

## **RT-RW Net and E-Democracy in Indonesia**

Suyatno

*PhD Student at School of Social Sciences, Universiti Sains Malaysia (USM), Penang, Malaysia.*

*One positive political breakthrough of democratic process in Indonesia is characterized by the development of new instruments of political participation. Internet is a tool utilized by the people to express opinion, to participate in public discourse on certain areas of public policy and to influence the government's policies. The use of the internet has strengthened the democratic political process in some areas of public life. Government agencies at provincial and local level have set up web-sites as an instrument of consultation and communication with ordinary citizens. Hence, the government has no longer the only actor promotes the adoption of internet in political life, but other actors such as NGOs and private institutions have also used the internet to respond the government's policies. While the impacts of the internet on democratic decision making is likely positive, the high expenses of establishing the network have been a concern for those in the lower classes.*

*Keywords: political participation, internet, e-democracy.*

### **The Development of Internet in Indonesia**

This paper answers several problems related to the use of the internet, in particular the RT-RW Net', for the development of democratization process in Indonesia.

Since 1990s, Indonesia has been through both political changes and the spread of Information and Communication Technology (ICT). This

---

RT-RW is an acronym for *Rukun Tetangga-Rukun Wargo*. *Rukun Tetangga* is neighborhood association which consists of several households, whereas *Rukun Wargo* is an administrative unit at the next-to-lowest level entity in a town. It is composed by some *Rukun Tetangga*. In this paper, RT-RN<sup>A</sup> Net refers to a neighborhood association internet network. RT -RW net is a network, which access is limited to a certain neighborhood. The network has been developed by private sector and it has been connected to an Internet Service Provider (ISP).

is a part of a trend in information technology development particularly the Internet. The backbone of this information revolution is the invention the World Wide Web. The Internet web has become an alternative channel of communication which is complementary to the conventional mass media, since the internet has not totally replaced the functions of the existing media in delivering information and news. In Indonesia, the internet has brought new opportunities to the government, business groups, and educational institutions for various objectives. Governments at central, provincial and district level use the Internet for internal communication, distributing information, and delivering public service such as tax processing and payment. Business sector develops virtual transactions called e-Business to offer goods and services online to customers. At individual level, the internet becomes a part of household life particularly in urban areas. The net is used for communicating through electronic mail (e-mail), reading news, browsing information, shopping, paying bills, and banking. Educational institutions use the Internet for research and deliver courses and course material to students (Douglas, 2006).

Some reports indicate a growing trend in the use of the internet by Indonesians. In 1995, for instance, the Internet Service Providers (ISPs) and users were limited in big cities, such as Jakarta, Bandung, Yogyakarta and Surabaya. It is difficult to find accurate information about the number of the internet users in Indonesia. According to APJII (Association of Internet Service Providers in Indonesia), there were around 150,000 account holders in 2001. This figure does not include the approximately 400,000 accounts used other lines (non-APJII member providers) as well as LinkNet lines. If one account is used by five users so the estimates were about 2.7 million Internet users in Indonesia in 2001. This accounted for actually about 3 percent of total population (<http://www.ristek.go.id/>). The number of internet users may be higher. A government's report estimated that there were 8,000,000 users at the end of 2002 ([http://www/inn.bppt.go.id/](http://www.inn.bppt.go.id/)). This trend is confirmed by the current survey by ARM (see Table 2). The organization envisaged about 16,000,000 internet users in Indonesia up to the end of year 2005 (<http://www.apjii.or.id/>). Another report issued by the Internet World Stats demonstrates a higher figure. The report projects about 18 million internet users in Indonesia in June 2006 (<http://internetworldstats.com/>).

Despite the increasing number of the internet users, the proportion of the Indonesian population use the internet is far lower than that of other countries. While only about 8.1 percent Indonesian uses Internet,

the number of the internet users in South Korea is 67.0%, Singapore (67.2%), Malaysia (36.7%), Thailand (12.7%), and Philippines (9.1%) (<http://internet.worldstats.com/>). This is a reason why International Telecommunication Unit (ITU) placed Indonesia in middle rank in ICT access categories. The main barrier to higher levels of digital access in this group is a shortage of infrastructure (ITU, 2003).

Indonesian internet users access the Internet in various points such as Warnet (Waning Internet - Internet Cafes), offices and home. It seems that most Indonesian internet users go online through internet cafes which are easily found in most Indonesian big cities such as Jakarta, Bandung, Yogyakarta, Surabaya and Semarang (<http://www.inn.bppt.go.id/>). The Cafes are popular place to access the internet due to its flexibility and low costs. It is flexible since the users can access the internet when they need it. Moreover the cost for accessing is lower than home connection. There are around 2,500 of Warnet throughout the country. Most are operated by private entrepreneurs. They have helped expand access to the Internet for those cannot afford individual access. According to one survey, over half of Indonesian internet users access the internet from a Warnet (<http://www.itu.int/>). Most of cafes are located in Jakarta area. In other cities such as Yogyakarta and Surabaya, there are more than 100 Warnets (Furuholt:2006).

Each cafe is connected to one provider. An Internet Service Provider (ISP) must apply for a license before operating an internet network. According to an official report, there are more than 150 licenses issued by the Government (Dirjen Postel: Post and Telecommunication) (<http://www.postel.go.id/>). The licenses have been given to 65 private and three state-owned ISP's. The network of most ISPs is concentrated in Jakarta. There is only one provider namely Wasantara net (<http://www.wasantara.net.id/>) that network and coverage goes beyond Jakarta and Java. This is possible because Wasantara net is owned by the Indonesian Postal Corporation. All Wasantara internet cafés are attached to local post offices which are available in remote parts of Indonesia (<http://www.indosic.com>). Inadequate telecommunication infrastructure is the main cause why the Internet service providers are reluctant to develop an internet network outside Jakarta and Java (ITU, 2002:14).

I

## **The Portrait of F.-Democracy**

The potential impact of ICTs in facilitating citizen engagement in the policy process is now widely recognized. There is a growing confidence that the Internet has a potential to strengthen the practice of democracy. Several scholars share this optimistic view about the positive political function of the internet. They argue that the Internet improves democracy, offering both internal and external ways for citizens to participate in the process of political decision making. Internally, the internet provides resources, raising civil awareness of political decision making processes and critical issues. Externally, the internet provides a channel for citizens to make their voices heard. The study on Minnesota E-Democracy, the world's first election oriented web page, illustrates that the internet improves government openness and civil participation by prompting active dissemination of information (Clift, 2005). The internet fosters informed citizen and erodes monopolies of knowledge, ending civil ignorance of moral, political, and economic issues (Carey, 1989:12).

The internet itself actually has a democratizing aspect. The most democratizing aspect of the internet is the ability for people to organize and communicate in groups. It is within the context of electronic free assembly and association that citizens will gain new opportunities for participation and a voice in politics, governance, and society. The convergence of the Internet and democracy raised a new concept that spread worldwide namely the Electronic Democracy (E -Democracy).

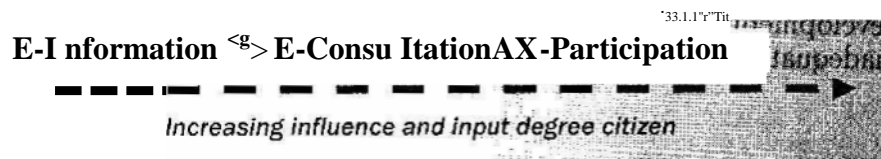
E-democracy is clearly focusing on the use of ICTs in political processes, and the users are seen as citizens. To summarize, the main difference between c-government and e -democracy, one can say that the first is about output of the political process, while the later is about input (Needham, 2001:5-7). Martin Hagen argues that concepts of electronic democracy refer to theories which regard computers and/or computer networks as central tools in the working of a democratic political system. An "Electronic Democracy" is any democratic political system in which computers and computer networks are used to carry out crucial functions of the democratic process - such as information and communication, interest articulation and aggregation, and decision-making (both deliberation and voting) ([http://www.uni-giessen.de/tbo3/vinci/labore/netzjhag\\_en.htm](http://www.uni-giessen.de/tbo3/vinci/labore/netzjhag_en.htm)),

Meanwhile, Steven Clift explains that e-democracy is the use of information and communications technologies and strategies by "democratic sectors" within the political processes of local communities, states/regions, nations and on the global stage. The civil society organizations, international governmental organizations, and citizens/voters. E-democracy is not evolving in a vacuum with these sectors only. Technology enhancements and online trends from all corners of the internet are continuously being adopted and adapted for political and governance purposes. This is one of the more exciting opportunities as e-mail, wireless networking, personalization, web blogs, and other tools move in from other online content, commerce, and technology areas and bring innovation and the opportunity for change with them (Clift, 2005).

In order to run appropriately, an E-Democracy system must contain three elements. First, the existence of *E-Information*, that all information needed by citizen is available in Internet. Second, *E-Consultation* in which E-Information encourages opportunity for citizen to discuss their information and get answers for their problems. Finally, *E-Participation* in which citizens make a decision to involve themselves in an on-line political process after getting adequate information and doing consultation. A whole process illustrates that implementation of E-Democracy is a gradual process starting from first phase (E-Information), second phase (E-Consultation), and third phase (E-Participation). Figure 1 helps us to understand about process implementation of E-Democracy (OECD, 2003).

Figure

### The Continuum of E-Democracy



### E-Democracy in Indonesia

It is too early to say that E-Democracy have functioned properly in Indonesia although information is available in websites. Someone can easily access information disseminated by not only the government but also private sectors such as NGOs, business community and

universities. The government of Indonesia itself builds an information system, called *Government Online*, which applying information technology that is based on the Internet. This system functions not only as a medium information but also as a medium of communication between one Governmental agency and other Governmental agencies (G2G), between Government and Citizen (G2C), and between Government and Business sector (G2B) (<http://www.inn.bppt.go.id>).

The Ministry of Information and Communication reported that there are 281 web-sites owned by the Indonesian government agencies. Most sites have a limited function that is providing information and publication about government policies (59%). Only about 32% of website that gives two ways communication services including retrieval data and information search engine service. The rest are under construction condition. The report indicates that the implementation of E-Democracy has not done much progress. It remains at a low degree in continuum of E-Democracy that is E-Information (<http://www.inn.bppt.go.id>).

There are many factors that impede the development of E-Democracy in Indonesia: (1) the concentration of the internet users are in urban areas; (2) a lack of communication infrastructure such as the absence of telecommunication network in rural areas; (3) the high cost of internet access; (4) a lack of hi-tech knowledge and language barrier. The development of broad internet network is the solution to overcome the problem of low internet access. This is crucial for population living outside Java where the internet is a relatively new technology. The establishment of the network will reduce the cost of access which in turn encourages more citizens to participate in E-Democracy. The development of the so-called RT-RW Net is a breakthrough for inadequate internet infrastructure.

- 4

RT-RW Net: An Excellent Idea

The idea to develop RT-RW Net was initiated by Michael Sunggiardi. He is one of man who promotes the use of the internet in Indonesia since 1980s with his company called BoNet in Bogor, West Java, Indonesia. Sunggiardi and Onrio W. Turbo are well-known for campaigning ICT in Indonesia. In 1999, Sunggiardi built an internet network in a community unit, i.e. in Perumahan Baranansiang Indah,

Bogor, West Java. He decided to develop a community internet network when he realized that there were many factors hampered the growth and the spread of the Internet in Indonesia. These barriers are caused by several factors, included: (a) the minimum of telecommunication infrastructure in Indonesia, especially in small towns (b) the low capability of the citizens to learn and to adopt ICTs; (c) the majority of population has low income that hampers them to afford the cost of the ICTs. RT-RW Net, hence, has been designed to answer these problems (Sunggiardi, 2003:1).

The vision and the mission of setting up RT-RW Net are for the interests of the citizens since the Net is one of the solutions for discouraging pictures mentioned. The mission of RT-RW Net is building the internet infrastructure for the communities (because government has not come yet to the idea), developing software applying for day to day activities and expanding the internet infrastructure. Vision of RT-RW Net is providing an affordable Internet access to all Indonesians (<http://www.apjii.or>).

RT-RW Net helps the members of the community in a certain residential area to access a low cost internet service. In many cases, the leader of RT-RW connects to an Internet Service Provider (ISP) then sharing the internet facilities with the neighbors. The cost is shared among household that use the service. The sharing system reduces the high cost of the internet service. For example, Michael Sunggiardi who built RT-RW Net using leased channel of the Government owned company, Telkom, only pays about Rp. 4 million (US\$ 390) per month. He shares the cost with other to households, each household pay only Rp. 400.000 (US\$ 39) per month. If the cost is shared with 20 households, each household will pay about Rp. 200.000 per month for unlimited internet access from home.

Except leased channel of Telkom, RT-RW Net also can be connected by using Dial-Up via Telkom, Asymmetric Digital Subscriber Line (ADSL) via Multimedia PT Telkom, Fibre Optic, Wireless LAN (WiFi LAN), Free Space Optics and Satellite. In order to promote a better access, in January 2005, the Indonesian government enacted a law that permit companies and individual to develop WiFi (in the 2.4GHz band) infrastructure without applying legal license. The introduction of the new regulatory measures is expected to bring about a surge in WiFi installations. Indeed, Indonesians are looking forward to more than 1,000 new WiFi outdoor installations (Purbo, 2005). This trend likely brings positive impacts on the expansion of RT-RW Net into remote communities where geographic distance and inadequate network have

prevented low income segment of population from accessing the virtual world.

The benefits of RT-RW Net have encouraged other communities to adopt this new way of accessing internet. It is reported that some neighborhood communities in Jakarta are developing. The basic idea remains how to provide internet access with low cost for community members living in an area of one kilometer square. The commercial values of the RT-RW net has attracted private sectors to develop this kind of service. For example, a company named Mitra Komputer (<http://www.mitrakomputer.com/>) has established an RT-RW Net that covers some neighborhood in Jakarta such as Rawamangun, Pulo Mas, Cipinang and Kayu Putih. The cost of unlimited Internet access from home is Rp. 250.000 or equivalent to US\$25 a month.

### **RT-RW Net and the Development of E-Democracy**

The development of RT-RW Net will strengthen the practice of E-Democracy in Indonesia. An important contribution of this community internet network is providing medium for ordinary citizen to involve in an on-line discussion. Although the government up-loads many public information in their sites, the information is useless since the absence of internet network prevents ordinary citizens from participating in public debates. RT-RW Net could be the first step of any effort to build community capacity in influencing the government's policies and educates citizens about the benefits of ICTs. In a condition in which governmental agencies have limited capacity to respond the people's need on communication technology, the community takes initiatives to introduce the new technology for the people.

The RT-RW Net has several advantages. Besides providing community-members an opportunity to access low price of the internet service from their homes, the Net makes the cost of accessing the internet from home lower than that of a Warnet (Internet café). In addition, RT-RW Net easily built in any places, such as in remote areas. It helps the local governments promote their policies via website and promote the use of E-Information in their regions.

The role of cyber-community in promoting the E-democracy in Indonesia is crucial. This has been done by establishing mailing lists in



which members discuss current issues. Among the popular mailing list groups are [egroups.com](http://egroups.com) in 1998 and [yahoogroups.com](http://yahoogroups.com) in 2005. Cyber-community in Indonesia have discussed many topics, including politics, social, religion, science, hobby, economy, business and the issue of pornography (Purbo, <http://www.ilmukomputer.com>).

Moreover, political parties also actively involve in Internet communication. For example, one new and emerging political party, Partai Keadilan Sejahtera (Justice and Welfare Party), dominates political forum in [yahoogroup.com](http://yahoogroup.com). The party has organized 5 big community of mailing lists and some smaller groups of mailing list. The largest mailing list of PKS has more than 100 people who actively join in everyday discussion (Purbo:2005). Electronic mailing group opens a wider opportunity for citizens to easily access information and to actively take part in E-Consultation. In short, RT-RW Net has a great potential to strengthen the practice of E-Democracy in Indonesia in the future.

### **Conclusion: Opportunities and Challenges**

The RT-RW Net has brought several benefits. Besides affordable, it has high flexibility since the network is easily built. The Net facilitates unlimited access from home and has a potential to educate community members in ICTs. The impact is that community members may no longer be reluctant to use the internet to make their voice heard. The Net likely promotes citizen participation in public discourse on certain public issues. It can be a good tool for promoting E-Democracy. However, there are many challenges to build RT-RW Net such as generally low income of the community and poor condition of communication infrastructure. The main handicap is lack of government goodwill to encourage E-Democracy.

Government and private sectors have to work together in the process of promoting E-democracy. Government has a responsibility to build infrastructure of the internet as many as possible, especially in many remote regions. The government has to reduce the cost of the internet services by lowering taxes paid by Internet Service Providers. Another role of government is to enact the regulation that facilitates the use of the internet. For example, one of government policies that encourages constructive condition for the adoption of the internet is a regulation

on the development of WiFi LAN. In January 2005, the Indonesian government enacted a law that enables companies to develop \WiFi (in the 2.4GHz band) infrastructure without applying license from the government. However, the Indonesian government, is still reluctant to cut the telephone tariff, especially the local tariff that hinder more citizens to use home connection internet. Government should encourage citizen to use computer by carrying out programs such as "*One House One Computer*" and "*Elimination of Computer Illiterate*" program.

These programs, of course, should embrace the ICT industries or business community, The government may asks their cooperation to give their second hand computers to schools in remote regions such as outside of Java. Another role of business community is helping the community to develop the internet network at community level. NGOs and Universities may also participate in educating citizens on the use of ICTs by giving training or consultation.

Finally the success of this program will encourage E-Democracy in Indonesia since RT-RW Net can he easily built in many places. RT-RW Net can be a milestone for the development of E -Democracy since RT-RW Net not only gives an important communication facilities but also opportunities to the citizens to actively involve in political process in the country. Furthermore E-Democracy will increase the quality of democracy in Indonesia.

## Bibliography

Carey, James. (1989). Space, Time and Communication: A Tribute to Harold Innis, in *Communication as Culture*. New York: Routlege,

Clift, Steven, E-Democracy, E-Governance and Public Net-Work. (2003) <http://www.publicus.net/articles/edempubliqusnetwork.html>, accessed 23 April 2006,

Clift, Steven, *Minnesota Government Information \_Access Council*, Minnesota E-Democracy, [http://wkvw.efflorg/Infrastructiire?](http://wkvw.efflorg/Infrastructiire?Foreign_and_local/MN/mn_giac.note) Foreign\_and\_local/MN/mn\_giac.note, accessed in 23 April 2006.