard Alumni Club of Indonesia in 2004. Participants representing the various Indonesian alumni clubs discussed their role regarding 20 by 12 and made several recommendations.

Recommendations Regarding Topic #6:

- The alumni can participate in enhancing the human resources development and job growth by socializing information through the networks among alumni.
- MBA executive programs can be established specifically to transmit the management skills needed to transform new broadband into market growth. These MBA innovations can be established through cooperation between foreign universities and Indonesian counterparts by using the latest modules with the support of the alumni network by inviting professors to give general lectures either physically or virtually.
- Alumni can provide technology resources from foreign universities by socializing free materials of lectures and in line with the local needs.

Next Steps:

- A plan has been created for the various alumni clubs of prestigious international universities represented in Indonesia –Harvard, MIT, Stanford, University of Chicago, Boston University, et al— to consider their role in advancing the 20 by 12 agenda. We will consider the role of these clubs in networking within Indonesia itself as well as their efforts to engage Indonesian students and professors in international universities.
- The question of how to engage alumni of ITB, University of Indonesia and other key Indonesian universities in 20 by 12 agendas will be on the agenda of the Rectors meeting to discuss IGADD strategies to be held at ITB in Bandung during March, 2008.