The Internet Factor in Indonesia: Was that All?[*]

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1. Preliminary Notes.

On February 3, 2002, a message from the list administrator, MacDougall (2002a), electrified the community of subscribers and readers of *Indonesia-L* mailing list <indonesia-l@indopubs.com>. It announced the imminent closing down of the list that had begun 12 years earlier as *Apakabar* <apakabar@igc.apc.org>. The end then indeed followed hardly a week later, with a final "over and out" announcement (MacDougall 2002b).

In the few days between those two messages, there was a stream of inputs that, besides stressing how much the subscribers regretted this sad end[1] of the project, expressed the sincere gratitude of the subscribers for the exceptional service that John MacDougall and the mailing list he operated had made to the Indonesian community. The compliments were, in my opinion too, by no means exaggerated.

The Internet in Indonesia indeed played an exceptional informative, motivating, and coordinating role during the political upheavals that finally led to President Soeharto's resignation in May 1998 (Randall 1996:38–39, Hill & Sen 1997:77, Zimmer 1998:5, Basuki 1999). If the developments of that time could be called a revolution,[2] it would be "the first revolution in world history to have been ushered in through the Internet. First the wall of total censorship was breached, then the military cordons protecting palace and parliament from the people" (Mahdi 1999).

In this, John MacDougall's *Apakabar* played an immanent role (Basuki 1999, Hok An 2000). The present paper will try to provide a recapitulation of those developments, and to outline the objective technical environment that conditioned them.

2. Indonesia Goes Online: How the Stage was Set.

The role of the Internet in the recent political upheavals in Indonesia is remarkable in several respects, some even quite scurrilous. One such circumstance is a curious variation on the proverbial story of a tyrany engendering conditions of its own downfall.

Indeed, a seminal role in Indonesia's opening to information technology (IT) was played by the hi-tech fascination of none other than the then State Minister for Research and Technology B.J. Habibie, that manifested itself in his promotion of the so-called IPTEK[3] agency under his ministry. Before that, Habibie had been in the upper management of the German aerospatial corporation Messerschmidt-Bölkow-Blohm GmbH (MBB), where he couldn't have failed to learn to appreciate the demands of business success in a modern industrial economy on technological progress and free flow of information. His insights proved to particularly benefit a dedicated group of domestically and foreign-trained IT specialists in the country (Hill & Sen 1997:71–72). It

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[*] Revised version of a paper presented at the 54th Annual Meeting of the Association for Asian Studies, Washington D.C., April 4–7, 2002, in Panel 87: "Apakabar 1990–2002: Pluralism on the Internet."

[1] Temporary end, one can happily add, since the launching of the *Indonesian-Studies* mailing list by John MacDougall in July 2003.

[2] Zimmer (1998:4) refers to it as "May Revolution".

[3] IPTEK is the Indonesian acronym for *Ilmu Pengetahuan dan Teknologi* 'Science and Technology'.

was this same Habibie, controversial foster son of President Soeharto, who in May 1998 — being by then Vice President — replaced Soeharto as president.

The study of computer sciences in Indonesia began in the 1970s at UI (*Universitas Indonesia* 'University of Indonesia', Jakarta) in the PUSILKOM (*Pusat Ilmu Komputer* 'Computer Science Center'). It soon brought forth a dedicated and at the same time talented group of indigenous specialists. The center for IT had the stiffest admission in the whole country.

First implementations of networking seems to have begun in 1984 at the UI with *UInet*, renamed to *JUITA* (*Jaringan Universitas Indonesia TerpAdu* 'UI Joint Network'), when an Ethernet cable was layed out. A year later, a newly installed VAX[4] mainframe functioned as UI's internal UUCP[5] *IndoVax* server. By the end of 1985, another UUCP server, *Indogtw*, was in operation at the UI in cooperation with PT IndoSat (Samik-Ibrahim 1996–2001a). Since early 1991, introduction of increasingly versatile hardware and efficient software opened the way for so-called Bulletin Board Systems (BBS) — self-contained online communities. *BeMoNet* (Berita Modem Network), an apparently UI-based early local network, described as operating since the mid 1980-s (Samik-Ibrahim 1996–2001b, 1996–2001c), reportedly established itself in 1992 as such a BBS (BeMo 2001).

In May 1992, the principal institutions engaged in IT research formed a cooperation named *Paguyuban* ('Community'), resulting in the connection of the UI complex in Depok (a suburb south of Jakarta) with BPPT (*Badan Pengkajian dan Penerapan Teknologi* 'Agency for Assessment and Application of Technology'), and with LAPAN (*Lembaga Penerbangan dan Antariksa Nasional* 'National Institute of Aeronautics and Space') in Bogor, and the latter with ITB (*Institut Teknologi Bandung* 'Bandung Institute of Technology') (Samik-Ibrahim 1997–2001).

An important center of study and research had developed at ITB,[6] known as PAU Mikro (*Pusat Antar Universitas Bidang Mikroelektronika* 'Inter-University Center for Microelectronics'), presently the PPAU ME (*Pusat Penelitian Antar Universitas Mikroelektronika* 'Micro-electronics Inter-University Research Center'). One of its workers, Budi Rahardjo, at that time on study leave at the University of Manitoba, set up the *PAU-Mikro* <pau-mikro@ee.umanitoba.ca> mailing list[7] there, that became an important discussion forum of the *Paguyuban* (Samik-Ibrahim 1997–2001, Rahardjo 2001).

Only just a year later, Rahardjo (1993) already reported six domestic network links in operation: UI–BPPT, UI–LAPAN, LAPAN–ITB, ITB–UI, ITB–STT Telkom, BPPT–Serpong, and several more in progress, including one to connect ITB in Bandung with UGM (*Universitas Gajah Mada*) in Yogyakarta.

In 1994, there were apparently four network centers with international links either operational or in progress (Purbo 1994):

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[4] *Virtual Address Extension* computers were designed and built by Digital Equipment Corporation (DEC) from the mid-1970s through to retirement of the line in 1999/2000.
[5] *Unix-to-Unix Copy*, was a utility and protocol (data packaging system) that enabled one Unix computer to send files to another over direct serial connection or via modems over the telephone net, included a store-and-forward transport mechanism which was used since the early 1980s as a means to facilitate the exchange of electronic mail among sites. The worldwide discussion system UseNet originally functioned over UUCP only (subsequently also over Internet).
[6] An IBM mainframe was working in ITB at least since the early 1980s (Rahardjo 2001)
[7] After Budi Rahardjo returned to Indonesia, the address changed to <pau-mikro@nusantara.net>.

1. UNINET & JUITA managed by Rahmat M. Samik-Ibrahim at UI, Jakarta — UUCP 19.2Kb/sec link to UUNET, DIALIX;
2. IPTEK-NET managed by Sahry Ramadhan, Samawi Samadikun, Firman Siregar, and R. Santoso at IPTEK, Jakarta — TCP/IP 300b/sec to Aachen Germany, TCP/IP 64Kb/sec to SprintNet, US (the latter in progress);
3. JASIPAKTA managed by Moch. Ihsan at LAPAN, Bogor — TCP/IP 38.4Kb/sec to CRL in Kashima, Japan (experimental), store-and-forward AX.25 VITASAT to InterNet, store-and-forward AX.25 OSCAR to AMPRNet (in progress);
4. BANDUNG-NET managed by Onno W. Purbo and Adi Indrayanto at ITB — store-and-forward AX.25 OSCAR to AMPRNet (in progress).

Practically, only the UUCP link from UI was generally accessible for exchanging email messages. The connection seems to have been not only very slow, but also very expensive even for receiving (Rahardjo 1993). Nevertheless, .id as Indonesian TLD[8] was established, with subdomains .ac.id (academic), .co.id (commercia), .go.id (government), .mil.id (military), .net.id (net providers), .or.id (organizations), and others (Rahardjo 1993, Samik-Ibrahim 1997–2001). By the end of 1994, the first ISP (Internet Service Provider) was established (*IdOLA*, see below), and one of Indonesia's oldest WWW sites, http://www.sdn.or.id/ of the Sustainable Development Network (Samik-Ibrahim 1996–2002).

A year later, Purbo (1995a) lists eleven governmental and six commercial WWW homepages. However, of the latter, three were under the TLD-s .net or .com rather than the domestic .id domain. Meanwhile, academic presence on the Internet was, with fifteen homepages, not only predictably on the forefront, but demonstrated the important role that was played by Indonesian students and alumni studying or working abroad (see Table 1).

Table 1. Indonesian academic institutions with WWW homepages on domestic (*left*) and foreign (*right*) domains by September 1995. [Source: Purbo (1995a)]

Institution	domain	Institution	domain
Institut Teknologi Bandung	ac.id	Inst. Teknologi Nasional	iii.net
Institut Teknologi Surabaya	go.id	Universitas Gajah Mada	umanitoba.ca
Universitas Hasanuddin	go.id	Universitas Padjadjaran	unb.ca
Universitas Indonesia	ac.id	Universitas Parahiyangan	u-tokyo.ac.jp
Universitas Kristen Petra	ac.id	Universitas Sam Ratulangi	carleton.ca
PAU Mikro	ac.id	Cendana High School	tamu.edu
		Gunadarma High School	cyberspace.org
		Pangudi Luhur High School	mit.edu
		IPTEK info base	uec.ac.jp

The brisk pace of development occasionally led to frictions. TLD-ID's (ID top level domain) much respected administrator Rahmat M. Samik-Ibrahim finally resigned from IDNIC (the TLD-ID Network Information Center). In agreement with him, the task of heading IDNIC was taken over in late 1997 by Budi Rahardjo as new TLD-ID administrator (Samik-Ibrahim 1997–2001, Rahardjo 2001).

Such tribulations notwithstanding, a rising demand for access to the Internet spurred work on ambitious development projects. In 1995, a project to convert IPTEKnet

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[8] *Top Level Domain* , refers to the last term in the Internet address, e.g. **.id** in <iptek.net.id>.

into a full-service provider for the entire Indonesian science community was laid down, targetting amongst others. A timetable of allocation of new "points of presence" as indicated in Table 2. The hand of State Minister B.J. Habibie, leading the ministry to which IPTEK was subordinated, made itself apparent in the conspicuous preference for the commercial area in Batam. Reportedly, the state minister had considerable financial commitments on this island that he favoured for its immediate contiguity to Singapore.

Table 2. Schedule for new IPTEKnet "points of presence." [Source: Ruth & Bush (1997)]

	Oct 1995	Apr 1996	Oct 1996	Apr 1997	Oct 1997	Apr 1998	Oct 1998	Apr 1999	Sum
Jakarta	3	6	5	3	2	2	2	2	**25**
Bandung	2	4	3	1	–	–	–	–	10
Yogyakarta	–	1	3	2	–	–	–	–	6
Surabaya	–	1	3	2	–	–	–	–	6
Batam	–	–	–	1	3	3	3	3	**13**
Denpasar	–	–	–	1	1	1	1	–	4
Ujung Pandang	–	1	3	2	–	–	–	–	6
Medan	–	–	1	2	–	–	–	–	3
Menado	–	–	1	2	–	–	–	–	3
Semarang	–	–	–	–	1	2	–	–	3
Palembang	–	–	–	1	2	–	–	–	3
Balikpapan	–	–	–	–	1	2	–	–	3
total new points	5	13	19	17	10	10	6	5	85

Perhaps more significant was the project for development of the IIX (Indonesian Internet Exchange) logical Network Backbone in five annual steps as on the map in Fig. 1 that also indicates the three International Backbone cables that are involved.
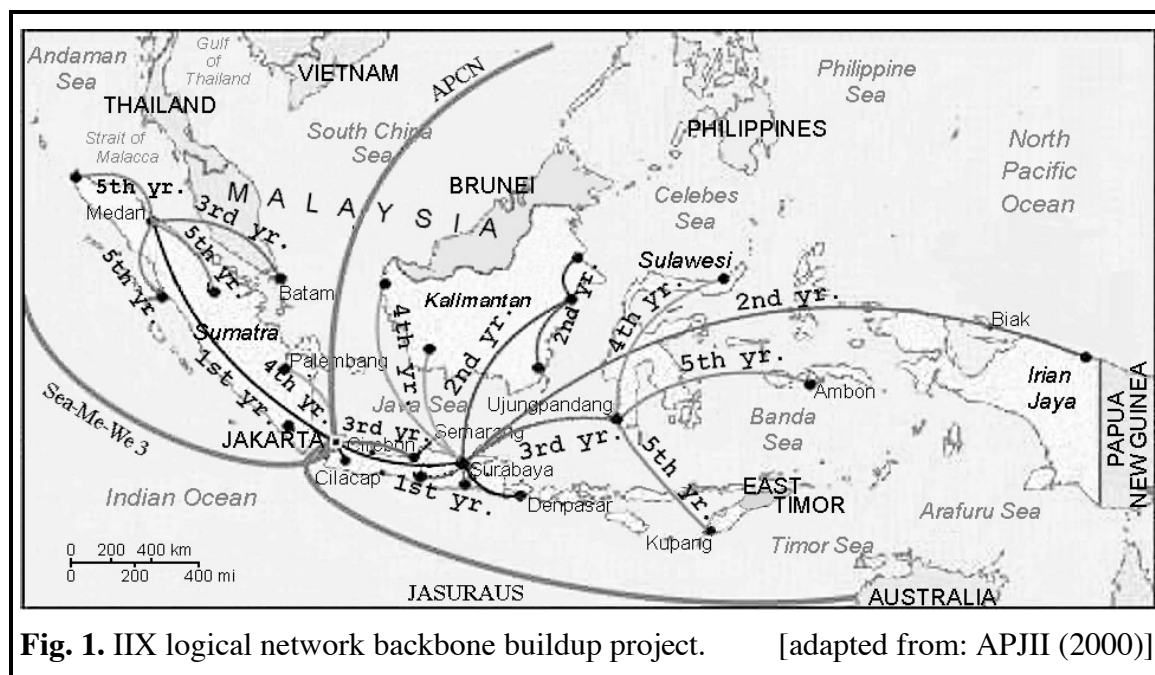

Fig. 1. IIX logical network backbone buildup project.   [adapted from: APJII (2000)]

An important indicator of the economic solidity of Indonesian utilization of the Internet is perhaps the extent of its commercial use. If in mid 1994 universities and institutes still accounted for 60% of Internet usage, this already shifted a year later to more predominant commercial use. In June 1995, the distribution was given as:

commercial	— 42.8%
universities and institutes	— 29.5%
government agencies	— 20.9%
research institutions	— 5.8%
NGOs	— 1.0%

<div align="right">Source: Purbo (1995a), Soegijoko et al. 1996).</div>

Equally revealing is perhaps a comparison of the monthly number of new allocations from Jan. 1995 till Dec. 1999 on the commercial domain .co.id (Table 3a), with that on the principal other domains .ac.-, .or.-, .net.-, .mil.-, and .go.id put together (Table 3b).

Table 3a. New allocations on the commercial WWW-domain .co.id.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1995	1	–	–	–	11	–	6	3	2	11	11	8	53
1996	3	2	5	14	9	11	18	20	30	28	17	46	201
1997	40	8	57	22	55	45	57	47	107	68	28	62	596
1998	132	86	71	72	63	87	81	101	100	153	125	119	1190
1999	57	318	162	103	125	121	131	97	163	116	145	143	1501

Table 3b. New allocations on the WWW-domains .ac.id (academic), .or.id (organizations), .net.id (networks), .mil.id (military), and .go.id (government).

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	total
1995	2	–	–	6	27	2	8	4	2	13	13	10	87
1996	8	4	7	17	13	13	18	23	32	33	21	51	240
1997	51	11	68	34	68	57	65	56	120	80	31	78	719
1998	192	109	88	93	77	99	102	118	122	183	146	152	1481
1999	67	180	215	135	168	157	171	139	219	167	247	288	2153

<div align="right">[Source for both tables: IDNIC (2002)]</div>

The first ISP (Internet Service Provider), *IdOLA* (Indonesia Online Access) launched by PT Aplikanusa Lintasarta — a subsidiary of PT IndoSat — in late 1994, was already providing access to the World Wide Web in 17 cities by the end of 1996; among ISP-s launched in 1996, *IndoNet* was serving 5 cities, and *WasantaraNet* of the government's postal service PT Pos Indonesia connected 22 cities by the end of that year; other major providers appearing in 1995 and 1996 were *MegaNet*, *RADNet*, *Sistelindo*, *MelsaNet*, followed in 1997 by *CakraWeb* and *IndoGlobal* (Purbo 1995a, Soegijoko et al. 1996, Samik-Ibrahim 1996–2002, Kosasih 1999), not to mention numerous lesser ISP-s.

1996 was thus indeed the year cyberspace became open to Indonesian society, "just one year after *Time* magazine proclaimed 1995 as the year of the Internet" (Basuki & Prasetyo 1998, Basuki 1999). The over-all number of ISP-s in 1996 has been estimated at 20–25, with 20,000–30,000 users, and the number of personal computers in use at approximately 300,000; in 1998 there were already 32 providers with 100,000 users (Hok

An 2000). However, based on observations made as moderator of *Apakabar* list, John MacDougall (priv. comm.) inferred that the cited "user" numbers give a significantly underestimated picture of the number of Indonesians profiting either actively or passively from the Internet.

Indeed, the cited count does not for example include domestic commercial sites — including ISP-s — which were established as "top-level" dotcoms and, hence, not subordinated to the Indonesian commercial domain .co.id. One example is the Web site of the newspaper *Kompas* <www.kompas.com>, which subsequently expanded to launch the major media provider *Kompas Cyber Media* <www.indomedia.com> that in turn hosted websites of several other newspapers, a.o. *Waspada* (Medan, Sumatra) and *Pos Kupang* (Kupang, West Timor), and of the news portal *Serambi Aceh*. At the same time, some foreign companies operating in Indonesia with dotcom URL-s[9] provided Internet access for employees (e.g. Freeport-McMoran in Irian Jaya[10]).

Above all, however, printouts of texts from the Internet were being multiplied and dissipated as leaflets throughout the country (see below), while use of computers with Internet access by far more than only one person was widespread (cf. Harsono 1996).[11]

Multiple usage was of course even more typical for public computers. Being experienced in providing public access to telephone and facsimile services since the 1980s, and boasting 25,000 public telephones and 800 telecommunication cafés (*wartel — warung telekomunikasi*) in the early 1990s, the postal services through their *WasantaraNet* provider began in 1996 to open Internet cafés (*warnet — warung internet*) (Hill & Sen 1997:69–70), making the Internet theoretically accessible to the man on the street. Furthermore, the relatively low usage fee made them popular among students (Basuki 1999). At the height of the economic crisis, access to computers for destitute students was facilitated by the opening of computer cafés (*warkom — warung komputer*) (Simanjuntak 1998). By early 2002, even cheaper email services already became available in some middle schools, e.g. at SMKN 6 Yogyakarta, Central Java, or SMKN 1 Ciamis, West Java, as indicated by Purbo (2002a).

Neither the computer specialists involved in the emergence of the country's Internet infrastructure, nor the commercial companies that then provided public access to it could of course have forseen the role Internet was to play in the subsequent political developments. Much less were they responsible for the contents of the political messages on the net, especially in email mailing lists and Internet news portals. But it was nevertheless as if the stage had been set in anticipation of the coming events. Even before the *Reformasi* (Reform) movement actually acquired momentum, readership at *Apakabar* list already reached 50,000 (John MacDougall, priv. comm.).

3. Internet and *Reformasi*

To avoid misunderstandings: the Soeharto regime of course did not fall because Internet was invented, much less because "nasty Westerners" were using it to undermine the Indonesian government. Although Indonesia during the more than three decades of "New Order" rule under Soeharto at first experienced astonishing economic growth within the

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[9] *Uniform Resource Locator* – term popularly used for the "address" of a site in the Internet.

[10] Contemporaneous private communication by email, of an employee of the company.

[11] During a short visit to Indonesia in November 2000, I witnessed one instance of a computer with Internet access being used by several relatives in two generations, and another one privately owned by a prominent literature editor who allowed a handful of younger software helpers make use of it for their own needs too.

framework of the West Pacific economic boom, authoritarian rule and the rampant corruption, nepotism, and cronyism that it fostered led to grave irregularities in financial management on one side, and stiffled free enterpreneurial initiative on the other.

Under conditions of the economic boom, Indonesia's middle class seems to have grown considerably in political influence, but the mentioned negative aspects of authoritarian government led to steadily growing discontent. A year before the outbreak of the monetary crisis in 1997, Soeharto was for the first time facing a serious potential rival contender, Megawati Soekarnoputri. Oppositional political sentiments were no longer confined to a more radical minority, but gradually becoming mainstream in traditionally moderate layers of the middle class. The regime that liked to boast about having brought about the economical boom that opened the country to the industrial age, suddenly found itself confronting that very same economic "genie" it had rubbed out of the lamp.

A nation that had experienced three decades of allround censorship and authoritarian manipulation of school education and public information, was poorly prepared for the task it now faced: to scuttle the *ancienne regime*, dismantle its omnipresent apparatus, with the aim of reforming the system of government to conform to demands on administration set by the more advanced and sophisticated structures and capacities that now characterized the country's economy. It is for this that the Internet was to prove to be of particular importance. Under circumstances of authoritarian government and allround censorship, as Basuki (1999) demonstrated, this novel medium could manifest itself as a lethal weapon, but as one that did not maim or kill, but owed its effectivity to enlightenment.

A seminal role was played by Indonesian students abroad, at the beginning of course by those with particular interest for IT. The first Indonesian-run mailing list abroad seems to have been the meanwhile defunct *JANUS* at UC Berkeley. It was followed in 1991 by at least three other ones: the already mentioned *PAU-Mikro* run by Budi Rahardjo at the University of Manitoba, *INDOZ-Net* set up by Yos Ginting at University of Tasmania, and *IDS* (Indonesian Development Studies, originally <ids@suvm.bitnet>, presently <ids@listserv.syr.edu>) at Syracuse University in Syracuse, NY. These lists began as relatively non-political forums.

Two following Indonesian-run mailing lists unavoidably hosted discussions on questions having social and political relevance since an early time. One was the inofficial list of the Indonesian Christian community, *ParokiNet* (originally <paroki@uiuc.edu>)[12] begun in 1991 (Darjatmoko 2000).[13] The mailing list of the Muslim community, *Isnet* (originally <is-lam@macc.wisc.edu>),[14] was established in 1992, but apparently looking back on precursor net-activity beginning in 1989 (Isnet 1995–2000).

Of central significance for the political discourse, as we shall see below, was however *Apakabar* (originally <apakabar@igc.apc.org>).[15] It was set up in 1990 with sponsorship of Indonesia Publications (*Indopubs*) and Task Force Indonesia, and administered by John MacDougall (MacDougall 1990). It was also an important source of English-language information on Indonesia (see Coville 2000)

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[12] Since 1995 <paroki@parokinet.org>.

[13] At Kanazawa University in Japan, Josaphat Tetuko Sri Sumantyo set up Paroki Asia Network (moved subsequently to <paroki-asia@warnet.unpar.ac.id>), but I have not been able to elicit the initial year.

[14] By 1996 already <is-lam@isnet.org>, and at least since 1997 also <isnet@isnet.org>.

[15] At different times it used the sender addresses <apakabar@access.digex.net> and, also as *Indonesia-L* mailing list, <apakabar@clark.net> and <apakabar@radix.net>.

Symptomatic seems to have been that Indonesians abroad immediately took to using the Internet much more actively than compatriots at home. The first to make special note of this seems to have been Onno W. Purbo in a message to *PAU-Mikro* list on December 24, 1995: inbound traffic was taking up almost the entire channel capacity between Indonesia and the Internet, while outbound traffic made up only about 10–20% (Purbo 1995). Students abroad enjoyed easier access to the Net, but Onno Purbo was referring to concrete usage of a given channel, and that relativizes the disproportion in accessibility to the individual user. The circumstance of being in an open society in countries with democratic government, free from intimidations of authoritarian censorship, appears to have helped release young Indonesians from inhibitions against articulating themselves on the relatively unsecluded Internet.

The number of Internet users grew quite dramatically, and the data for *INDOZ-Net* <indoz-net@cc.utas.edu.au> shown in Table 4 are perhaps typical for similar mailing lists. The accompanying pie diagram (Fig. 2) gives the distribution of list members by country in February 1996 (adapted from Ginting & Rahardjo 1996:33).

Table 4. *INDOZ-Net* membership.

Year	members
1991	40
1992	200
1993	370
1994	610
1995	1100
Feb. 1996	1220

Fig. 2. *INDOZ-Net* member distribution by country in February 1996

The quantitative relationship sugested by the 1996 pie diagram is remarkable. The overall distribution was of course strongly skewed in favour of Australia-based members (AU), because *INDOZ-Net* was essentially the discussion list of the Indonesian Student Association in Australia. But upon comparing the other contingents it becomes evident that the number of Indonesia-based list subscribers (ID) actually compared quite well with that of the UK- and US-based ones. Hence, the extreme disproportion between in- and outbound traffic cannot be simply attributed to a relatively small number of domestic participants. Even if freer access to facilities abroad would enhance greater mobility on the Net, the extent of the disproportion observed by Onno Purbo must to my mind derive at least to a significant degree from a greater passivity of home-based subscribers.

A study by Rahardjo & Rahayu (1997) inspecting the traffic on three different lists compared a.o. the relation of number of subscribers who had input to the list within a month to the total number of subscribers. Their results are shown in Table 5.

As the authors pointed out, discussion on *PAU-Mikro* was of a purely technical nature, the greater part of messages being either brief queries soliciting for help after some computer malfunction, or just as concise responses suggesting solutions to the problem. Here, participation could reach 50%. By contrast, the discussion on Isnet tended to cover political issues, and members would frequently input whole articles. Here, the

share of "spectators" came close to 80%. However, the observations cover a too limited period of time to permit farreaching generalizations.

Table 5. Relation of inputting to total number of subscribers in three mailing lists in mid 1997, based on Rahardjo & Rahayu (1997)

Month	PAU-Mikro	ITB-Net	Isnet
May 1997	192/457 = 42%	54/—	165/795 = 21%
June 1997	211/420 = 50%	93/278 = 33%	—

(*ITB-Net*'s total subscriber number in May was unknown, while *Isnet* suffered harddisk damage in June).

It is understandable that under circumstances of political repression and censorship, Indonesians at home were hesitant to speak out on mailing lists. Even just subscribing to them already required a certain degree of civil courage. The hesitance was not unfounded. As Basuki (1999) pointed out, E-mails sometimes failed to reach addressees, or arrived several days delayed; email addresses known to be used by dissidents were reportedly the target of censorship attempts by unidentified persons in certain providers.

This did not prevent continous growth in popularity — and number of subscribers — of *Apakabar* (later *Indonesia-L*) mailing list administered by John MacDougall. On March 19, 1997, the already existing *Indonesia-L* (discussion list, gratis) and *Indonesia-P* (read-only, national news, $120/year) got five new read-only companions, and hardly a month later, twelve more such read-only lists were made available (McDougall 1997).

Most of these new lists were, like *Indonesia-P*, primarily aimed at a foreign readership seeking to learn more about Indonesia, but with a subscription fee of $60/year. While helping to bring Indonesia closer to an international public and interested investors, the subscription fees were recruiting independent financial means for the gratis *Apakabar/Indonesia-L*. As a result of spontaneous participation of growing numbers of Indonesian subscribers, and under a prudent moderating policy of the list administrator, this list had practically become a forum for practicing democratic freedom of opinion and for developing the civil courage to speak out.[16]

For Soeharto's administration, accustomed to ruling under conditions of uncontestable pronouncements on matters of policy or characterization of problems, a medium for uncensored exchange of opinion and information such as the Internet was quite discomforting to say the least. In this, B.J. Habibie seems to have steered a compromistic course between lip service to the authoritarian principles of government maintained by Soeharto and the army, and comprehension for requirements of technological progress and free flow of information of the business middle class, particularly of that of his native South Sulawesi and his favoured Batam area in Riau.

For students abroad and even domestic mainstream computer specialists not at all given to engagement in politics, this apparently meant it sufficed when one kept the magic attribute "controversial" (*kontroversial*) at the tip of one's tongue for characterizing the political implications of John MacDougall's activity, to then not need to have any

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[16] I understand, John MacDougall's main reason for not having published subscriber and visitor ranges had been that these would have made Indonesian domestic print media "look bad". These, after all, were still handicapped by having to comply with censorship regulations.

inhibitions in directly contacting and technically cooperating with him, and particularly upon seeking his assistance in various practical matters. [17]

The safest, most passive way of gaining access to news and information on the Internet, even safer than passive membership in mailing lists, was visiting homepages providing news. The possibly first "Indonesian Homepage" on the internet was set up in 1994 by Budi Rahardjo at the University of Manitoba in Winnipeg (http://www.cc.umanitoba.ca/indonesian/, later moved to http://indonesia.elga.net.id/) (Rahardjo 2001). Approximately at the same time, March 1994, an "Indonesian Homepage" was set up at the University of Stuttgart (http://www.uni-stuttgart.de/indonesia/index.html) by Roby Nataatmadja (priv. comm.). In October 1994, a third Indonesian homepage was opened at the University of Tasmania by Yos Ginting (priv. comm.).[18]

A futher step was Roby Nataatmadja's decision to refunction his existing Indonesian homepage in Stuttgart into a news portal by starting *Indonesia Daily News Online* at that site in August 1994 (later placed at http://www.indo-news.com/). Fresh news items were placed on a daily schedule, while items of the previous days were kept accessible for a week. This combined the anonymity of linking to a Web site with accessing news information that could otherwise only to be acquired by subscribing to mailing lists.

Shortly after that, John MacDougall's *Indonesia-L* messages were made accessible for two weeks at the *Indopubs* Homepage (http://www.indopubs.com/). This proved to be a so much more efficient mode of supplying the latest news on Internet, that *Indonesia-L* stopped dissipating its messages as emails after April 7,1997, and only still offered them on the *Indopubs* WWW portal (MacDougall 1997). The popularity of the site was so great, that Roby Notoatmadja mirrored the messages (though not always all of them) at his above-mentioned Stuttgart portal.

Budi Rahardjo included a *Berita Indonesia* news index on his Indonesian site at University of Manitoba. The Royal Institute of Anthropology (KITLV) in Leiden placed *Indonesian Daily Reports* on a gopher[19] (gopher://oasis.leidenuniv.nl/11/.kitlv/.daily-report) which gained considerable popularity. Syafedi Syafei developed his *Jendela Indonesia* site running since October 5, 1995, at the Illinois Institute of Technology, Chicago. It hosted a mailing list and news archive which originally catered to university and student matters. But from 1997 onwards it too became a much frequented portal for non-censored news, including material from *Apakabar/Indonesia-L* (Tangkar, n.d.)

As the feeling of urgency for reform grew, the number of news providers on the net increased. Gordon Bishop operated a very productive news service, *Joyo News Service* (Joyo@aol .com, or JoyoNews@aol.com, later joyoindonews@aol.com),[20] that supplied a number of news mailing lists. A number of new lists were launched (particu-larly at Egroups.com, that was taken up in January 2001 into Yahoogroups.com) hosting discussions or forwarding news items (e.g. from *Apakabar/Indopubs* or from *Joyo*), such as *Berita-Bhinneka*, *Berita-Indonesia*, *Indo-Chaos*, *Indonesia-Forum*, *MimbarBebas*, *Re4masi*, *ReformasiTotal*, *Revolusi-Damai*, only to mention the ones I knew.

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[17] Concluded from passages in Samik-Ibrahim (1996–2001c), Rahardjo (2001), Roby Nataatmadja (priv. comm.). The interpretation is mine.

[18] The two latter are apparently no longer operative. My own humble Web site (originally http://paradox.rz-berlin.mpg.de/, meanwhile http://w3.rz-berlin .mpg.de/~wm/wm6.html) was only set up in 1995.

[19] Gopher was a document retrieval system with networking protocol that permited reading straight texts (without font style or size variation, and without pictures) on the World Wide Web.

[20] See Harsono (2001a).

So far, we have considered discussion lists and news lists, or more usually combinations of these. Whereas discussion contributions typically originated from the respective sender, news contributions on these mailing lists were merely forwarded. They ultimately originated either from the conventional press, or sometimes from NGOs. As Harsono (2001b) indicated, the Internet itself was not a news source in the journalistic sense, but a transmitter of journalistic work. This seemed at first to be the Achiles heel of Internet news supply. Besides a few inputs from NGO-s, the news items either originated from the domestic press that was subject to stringent censorship, or from the international press that the regime could declare biased or accuse of reflecting ulterior motives.

Only two types of genuine investigative journalism escaped this dichotomic scheme. The one was press media which had been prohibited by the government, and then moved into the Internet. The most celebrated case involved the flagship of Indonesian journalism, Goenawan Mohamad's *Tempo* weekly news magazine which was forbidden in 1994. In 1996 it reappeared online in unimpaired journalistic quality as *Tempo interaktif* (http://www.tempo.co.id/). A similar history is that of *Detikcom* (http://www.detik.com/) which went online in July 1998 after its print precursor *DeTIK* was banned in 1994. As online site it has become Indonesia's largest portal, with reportedly around 200,000 individual users by early 2002 (Agrakom n.d.-a).

Besides the licensed press, to which *Tempo* and *DeTIK* had belonged before being banned, there were editions of the alternative press with ostensibly "limited circulation". One of the most influential of these, *Forum Wartawan Independen* of the AJI (*Aliansi Jurnalis Independen* 'Alliance of Independent Journalists'), was banned in March 1995, but reappeared in June 1995 as *Suara Independen* (Stanley 1996). It also distributed over the Internet, and was echoed in *Apakabar/Indonesia-L* (Harsono 1996).

The second type is even more remarkable. As early as in September 1989, Bonar Tigor Naipospos with a group of some 40 students at institutions in Jakarta, Bandung, and Yogyakarta set up the NGO widely known by the acronym PIJAR (*Pusat Informasi dan Jaringan Aksi untuk Reformasi* 'Information Center and Action Network for Democratic Reform'). It published the periodical *Kabar dari PIJAR*, but mainly made news of itself by public actions in defence of victims of injustice. Many of its activists, including the founder, were prosecuted and placed for many years in jail (PIJAR 1995). In 1997, *Kabar dari Pijar* went online as *KdP-Net* (<kdpnet@activist.com>, via <kdp-net@sparklist.com>, or directly; also sometimes <pijar@usa.net>). Besides being mirrored at the Indonesian homepage in Stuttgart (PIJAR 1997), their directly investigated news items were echoed on many portals and lists, and reached particularly wide distribution through *Apakabar/Indopubs*.

Another remarkable provider of original news of this type was the enigmatic *SiaR*. This was a clandestinely operating group of some professional journalists associated with ISAI (*Institut Studi Arus Informasi* 'Institute for Studies on Free Flow of Information'), led by Stanley Prasetyo with full support of Goenawan Mohamad and Andreas Harsono; amongst the dedicated members of the secret team were Tedjabaju Basuki, Togi Simanjuntak, Bimo Gendeng, Aris Santoso, Eri Sutrisno, Irawan Saptono, Oki Satrio (Stanley Prasetyo, priv. comm.). Apparently maintaining contacts to sympathizers till relatively high up in the establishment, they could deliver particularly exposing scoops.

The underground journalist team operated since early 1996 as *Pipa*, and from August 1996 onwards as *SiaR* <SiaR@mole.gn.apc.org>, cooperating with John MacDougall's *Apakabar*. On May 25, 1998 it moved to a Melbourne-based provider as *SiaR News Service* <siar@minihub.org>. Having produced a steady stream of daily news

items providing intimate insight into developments through the height of *Reformasi*, echoed on *Apakabar*/*Indonesia-L* and numerous other lists and portals, it only stopped operations on May 22, 2001.

As a result of the closure of the weeklies *Tempo*, *DeTIK*, and *Editor* in 1994 and subsequent government crackdowns on journalists, compelling editors to fire all journalists that were not in the compulsory official jounalist association PWI (*Persatuan Wartawan Indonesia* 'Association of Indonesian Jormalists'), there were many unemployed journalists. These moved to the alternative press, into the underground, or to the Internet (Harsono 1996). Not only was the Internet there to bring the uncensored news to the people, the regime had also seen to it that an army of professional journalists had nothing better to do than to feed it with the fruits of their investigations.

This situation lasted through the most exciting years of the struggle for *Reformasi*: the ransacking of the oppositional PDI headquarters by the regime on July 27, 1996, the beginning of the monetary crisis in late 1997, mysterious abductions of activists, killing of Trisakti University students, the marauding of Sino-Indonesian shops and rape of Sino-Indonesian girls and women, finally leading to the student occupation of the parliament and Soeharto's resignment in May 1998, then the general elections of June 7, 1999, the behind-the-screen manipulations at the election of the president in October 1999, the tenacious resistance against democratization by diehard elements of the former regime, and ups-and-downs of Abdurrahman Wahid's presidency.

A complex of homepages, mailing lists, and news portals was on one side providing a medium for journalists and NGOs to report what they saw, and for a vocal segment of society to express what they thought of that, and on the other side providing access to a wide scope of non-censored information, commentaries, and opinions for a many times larger part of the population. Messages did not stop at the viewing screen, but got printed out, to often be multiplied on copying machines for further dissipation. Harsono (1996) describes protesters at the ransacked PDI headquarters distributing printouts of news reports from *Apakabar*/*Indonesia-L*, and faxing them to provincial offices where the non-censored messages were plastered on walls. Children selling newspapers on the streets sold hard copies of downloaded Internet news at low prices (Basuki 1999). The popularity of the printouts was enormous:

> "Recently, security officers temporarily arrested two children selling photocopies of downloaded material at a railway station. To the surprise of the children, the army soldiers took the copies for their own purpose.
>
> White-collar workers downloaded the alternative news or pamphlets from their office's access to the internet and distributed that among themselves. The photocopy operators stole some copies and brought them to friends. They all brought the material home and then disseminated it to neighbors. The neighbors would give the copies to relatives. Again and again the news spread like a bushfire in the middle of the dry monsoon and, combined with the work of advocacy NGO activists, it burned the hearts of the people." (Basuki 1999).

Apakabar had since the very start become the hub of the entire complex. All important items somehow found their way into *Indonesia-L* (that is to say, thanks to John MacDougall's tirelessly toothcombing all the potential Internet source sites), and items on *Indonesia-L* would in turn reappear on various other lists and portals. But its role went far beyond being the epicenter of a network that was sidetracking the regime's censors.

In May 1993, Tapol <tapol@gn.apc.org>, the human-rights organization set up by Carmel Budiardjo for the freedom of Indonesian political prisoners, posted an appeal on *Apakabar*, protesting against the murder of the female labor activist Marsinah (Tapol 1993). In a short time, the fax machines of the Indonesian Ministry of Labour and other offices were jammed with hundreds of sheets of protest from around the world.

> "This event dramatically changed Marsinah, a young and unknown village
> girl from East Java, into a workers' heroine known worldwide."
>
> (Basuki 1999).

Then came 1996, the year cyberspace opened up for Indonesian society, that coincided with the year of the June 27 violence against the PDI headquarters. Indonesian students, NGOs, and journalists marked a new era by utilizing the Internet to speed up the downfall of a corrupt regime (Basuki & Prasetyo 1998, Basuki 1999).

At the "consumer end", enthusiasm for the medium of Internet reached unprecedent heights. Thus, at the time of the attack on the PDI headquarters in July 1996, a sharp increase in frequency of visits to the Indonesian homepage in Stuttgart led to a crash of the university server (Johnson Chandra and Roby Nataatmadja, priv. comm.).

In March 1998, *Apakabar/Indonesia-L* was feeling the strain of the heightened Indonesian Internet activity, and John MacDougall was even compelled to introduce some restrictions because the portal and list administrator could no longer keep up with the incoming flood of mails (MacDougall 1998).

In May 1998, at the time of student occupation of the parliament building and subsequent resignment of Soeharto, frequency of visits at the *Jendela Indonesia* portal caused the server of the Illinois Institute of Technology to crash again and again. The head of the computer center, Michael Hites, seriously considered closing down *Jendela Indonesia*, but realizing that frequency of use was actually demonstrating its usefulness, and finding that the Indonesian movement for democracy deserved to be supported, he decided instead to invest $35,000 to step up the server's efficiency (Tangkar n.d.).

4. Was that All?

One short-term consequence of Soeharto's resignment in favour of B.J. Habibie was the lifting of censorship on the press. The interim new president made consistent use of his newly acquired powers, and acted in agreement with his commitment to free flow of information as one of many conditions for the smooth functioning of an industrial economy, by lifting the censorship.

Under these circumstances, the conventional press rapidly regained its attractivity as source of information and medium for the meeting of opinions. The Internet had indeed never replaced journalism proper (Harsono 2001b), but conveyed more efficiently the conventionally investigated products of real-world journalism to a wider public.[21] Soeharto's censorship had artificially increased the role of Internet complementarily to the narrowed freedom of operation of the handicapped conventional media.

But the lifting of censorship did not just reduce the role of the Internet back to that of extensions of conventional media. It at first also seemed to make special mailing lists and news portals operating either underground or abroad redundant as well. It became

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[21] It is furthermore unsensitive to reliability of textual contents, and is therefore, alas, just as efficient and intrepid in dissipating hoaxes and "spam" as it is in distributing professionally investigated news reports. Albeit, paper too of course has been known to be notoriously tolerant.

quite normal for newspapers, magazines, radio and television stations to have homepages functioning sometimes as quite elaborate portals, and some even operated mailing lists or other services (e.g. archives, search facilities). In short, they were now in the position to run their own channels on Internet.

Consequently, some of the Indonesian homepages abroad closed down (e.g. Yos Ginting's at the University of Tasmania, subsequently also Roby Nataatmadja's in Stuttgart), those featuring news portals now closed this feature (e.g. Budi Rahardjo's originally at U. Manitoba, now at Elga.net). Journalistic clandestine providers of news reports such as *KdP-Net* and *SiaR News Service* stopped operations too. Many of the former Egroups mailing lists, meanwhile Yahoogroups, also became inactive. Table 6 provides what may seem as a quantitative picture of the dynamics of loss of interest of individual news contributors towards posting on the Internet in the example of *Indonesia Forum* (http://groups.yahoo .com/group/indonesia/):

Table 6. Monthly number of postings on *Indonesia Forum* mailing list that ended operations April 5, 1999.

Year	1998							1999				
Month	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
postings	950	1023	918	530	257	314	167	279	135	59	5	0

A variety of the same predicament was experienced by the once very popular spontaneous discussion list *IndoChaos* (http://groups.yahoo.com/group/indo_chaos/). It at first showed a similar tendency as above, only with 6 months delay. But then the list was taken over mid December 2000 by commercial advertizers as shown on Table 7.

Table 7. Monthly number of postings on *IndoChaos* mailing list. Italics indicate that commercials and "spam" exceeded news or discussion inputs in that month.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1998								122	291	446	690	283
1999	289	309	293	234	212	215	169	155	417	78	55	27
2000	36	28	39	67	35	65	67	96	30	10	14	*11*
2001	*22*	*23*	*14*	*34*	*56*	*8*	*10*	65	*318*	*1379*	*382*	*53*
2004	*53*	*57*										

The dramatic spike around October 2001 resulted exclusively from repeated identical inputs of a limited number of commercials. This mailing list has since then remained a collect bin for commercial spam. Of the 57 inputs in February 2004, 48 were advertizements of one and the same car rental. The remaining 9 inputs were also either commercials or spam.

And then the flagship of the Indonesian Internet *Reformasi* saga, *Apakabar/Indopubs*, was forced to disactivate *Indonesia-L* mailing list on February 8, 2002 (MacDougall 2002b). It was a sad moment which invited a stream of farewell messages that practically filled up the list in its last days. The closure seems, however, to have been conditioned not by slackening interest from the Indonesian cyber-public, but by financing problems.

The situation was aggravated by the temporary collapse in the e-business market. In Indonesia too, after a similar euphoria as elsewhere in the world, e-business was hit

hard (Kurniawan 2001). Indeed, the problems seem to be closely related. E-business neither produces, nor does it even transport products to their ultimate consumers. It is merely a go-between, like mailing lists and portals in the news business. Even the simplest online-ordered piza pie cannot be downloaded via modem, but requires a flesh-and-blood deliverer, or at least a non-virtual mechanical one.

Nevertheless, the Internet itself had not only come to stay. In Indonesia too, net activity was apparently not showing signs of fatigue, but was actually on the steady increase. With regard to growth in number of Internet users in general, estimates of the Indonesian chamber of commerce and industry Kadin (*Kamar Dagang dan Industri*) was quite optimistic. As reported in the newspaper *Suara Pembaruan*, March 4, 2002, [22] it estimated the number of Internet users in coming years as shown on Table 8.

Table 8. Estimated number of Internet users in Indonesia by the end of each respective year according to the Chamber of Commerce and Industry (Kadin) in 2002.

Year	Number of users
2003	4,000,000
2005	8,000,000
2010	15,000,000

In the aftermath of Soeharto's 32-year authoritarian rule, startling deficiencies in national personnel resources became evident, conditioning an exasperatingly sluggish pace of return to democratic rule by law. How does a state burocracy function in a democracy; how does police and military secure law, order, and territorial integrity under rule by law; how does a judiciary work impartially, and independently from the executive; how does an executive go about actually handling existing problems instead of euphem-izing about them, or waiting for interested parties to make their highest bids; how does the body politic combine freedom with reason of state, political ambition with democratic consensus? Everything had to be learned again from scratch. A functionary in the ripe age of 45 in 1998 had been just 13 when Soeharto took over in 1966, and 6 when Sukarno invoked "guided democracy" in 1959.

In addition to all that, the shockwaves from the September 11, 2001, terrorist attack on the New York World Trade Center caught the Indonesian numerically largest Muslim community in the world unprepared. And before one managed to somehow mentally accommodate to it, there followed the Bali bombings on October 12, 2002.

The Internet had recommended itself in the years leading up to Soeharto's 1998 downfall as an invaluable source for a whole generation of Indonesians, both in quest for the truth that was being withheld from it, so too as medium for free exchange of opinions and for formation of political consensus. So in the aftermath of Soeharto's "abdication", when the country was rocked by interconfessional and interethnic violence, separatist movements, corruption and legal scandals, and on top of all that, underwent the intellectu-al turmoil of coming to mental grips with a crisis in the religious foundations of the com-munity, not only a bewildered public again turned to the Internet, but probably also many a functionary.

A number of discussion lists, news lists, news portals did not stop, but managed to remain in business. This is for example reflected by the movement in the monthly average

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[22] In an article titled *15 Juta Pemakai Internet di Indonesia*, and signed-off by *E-5*.

number of visits per day at *Isnet*'s homepage (http://www.isnet.org) as shown on Table 9 based on data for some months displayed at Isnet (2002, 2003):

Table 9. Monthly average number of visits per day at *Isnet*'s homepage.[23]

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2001					1466	1526	1666	1453	1460	1472	1482	1447
2002	2026	2133	2355							1098	2959	1368
2003	1464	1322	1405	1994	1659	1497						

Table 10 suggests a roughly similar tendency for presentation of news from Indonesia on the Internet on *Berita-Bhinneka* (http://groups.yahoo.com/group/berita-bhinneka/), a non-discussion list solely placing news items (often almost exclusively from *Joyo*), settling down to around 800 postings/month after a high in 2001-2002:

Table 10. Number of postings per month on *Berita-Bhinneka* mailing list.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1999	610	947	1052	822	767	971	994	1242	526	976	1311	833
2000	1013	832	1158	1203	952	676	982	1111	946	992	946	950
2001	1734	1670	1732	1720	1675	1564	1782	1635	1733	2591	1853	1216
2002	1609	1489	1633	1690	1729	1551	1586	1424	1266	1296	1157	1193
2003	1231	1073	865	700	833	783	873	850	856	793	585	653
2004	839	785										

The major English-language human rights, labour, and pro-democracy mailing list *Indonesia-Act* (at first indonesia-act@igc.org, since October 2000 indonesia-act@igc.apc .org, and since mid January 2001 indonesia-act@igc.topica.com) that had been initiated (apparently before April 1997) by Tapol, London, continues to operate at some 20–25 postings a day in March 2004. But though originally posting news items from various sources as well as NGO statements and occasional reader comments, it now likewise carries almost exclusively news items from *Joyo*.

The already established commercial news portal *Detikcom* (see above), already boasting around 200,000 individual users by early 2002 (Agrakom n.d.-a), now claims 19,324,829 individual users and more than 800,000 page-views per day (Agrakom n.d.-b), probably the most successful Indonesian news portal. The booming market for objective and impartial information that made this achievement possible also opened opportunities for new formations.

Laksamana.Net (http://www.laksamana.net/), jointly financed by Laksamana Sukardi (then Minister of State Enterprises) and Mochtar Buchori (professor of political development), apparently began operating in January 2000 during the difficult presidency of Abdurrahman Wahid. Under the editorial management of Keith Loveard since 2001, it has developed into an important source of free news on Indonesia for domestic as well as expatriate users (Tingle 2003).

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[23] Data for the blank slots remained inaccessible to the author.

Former political prisoners of the regime too have taken to the Internet. One news and discussion mailing list they initiated in 1999, that also boasts a substantial readership among exilees and foreign Indonesianists abroad is *Wahana* (<wahana@centrin.net.id>, since February 2004 <wahana-news@yahoogroups.com>). In March 2004 there were 12 to 20 postings a day.

The Germany-based *Nasional* mailing list launched in October 2001 (<nasional@ yahoogroups.com>, moved January 14–17, 2002, to <national@mail2.factsoft.de>), has developed into a major news and discussion list with mainly Indonesian subscribers (home and abroad), in several aspects resembling the old *Apakabar/Indonesia-L* list. Posting frequency shown on Table 11 very much resembles that on *Berita-Bhinneka* (see Table 10), inspite of very different kind and source of the postings.

Table 11. Number of postings per month on *Nasional* mailing list.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2001	—	—	—	—	—	—	—	—	—	96	362	580
2002	590[24]	518	717	806	715	632	714	1134	1092	1098	1180	1100
2003	1198	947	802	970	1287	775	780	729	555	574	542	558
2004	629	820										

In the light of this far from exhaustive overview of Internet information and discussion activity either surviving the downfall of the former regime, or newly formed afterwards, the involuntary close-down of *Apakabar/Indopubs* in February 2002 seems indeed premature. Some of the Indonesian subscribers moved over to a replacement list immediately started by one of them, named at first *Apakabar2002* (apakabar2002@topica .com and apakabar2002@yahoogroups.com), then renamed as of October 2002 back to *Apakabar* (apakabar@yahoogroups.com). As one can see in Table 12, the discussion continued with undiminished activity, but this "epigonal" *Apakabar* (after October 2002) is not as open as the original, the messages (archives) being accessible to members only.

Table 12. Number of postings per month on the "epigonal" lists *Apakabar2002* (February till September 2002) and *Apakabar* (October 2002 onwards).

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2002	—	454	1388	1638	1876	1784	1961	1067	1633	1490	1963	1406
2003	1105	909	1653	1361	1222	1855	2524	2402	2854	1699	1201	1385
2004	1812	1028										

The archives of the authentic *Apakabar* had once been accessible through a now defunct searchable gopher (gopher://gopher.igc.apc.org:2998/7REG-INDONESIA) and became a 'discovery' among Indonesianists as invaluable text corpus. Then a searchable Web site was set up (http://basisdata.esosoft.net/), presently hosted by the library of the Ohio University (http://www.library.ohiou.edu/indopubs/search/search.html).

Meanwhile, however, John MacDougall has apparently got the financial problems of *Indopubs* in order again, and has launched a new mailing list with a new project program in June 2003, in cooperation with Elizabeth Coville (Dept. of Anthropology, Hamline University, St. Paul, MN). It is a moderated multi-disciplinary Indonesian stud-

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[24] Sum of postings to the list at Yahoogroups till January 17, and at Factsoft.de since January 14, 2002.

ies list aimed predominantly at a scholarly readership, and aptly titled *Indonesian-Studies* (http://groups.yahoo.com/group/indonesian-studies). And as one can see in Table 13, it is steadily gaining momentum. In March 2004, the posting frequency increased sharply to *c.* 20 per day.

Table 13. Number of postings per month on the new *Indonesian-Studies* mailing list.

Year	2003							2004				
Month	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
postings	5	35	67	57	87	110	189	194	211			

4. Conclusion

The Internet seems to have come just in time to play a rare and unique part in the recent developments in Indonesia. Under particularly antagonistic and even conflagrative conditions it distinguished itself as an effective weapon that neither killed nor maimed, but functioned as an ideal venue of mediation that bridged the no-mans-land between irreconcilable parties.

Various segments of the community and individual persons were unwittingly drawn into a most unlikely alliance: a foster son of the authoritarian president, motivated by insights into demands of business in a modern industrial economy on technological progress and free flow of information; bright young IT scientists who, motivated solely by ambitions of professional perfection in their field of expertise, inevitably came into contact with free society in which alone the novel medium that so fascinated them could thrive; capital-strong business companies investing in Internet service providers and net-café chains; investigative journalists prevented by an authoritarian regime to legally follow the calling of their profession, and that in a country with a particularly proud tradition of journalistic dedication (see Harahap 1924, Tjokrosisworo 1958, Toer 1985); dedicated local and expatriate activists of NGO-s; students enjoying the privilege of studying abroad in a free democratic country; an army of nameless footfolk, boys selling newspapers, running errands to the office copying machine, plastering news printouts on walls, etc.; and last but not least, a Yank investing all his cyber-expertise and time, as well as his last buck, in an Internet news service with mailing list for Indonesia, that then found itself at the center of the Internet chapter of *Reformasi*.

There is probably much more to this than the simple listing of involved parties above at first reveals. But, going into that in detail would fully escape the the scope of this paper, so a few hints will have to suffice. It seems significant, for example, that the banned *Tempo* magazine went online as *Tempo interaktif* on the domestic commercial domain (i.e. as http://www.tempo.co.id/). One cannot help but gather the impression that the establishment was at difference with itself, and the Internet was providing an elegant way for it to do both: suppressing an effective press and tolerating it at the same time. An establishment that was confronted with "exploits" of vicious "rogue elements" of the armed forces that served as its own basis of power, shooting and kidnapping its own children, raping Sino-Indonesian girls, was at the same time suddenly motivated to lay bare these atrocities without having the courage to really face the consequences. The same economic growth that led to an accumulation of surplus capital wanting a profitable field of implementation, was also causing Internet providers and cafés to be such lucrative investment objects, and at the same time providing for that nameless army of footfolk bringing the printouts and copies of mailing list messages to their final consumers. Yet,

the primary investors would hardly have dared condone the activity that proceeded from their investments.

The Internet was like a wondrous gadget that was allowing these and other seemingly contradicting interests to move the carriage forwards while everyone was pulling in different directions. Unfortunately, the Indonesian establishment seems not to have been as prepared for the required reforms as establishments of many other nations in the West Pacific, and so an unfinished *Reformasi* is being drawn out endlessly in time. Under these circumstances, the Internet is continuing to provide its good services for this country.

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