Laporan Hasil Survei Ronde Pertama

(*First Round Survey Report*)

Kondisi Industri Warnet Indonesia

di

Medan, Makassar, Bandung, Jogja & Jakarta suburban

(*Survey of Internet Kiosks in
Five Major Indonesian Cities*)

Kerjasama antara

(*Collaboration between*):

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Executive Summary

According to a recent AC Nielsen research, there is an upsurge in the demand for accessing the cyberspace from Internet kiosks or cafes (locally known as "Warung Internet" or Warnet) in Indonesia. In the year 2000, Warnets were used by 50% of the total users but by 2003, it is estimated that the figure has risen to 64%.

Such an increase have been attributed to the decline of direct access from households from 13% in 2000 to only 6% of the total Internet users in 2003 with a corresponding decline in Internet access from offices from 42% in 2000 to 38% in 2003.

Such major change in the composition of Internet user can have two major implications. Firstly, on the positive side, with the increase of the number of Warnet users, Warnet entrepreneurs are earning greater disposable income and re-invest some of their earnings so that some improvements of their services can be expected. If such a trend continues and there is continuing relative economic stability, more investors will sink their capital into the Warnet business. As such, this can lead to further improvements in services, a lowering of access costs and healthier competition between Warnets, particularly if there is no significant rises in various government levies. This can mean even greater numbers of Internet users accessing from Warnets.

Secondly, on the negative side, the rapid expansion of Warnets in Indonesia has some dire implications which must be taken seriously as they can threaten and undermine not only e-commerce but also security at large not just in Indonesia but also in the rest of the world. One implication of Warnets use increase is that, in some cases, unscrupulous entrepreneurs who only treat Warnets as pure profit centres and do not heed the prevailing ethical standards appear to allow cyberfraud, cybercrime and other unlawful exchange of information and other activities to take place on their premises. Another type of activities which can be observed is that, if such behaviour is allowed to continue, there is little doubt that some Warnets will also be used as centres of terrorist information exchange which will then pose an ever more serious threat to the rest of society.

The Warnet "industry" in Indonesia, in some ways, has experienced a series of fluctuations in their numbers and level of activity since their beginnings in 1997 during the commencement of the economic crisis. Paradoxically, few started around 1997-8. But Warnets enjoyed growth like mushrooms in a rainy season during the brief recovery around late in 1999 and early 2000 during the early part the reign of Indonesia's first democratically elected president. Since late 2001 and through 2002 until early 2003, Warnets to face greater uncertainties and leaner times. The year 2003 has been a year that most Warnets are experiencing a turnaround.

The Survey found that most Warnets in all areas surveyed are facing similar sets of issues. In each of the five major cities, 10 randomly picked Warnet were selected and their operators interviewed on 4 key sets of issues:

(1) Legal status and business regulatory issues:

    1.1 Legal business status

    1.2 Existing local government regulations

    1.3 Existing national government regulation

    1.4 Existing official payments and unofficial levies

    1.5 Previous experience of search of premises or arrest by law enforcement

(2) Business model, nature of operation and other value added activities on the premises:

2.1 Operating hours	2.2 Employee net salary level
2.3 Date of establishment	2.4 Average number of users
2.5 Initial capital	2.6 Categories of typical users
2.7 Existing assets	2.8 Other side/value-added businesses
2.9 Number of employees	2.10 Existing and optimum level of tariff for users
2.11 Highest attained level of education of employees/operators	2.12 Net earnings
2.13 Type of computer servers	2.14 Routine expenses
2.15 Type of computer client software	2.16 Employee net salary level

(3) Physical and network security issues:

3.1 Physical security of premises and equipment

3.2 Additional protection with enforced computer casing

3.3 Types of computer and cybercrime activities (credit card fraud, hacking, cracking and others)

3.4 Pornographic access

3.5 Facility for users to use their own software

3.6 Availability of firewall software

3.7 Requirement for users to show identity cards

3.8 Keeping of activity log books

(4) Software, hardware and licensing issues:

4.1 Type of technology to obtain bandwidth (wireless, Internet cable and others)

4.2 ISP service levels

4.3 Operating system of servers

4.4 Operating system of client computers

4.5 Types of applications software

4.6 Use of licensed software

Thus, the Survey covers 34 data fields across a sample of 50 respondents – 10 Warnets in each cities selected at random in 5 cities.

In order to obtain greater depth on the responses, the Survey also interviewed several well-known Warnet entrepreneurs (not interviewed in the Survey) and industry local organization activists. We are grateful to Mr. Stephanus Edi Pambudi (former chairman or the Yogyakarta Warnet Association, AWAYO and a long-time Warnet owner), Mr. Hadi Sutikno (Warnet owner and Warnet network developer), Mr. Sie Ket Liong (Information Technology staff of the Japan International Cooperation Agency, Medan), Mr. Berlin Bulo (Warnet observer, Makassar), Mr. Adi Nugroho (Chairman, ISP Association of Makassar), Mr. Irwin Day (Linux activist and Warnet owner, Makassar) and Mr. Mappasoro Mahmud (Warnet owner since April 1999, Makassar), Mr. Irsan

Bakhtiar (Warnet owner, Bandung) and Mr. Imam Badaruddin (Warnet manager since 1998). We appreciated their generosity in sharing their comprehensive knowledge of the Warnet industry.

Given time and budget restrictions, our study covered only 50 out of an approximately over 2500 Warnets in Indonesia but our conclusions and recommendations at the end of the paper were also subjected to discussion with a focus group in Jakarta. This Warnet Focus Group discussions (WFG) were organized by the Center for ICT Studies Foundation and ICT Watch Foundation.

We are grateful of the financial support from the Partnership of Economic Growth (GoI-USAID) Project to conduct this first round qualitative survey in five major cities in Indonesia, namely Jogja, Medan, Makassar, Bandung and Jakarta suburban. Based on the prior research conducted by ICT Watch, the five cities were selected basis of the fact that these are cities with the largest number of Warnet users and Warnets.

Last but not least, we greatly thank the field interviewers Yan Aryanto, Rapin Mudiardjo and Mukhlis Ifransah who during August 2003 carried out the field work for the first round survey as a preliminary work to a more comprehensive study on Warnets that will conducted in 2004. Notwithstanding the shortcomings of relatively small sample and scope, we hope that this publication will provide some useful pointers for the current and future efforts in understanding ICT public access issues and particularly Internet Kiosks or Warnets in Indonesia.
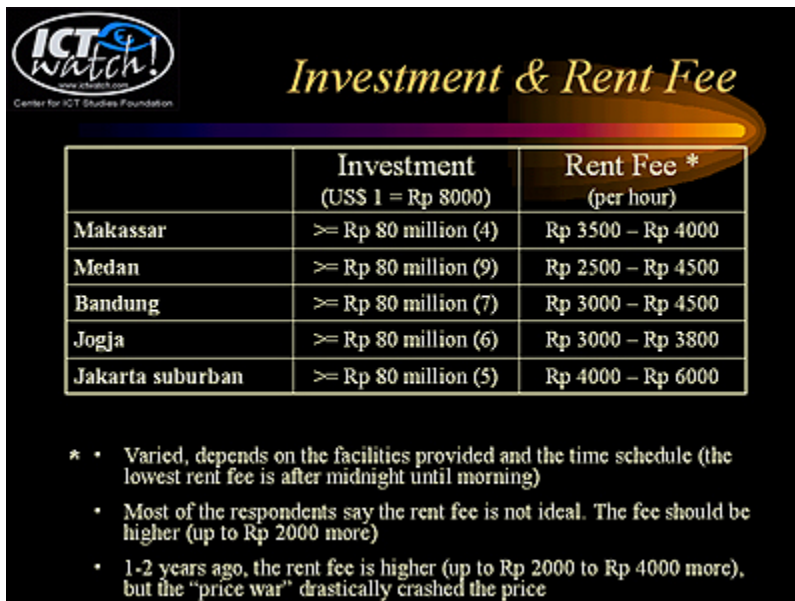
Jakarta, 26 August 2003

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	(PEG – GoI/USAID) Project

I. Summary of Findings (English)
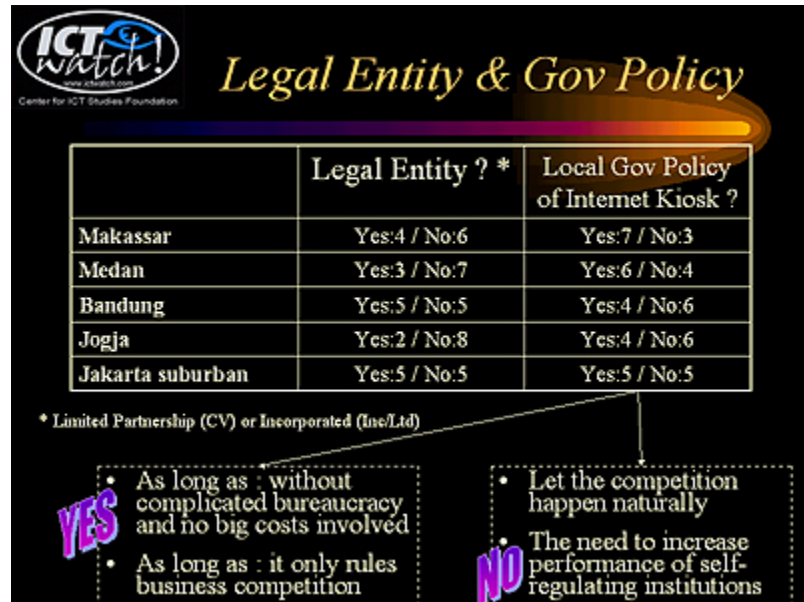
(data #1)

(data #2)

Computers & Net Income

	Computers (client)	Net Income * (average per month)
Makassar	5 – 10 (5) 11 – 20 (5) < 20 (0)	Rp 2 – Rp 4 Million
Medan	5 – 10 (0) 11 – 20 (3) < 20 (7)	Rp 2 – Rp 6 Million
Bandung	5 – 10 (0) 11 – 20 (8) < 20 (2)	Rp 5 – Rp 10 Million
Jogja	5 – 10 (4) 11 – 20 (4) < 20 (2)	Rp 2 – Rp 4 Million
Jakarta suburban	5 – 10 (8) 11 – 20 (0) < 20 (2)	Rp 0.5 – Rp 2 Million (housing area) Rp 5 – Rp 10 Million (campus area)

(data #3)

O/S and Internet Access

	Operating System (server)	Internet Access
Makassar	Windows (1) Linux (9)	Wireless / 16-64 Kbps
Medan	Windows (8) Linux (2)	Wireless / 16-64 Kbps
Bandung	Linux	Wireless / 32-64 Kbps
Jogja	Windows (1) Linux (9)	Wireless / 32-64 Kbps
Jakarta suburban	Windows (8) Linux (2)	Dial Up (housing area) ADSL 512 (campus area)

- Most of the respondents use Windows 98 for their client computer operating system

(data #4)

(data #5)

(data #6)

II. Recommendations of the Warnet Survey

Based on our preliminary research above, this Study offers some tentative recommendations in the light of our twin objectives to assist the Warnet entrepreneurs improve the viability of their businesses as well as stimulate the positive role for their surrounding community. Readers, however, need to be aware of the limitations of the small sample and the scope of our survey and are encouraged to offer their comments. The following points can be put forward as tentative recommendations:

1) Avoid "dial-up" access: Warnets should place the lowest priority in using (standard telephone) "dial-up" access to the Internet. If Warnets want to improve their profits and increase their customers, then it is imperative that they use other type of access to obtain larger customer numbers.

2) Speed is the name of the game: There are some economies of scale that can be achieved by having a larger number of customers. In addition, if a Warnet has a larger customer, and particularly have the "dial up" technology, then this slows the speed in accessing the Internet. This can result in a drop in customer numbers and hence in their earnings and long-term viability.

3) Location determines competitiveness: Warnets must carefully consider their location. If they set up their operations in a densely populated areas, the location by itself does not necessarily mean a greater number of customers unless they are prepared to work on building up the local demand by promortional or marketing activities. The best locations to set up Warnet appear to be those close to universities or colleges.

4) Sensitivity to local conditions: Warnets must try to carefully consider the needs of their surrounding communities and their cultural sensitivities and select their operational staff well in terms of their skills to deal with both technical and content issues. Warnets are well advised to pay attention and to have a policy in dealing with the negative impact of the Internet such as those relating to cybercrime activities (credit card fraud, hacking, cracking and others) and access to

pornography. This is particularly relevant for those Warnets located in small towns and rural areas.

5) Rural areas are harder to penetrate: Warnet owners need to be aware of the greater effort (in terms of time, work and cost) to establish Warnets in rural areas. Some reasons for such a greater effort is due to: a) the greater cost in promotion (currently there is relatively only limited number of promotional activities, b) greater effort needed to neutralize the negative impact of the Internet and c) the likelihood that cheap and adequate infrastructure is generally scarce in the regions. In general, Warnet owners and their customers have to face higher costs in the regions compared to those in the urban areas or near educational establishments.

6) Don't compete on rental price: Warnet owners need to focus on non-price competition based various value-added services and the quality of service to customers such that prices can be adjusted according to the level of services being offered. Price-based competition tends to become a futile self-defeating exercise.

7) Better to compete on value-added activities and services: Warnet owners must focus on value-added content services (such as providing multimedia educational training schemes, e-commerce/SME portal and other services) as well as other side-businesses (photocopying, scanning, printing and other business support activities as well as food/drinks sale) that can serve the local community needs but at the same time ensures that these can significantly increase their earnings.

8) Don't use Windows for client computers to keep software costs low: Warnet owners should use non-propriety software such as Linux-based software. Recently, there are many software applications that have a good graphic interface similar to popular Windows-based software such as the well-known browsers, Yahoo! Messenger and IRC.

9) Legalization of business: Warnets must possess a legal basis for their existence. If a Warnet register itself as a company or foundation, then the trust gained can facilitate its relationship with soft/hardware vendors and the banking/finance community.

10) Know your Customer: Warnet owners should implement a "know your customer" (such as those employed by banks) policy. This can be achieved through setting up

creative loyalty/membership schemes of which initial registration will require users to show their civic ID (KTP) cards. Alternatively, the deposit of user ID cards and registration of their details numbers in a logbook as well as the retention of these cards while users use the computers. Such a practice can provide some protection for the Warnet owners so that their premises will not become a haven for those engaged in cybercrime activities. If such activities are known to occur in a Warnet by the police, then they are often known to confiscate the Warnet's server and forcibly close it down for a time period that can incur a significant loss to the owner.

11) Warnets need to get organized: Warnet owners should consider forming an active and dynamic local warnet association so that they can be better represented to the local government, banks and other relevant private sector bodies. Through such a local associations, Warnet owners can minimize the collection of "unofficial taxes" by unauthorized rouge officials or the official seizure of equipment (for example for their use of wireless 2.4 GHz equipment) by local police or local government officials.

12) Vice doesn't pay: Warnet owners are well advised to no longer disregard and take more seriously any cybercriminal activities on their premises. If these owners tacitly permit such activities on the basis of allowing their customers some privacy then they run risk of either seizure of equipment by the authorities or being subject to paying "unofficial levies".

There is a great need for a comprehensive approach to deal with activities relating to cybercrime and pornography in Warnets. Some measures that have been considered such as the adoption of an industry-based code of conduct, greater community/police enforcement and others will need to be developed and will require greater external commitment, funding and commitment as well as industry coordination.