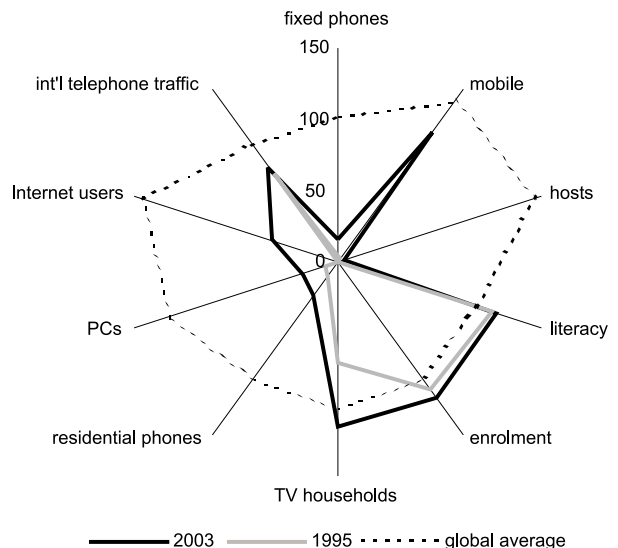


.ph

Philippines

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Source: *Monitoring the Digital Divide*. © Orbicom 2004

Overview

The Philippines continues its transformation into a knowledge-based economy with significant policy and regulatory developments. A new Commission on Information and Communications Technology was established in January 2004, and a new Optical Media Law that adds teeth to the effort to combat digital piracy came into force in February 2004. In addition, the National Telecommunications Commission (NTC), the regulatory body for the telecommunications and broadcast industries in the Philippines, has issued rules for WiFi, VoIP, and cellular phone number portability. It has got involved too in the administration of the “.ph” domain name. Significantly, the courts have also weighed in on ICT regulation with their rulings on telephone billings and a domain name dispute.

The government, as the single biggest ICT consumer, continues to move forward with its e-government efforts. Notable are its mobile government initiatives, an e-government fund and continuing progress of government agency websites.

The mobile phone industry remains the shining star of the Philippine ICT sector. Competition, innovation and the continuing Filipino love affair with the cellular phone have pushed mobile phone ownership to more than 25 percent of the population – six times higher than wired phone penetration.

Industries

The Philippines is proof that competition in the telecommunications sector leads to better and innovative services at lower costs. Before competition was introduced in the country in 1993, telecommunications services were the pits. In 1990, the Department of Transportation and Communication announced the National Telecommunications Development Plan 1991–2010, which targeted a teledensity of 2.4 by the year 2000 and 3.5 by 2010. But by 1998, a mere five years after the introduction of competition, the targets were

surpassed. Today, teledensity is at 10. In fact, currently there are more telephone lines than there are subscribers.

Even more impressive is the effect of a liberalised and competitive telecommunications market on the uptake of cellular phone services. The Philippines is among the countries with more cellular phones than fixed/wired phones. And this is not simply due to the deterioration of fixed/wired phone services. Between 1999 and 2002, the number of fixed/wired phones increased by 446,491, making the Philippines the ninth best performer in the Asia-Pacific region in terms of the absolute number of new lines for the period. However, in the same period, cellular phone subscribers increased by 11,366,250! This made the Philippines the fifth best in the Asia-Pacific region in terms of the absolute number of new cellular subscribers and seventh best in terms of percentage increase (at 399 percent).¹ At the end of 2003, there were close to 22 million mobile phone subscribers.²

Cellular phone services in the Philippines started in 1991 using analogue technologies. But analogue’s dominance did not last. Problems related to cloning and poor billing by service providers boosted the shift to 2G. By 1999, GSM was already the new standard in the market.

The shift to digital technology, the brutal competition for market share, and the 1997 financial crisis led to consolidation in the cellular marketplace. The five original cellular providers have been reduced to two: Smart Communications, which had 54 percent of the market by 2003, and Globe Telecommunications, which had 46 percent. In the middle of 2003, a new cellular phone provider, Sun Cellular, entered the fray offering lower-priced SMS and voice services.

Because of the intense competition for subscribers, the mobile service providers continue to extend their reach by opening new cell sites in remote areas. Smart claims that its 4,000 cell sites provide coverage to 80 percent of the entire archipelago.³ The providers have also been upgrading their networks with EDGE technology. Smart has announced that

it will continue rolling out more multimedia services over its EDGE network.

Widespread marketing of multimedia mobile phones in the consumer market was also seen in 2003. Subscribers, equipped with the latest models, are able to surf WAP sites, access websites via GPRS, and send image, audio and video files via MMS. But given the high cost of sending MMS messages, SMS is expected to remain the messaging service of choice for Filipinos in the foreseeable future.

SMS was introduced in 1994 by Globe as a free service. It has since become an important source of revenue for cellular service providers. A 2003 Pulse Asia Survey reveals the depth of the Filipino love affair with SMS: 94 percent of Filipino cellular phone users send text messages via SMS, and an amazing 70 percent of these texters send as many as 10 messages a day, with another 13 percent sending 11–20 messages per day. This means that there are almost 21 million texters in the country with 14.5 million of them sending as many as 10 messages each per day and another 2.7 million sending 11–20 messages per person a day!⁴

A recent innovation introduced by cellular service providers is over-the-air reloading or topping up of prepaid credits. This service was launched in the Philippines in mid-2003 by Smart through its product dubbed “e-load”.⁵ In the past, prepaid users (comprising approximately 95 percent of mobile phone users) had to buy plastic “cell cards” with values of Php 300–1,000 (around US\$5.5–\$18) to load credits into their mobile phones. These cards are available in telecommunications shops and convenience stores. With e-load, all a subscriber needs to do is go to a retailer and state his or her telephone number and the amount to be topped up.

After only four months, e-load transactions exceeded one million a day. It had become the preferred way to top up credits – two-thirds of top-ups by prepaid subscribers were done via e-load. What makes e-load popular is not just convenience but the introduction of smaller top-up amounts. Before e-load was introduced, the smallest credit amount was Php 300. Today, Smart subscribers can buy credit amounts as low as Php 30, 60 and 115. The lower amounts not only help existing subscribers to overcome a significant barrier in paying for their credits, they also reduce the barrier for new subscribers, particularly those in the low-income brackets, who make up the greater part of the population.

Another innovation introduced into the market is dubbed “pasa-load” (pass a load) or “share-a-load”. The service allows subscribers to transfer mobile phone credits directly to another subscriber within the same telephone network. Parents can now top up the phone credits of their children from their own mobile phones. Friends are able to give or lend each other phone credits to send SMS messages or make calls. But pasa-load/share-a-load is not just about convenience, it is also creating a new “currency” among youths. For example, students who need cash can “sell” a portion of their prepaid credits (probably paid for by their parents via e-load) to any one of their friends in the same telephone network with pasa-load.

In 2004, mobile service providers introduced cash services. Smart’s “cash padala” (send cash) allows subscribers to send “money” to another Smart subscriber via SMS. The “money” can be redeemed at any Smart partner office or outlet. This service specifically targets overseas Filipinos who send remittances to their families in the Philippines via banking and non-banking channels. On the other hand, Globe’s “G-Cash” lets subscribers pay for purchases in participating stores via SMS. Prepaid subscribers can buy credits from Globe’s authorised dealers.

Policy and regulatory environment

A number of important changes in the policy and regulatory environment affecting ICT development were implemented in 2003 and 2004.

Commission on Information and Communications Technology (CICT)

Foremost was the creation of CICT as the government’s primary policy, planning, coordinating, implementing, regulating and administrative entity to promote, develop and regulate integrated and strategic ICT systems as well as reliable and cost-efficient communications facilities and services.⁶ CICT has the mandate to carry out the following tasks:

- Ensure a policy and legal environment that will promote a level-playing field and healthy competition, public and private sector partnerships, strategic alliances with foreign investors, balanced investments between high-growth and economically depressed areas, the growth of ICT industries, and broader private sector participation in ICT development.
- Foster and accelerate the convergence of ICT facilities.
- Ensure universal access and high-speed connectivity at a fair and reasonable cost, as well as the provision of services in areas not adequately served by the private sector.
- Foster the widespread use of emerging ICT.
- Establish a strong and effective regulatory system that will ensure consumer protection and welfare as well as protect the privacy and confidentiality of personal information.
- Promote the development of ICT expertise in the country’s human capital.
- Encourage the use of ICT in support of the development and promotion of the country’s arts and culture, history, education, public health and safety, and other sociocivic causes.
- Sustain the development of the nationwide postal system as an integral component of the overall development of ICT in the country.

CICT will take on the ICT-related functions of several government agencies, including the Department of Science and Technology and the Department of Transportation and Communication.

President Gloria Macapagal-Arroyo signed an executive order in January 2004 creating CICT as an interim measure. It is hoped that a Department of ICT, which the ICT private sector has been lobbying for since 1992, will soon be created through legislation.⁷ Prior to CICT, the Information Technology and E-Commerce Council was the highest policy-making body on ICT concerns.

Optical Media Law

President Arroyo signed into law Republic Act No. 9239 or the Optical Media Law in February 2004. The law imposes strict rules for the manufacture, reproduction and sale of optical discs with the intention of deterring digital piracy.⁸ It also provides for the creation of the Optical Media Board, which will issue licences for the import, export, acquisition, sale or distribution of optical media, manufacturing equipment, parts, accessories and manufacturing materials. The law specifies measures for regulating the use of optical media to distribute pirated material. It further makes clear that the measures are meant to regulate uses “for commercial purposes”, taking exception to uses for personal or non-commercial purposes.

While applauded by the mainstream entertainment industry, the passage of the law has raised some concerns among the ICT community. Writing to the Philippine Cyberspace Review email list of IT professionals, Roy Cruz, a software developer and independent songwriter, raised the concerns of independent filmmakers and songwriters about the possibility of encountering legal hurdles when distributing their works.⁹ The more telling critique of the law is articulated by Leo Magno, an ICT journalist. Magno points out that, by focusing on the regulation of the medium – the optical disc – in combating piracy, the law reflects “the entertainment industry’s fear of technology and how digital content can be reproduced with impunity. It is this fear, more than the fear of losing what they claim to be millions of dollars or pesos in potential revenue, that fuels their perceived immediate need to enact a tougher law on digital media. . . . It is the fear of losing control. It is the fear of consumers, practicing their right to fair use, to utilize technology to organize and file their digital assets on their own.”¹⁰ He counsels that “what the local media industry needs to do now, in the face of technological change, is to come up with innovative sales and distribution methods instead of trying to stop a tsunami of technological waves”.

Court rulings on ICT issues

In June 2000, NTC issued a memorandum detailing rules and regulations on billing for telecommunications services.

Among other things, the rules included strict schedules on delivery of billing statements, grace periods for paying bills, and verification of the address of each buyer of prepaid SIM cards. The memorandum also sought to change the unit of billing for cellular phone calls to six seconds per pulse instead of one minute per pulse. The various telecommunications providers affected by the rules filed a joint appeal asking NTC to reconsider. The appeal was later elevated to the Supreme Court. In a decision issued in November 2003, the Supreme Court decided in favour of the providers.¹¹

Another major court ruling relates to the first and most controversial domain name dispute in the country. In 2000, the local telecommunications giant PLDT filed a Php 1.35 million (approximately US\$25,000) lawsuit against Gerry Kaimo alleging that he was violating the company’s intellectual property over the PLDT trade name by publishing a website with the domain name *pldt.com*. Adding salt to PLDT’s wound (which uses the domain name *pldt.com.ph*), Kaimo had also published material critical of PLDT on his website. Unfortunately for PLDT, the court found that “PLDT has not been able to show its entitlement to the relief prayed for”.¹² An appeal can be expected from PLDT.

WiFi regulation

Unlike in the USA and other developed countries, in the Philippines a licence is required for using the WiFi frequency. In the first half of 2003, Globe Telecommunications started deploying WiFi hotspots in the country. In June the same year, an NTC official was quoted as saying that commercial WiFi services, and even Bluetooth use, were still “illegal” in certain regions in the Philippines.¹³ This claim stemmed from the fact that the frequency used for WiFi was already licensed by NTC to utility firm Manila Electric Company (Meralco) as far back as 1993. Meralco uses this frequency for internal communication and supervision of its facilities in Metro Manila, Central Luzon and Southern Luzon.

Following public forums that NTC conducted in a bid to determine the best resolution for the use of the frequency, regulations were issued governing WiFi use in the Philippines that effectively lifted the ban on the use of the 2.4-GHz frequency. The guidelines allow private entities to set up non-profit WiFi networks for indoor use. Commercial deployment, on the other hand, will require a licence from the regulatory agency. Furthermore, all users of outdoor WiFi equipment, whether commercial or not, are required to secure appropriate NTC permits and licences.¹⁴

Currently, there are two large commercial WiFi service providers. Airborneaccess lists 46 hotspots that are mostly in the Metro Manila area and two in North Luzon, while GlobeQUEST Wiz has 18 hotspots in Metro Manila, Davao and Cebu. Both service providers installed their hotspots in public places such as airport lounges, Internet cafés, restaurants, hotels and schools.¹⁵

Unfortunately, WiFi has not been used by NGOs and civil society groups for developmental purposes as in Indonesia. Current regulations, particularly the need to secure NTC permits and licences for outdoor equipment, will probably hamper the deployment of WiFi for developmental purposes.

VoIP regulation

VoIP is a controversial issue in the Philippines. Telephone companies are wary of its potential to reduce their revenues, while ISPs are excited over the possibility of increased revenues by offering the service. Presently, the government seems to favour the former. NTC has released draft guidelines ruling that only telecommunications companies will be allowed to offer VoIP services.¹⁶ ISPs, which are categorised as value-added service providers, will not be allowed to do so. Private companies are allowed to use VoIP only internally and not as a chargeable service outside the company.

A nationwide Internet café chain, Netopia, has been offering international calls via VoIP even before the NTC guidelines were written. International calls made through Netopia are charged only US\$0.10 per minute in contrast to US\$0.40 per minute for calls made using mobile or land-line phones.

Domain name registration

The increasing significance of the Internet in social, economic and political life has made the administration of the “.ph” registry an important issue. There has been only one registry right from the start. It was headed by Joel Disini, who became the registrar by the simple fact that he was the first person to apply for the job. Over the years, people had become dissatisfied with the way Disini was managing the registry. Some complained that registration for “.ph” domain names was more expensive than for the domains “.com”, “.net” and “.org”. Registering a “.ph” domain name costs US\$70 for two years – almost three to four times the price of registering a “.com” domain name. The issue came to a head when Disini announced that he would market “.ph” to telephone companies the way that “.tv” of Tuvalu was being marketed to television companies.

The controversy generated by Disini’s plan brought the government into the picture. After numerous consultations with all relevant stakeholders, the government announced in 2003 an alternative arrangement to govern the registry. The new guidelines stress that the “.ph” domain is a national property and that the government has jurisdiction over policies and decisions related to the administration of the Internet domain.¹⁷ NTC was given an “oversight” function over the “.ph” domain name registration. Disini, however, retains the registry and remains the registrar. But to ensure that all relevant interests are protected, the government, with the consent of Disini, has created an advisory board to the registrar.

Number portability for cellular phones

Early in 2004, Congress urged NTC to draw up new regulations that would allow cellular phone subscribers to keep their mobile phone numbers even when they switch operators. This facility, known as number portability, has been in place in Hong Kong since 1999. The Federal Communications Commission also recently approved a number portability scheme for the USA.

However, a study by one of the mobile phone operators indicates that number portability may not be an important issue in the Philippines.¹⁸ The findings show that number portability has a larger impact in countries where the postpaid subscriber base is more dominant than the prepaid base, which is not the case in the Philippines, where about 90–95 percent of cellular phone owners are prepaid subscribers. Furthermore, Philippine cellular subscribers have virtually no loyalty to operators. A number of them have two cellular phone numbers, one from each provider.

E-government

A June 2004 study of the Congressional Oversight Committee on eCommerce examined the state of e-government in the Philippines by looking at the national government agencies’ use of the Web, email, and SMS-based services to serve the public.¹⁹ It shows that, of the 24 departments and constitutional bodies assessed, all of them have websites that are linked to the government portal (<http://www.gov.ph>). All these websites provide basic information about the agencies, 83 percent allow the downloading of forms, 79 percent also serve as a channel for public complaints, 75 percent provide information on procedures, and only one site allows financial transactions.

Almost all the 24 agencies studied (96 percent) have email access, and 79 percent of them publish the email addresses of senior officials on their websites. But given the low level of Internet penetration, very few people are able to avail themselves of this opportunity to contact government officials via email.

A more promising development in terms of citizen-to-government (C2G) communication is the use of SMS by the government. Over half of the agencies (54 percent) provide SMS-based services that act as a channel for citizens to register complaints (42 percent), provide information (25 percent), and serve as a direct line of communication with the head of the agency such as the secretary or minister. An example of such an SMS-based service is Text117, which is a channel for Filipinos to report crime and other illegal activities to the police by text. Text USOK (Smoke) is a conduit for citizens to participate in the government’s anti-smog campaign by reporting, via SMS, smoke-belching vehicles plying the streets of Metro Manila (see sidebar).

Government websites

Government websites are the bright spots of the Philippine e-government initiative. In the 2003 UN Global E-Government Survey of 173 of the 191 UN member states, the Philippines ranked seventh overall in the web measure index. The other countries in the top ten were (1) the USA, (2) Chile, (3) Australia, (4) Mexico, (5) UK, (6) Canada, (8) Singapore, (9) Denmark and (10) Sweden.²⁰

Aside from the UN survey, the 2003–2004 networked readiness index of the World Economic Forum gave the Philippines a favourable rating for its government’s online presence, ranking it 49th out of 102 countries. In terms of the sophistication of online government services, the Philippines was ranked at 20th place. Significantly, it was one of only eight middle-income countries that qualified for stage 3, or transaction stage, in the World Economic Forum’s Survey of National Government Websites.²¹

It is not surprising that the Philippines rates well in international surveys of government web presence. President Arroyo gave a directive in April 2002 requiring all government agencies to reach at least stage 1 of the UN–ASPAA (American Society for Public Administration) five

stages of e-government. In July 2003, the National Computer Center (NCC) released a new set of guidelines for government compliance to the Electronic Commerce Act that aim to guide government agencies towards stages 2 and 3 of the UN–ASPAA prescribed standard.

NCC also monitors the websites of government agencies. Its most recent report states that 99.5 percent (373 out of 375) of the national government agencies were online as of end 2003. Of the 373 agencies with websites, 122 or 32.7 percent were in stage 1 (emerging web presence), 157 or 42.1 percent in stage 2 (enhanced web presence), and 91 or 24.4 percent in stage 3 (interactive web presence). The remaining 3 agencies were in stage 4, or transactional web presence, which means that users are able to make complete transactions via the website. These agencies were the Bureau of Internal Revenue, the National Statistics Office and the Securities and Exchange Commissions. No agency websites were in stage 5 – fully integrated web presence.²²

In September 2003, NCC reported that the local governments in all the country’s 79 provinces, 115 cities and 1,500 municipalities have a web presence. This is a significant development as the same agency reported that in June 2002 only 51 percent of provincial and city governments

Mobile government in the Philippines

M-government is a subset of e-government. It is the use of mobile devices and/or wireless technologies to improve government operations and to empower citizens. The advantage of m-government over traditional e-government is that it makes public information and government services available to citizens and officials anytime, anywhere. In developing countries where there are more cellular phones than Internet connections, most citizens would experience the benefits of e-governance through m-government.

As the Philippines is the self-proclaimed SMS capital of the world, it is not surprising that SMS or texting would find its way into governance. As in other parts of the world, SMS is being used to improve communication between government and citizens as well as to engage the citizenry in governance. It is estimated that over half of the Philippine government departments and independent commissions provide SMS-based services.

Citizens who used to send mail and telegrams to the President through the post office can now send SMS messages to President Gloria Macapagal-Arroyo through a service called TXTGMA. Overseas Filipino workers and their relatives in the Philippines can seek assistance from the Department of Foreign Affairs through TXTDFA.

To encourage citizens to help in the battle against crime, the Department of Interior and Local Government has set up a centralised emergency and crime-reporting service called Emergency 117. Metro Manila residents can report crimes and emergencies, as well as make complaints about abusive law enforcement officials, by calling or sending SMS messages to 117.

SMS is also in the service of environmental protection. Citizens can bring their concerns to the Department of Environment and Natural Resources through a service called DENR@YourService. An NGO in partnership with the Land Transportation Office is asking citizens to help enforce the Clean Air Law by reporting smoke-belching vehicles on the streets of Metro Manila via SMS.

SMS is also deployed in public health services. During the SARS epidemic, the Department of Health established a SARS hotline for people who wanted to know more about the disease or make a report about it.

The Department of Education and the Civil Service Commission have deployed SMS to improve the internal operations of the government. Their respective SMS-based services are good examples of how m-government can be used to involve various sectors of the society in governance. The DETxt service was introduced in February 2003 as a new channel of direct communication between the various stakeholders of the education sector with the Secretary (Minister) of Education. It is also used to fight corruption in the Department of

and 3 percent of municipal governments had websites. In 2004, NCC's target was to upgrade local government websites from static to enhanced or interactive web presence.²³

Aside from this initiative for e-governance in local government units (or eLGU), NCC is developing web information systems, including the real property tax system, the business permits and licensing system and the treasury management systems. This eLGU initiative is not only an effort to promote a common standard in e-government for local governments, it is also a big boost to the free and open source software movement in the country as NCC is developing these systems using open source technology. NCC's eLGU efforts received a boost when they were allocated Php 100 million from the e-government fund.²⁴

E-government fund

In 2003, the Department of Budget and Management, in compliance with an executive order from the Office of the President, created the e-government fund. Under the 2003 national budget, the e-government fund amounted to around Php 4 billion. Close to half of the amount has been allocated

to eight priority projects of various government agencies. The projects earmarked include a portal for the more than three million overseas Filipino workers, a national business registration system, automation of import declaration, a science and technology e-library and an e-government portal. Although the e-government fund accounts for only 0.08 percent of the national budget, it supports only projects that involve two or more agencies.²⁵ The funds for the computerisation projects of national government agencies remain within each agency's control and are not part of the e-government fund.

E-elections

In 1997, the Automated Election Law was signed, which required the Commission on Elections (COMELEC) to conduct massive computerisation of its voting and registration system.²⁶ In the following year, COMELEC conducted partial automated elections in the Autonomous Region of Muslim Mindanao as a pilot test of computerised elections.

In 2003, COMELEC invited bids for a computerisation contract to install a nationwide system in time for the national elections in May 2004. The bidding and awarding of the

Education. A good example is its deployment in the Text Book Count Project, which was implemented to ensure the delivery of 37 million textbooks and teachers' manuals worth Php 1.3 billion. The elementary and high school textbooks and manuals are to be distributed within 5,623 school district offices all over the archipelago. The project was jointly developed and implemented as a partnership between the Education Department, civil society organisations and the private sector (book publishers and freight forwarders) to prevent "ghost", or non-delivery of textbooks. SMS has become the major communication line of the parties involved in the project. Ordinary citizens are also able to report to DETxt anomalies in textbook delivery. This texting service has emerged as the preferred communication channel because it allows fast exchange of information and thus results in immediate action.

The Civil Service Commission (CSC) launched TXTCSC to provide citizens with a channel to complain, suggest, commend or inquire about CSC matters and any other government matters, giving them a weapon to fight against a corrupt and inefficient bureaucracy. TXTCSC seeks to become not only a text-based information service for the whole government but also an immediate response system at the service of the citizens. In its vision, if a citizen is not given proper attention in the course of transacting with a government agency, he or she can report the matter on the spot (via SMS) to CSC, which will then send a representative to provide the citizen with the appropriate assistance.

While its deployment in governance in the Philippines is perhaps the most extensive in the world, SMS is not being deployed in a number of critical areas. There are no SMS-based applications for m-transactions (like Norway's SMS income tax returns) and m-payment. Furthermore, using SMS for voting (like in local elections in the UK) has not been explored. In sum, while the Philippines receives high marks for encouraging citizen activism, there are still a number of important SMS applications that have not been considered which can facilitate citizen-government transactions and enhance citizen participation.

It is also worrying that there seems to be no government-wide m-government strategy. At present, each agency develops its own applications as it sees fit, and there is no central portal for all these services. Consequently, there are many different numbers for all these services, which may lead to confusion and frustration.

M-government in the Philippines has proven wrong the belief that citizens are unwilling to pay for government services. Filipinos are not only paying to get basic information needed to deal with the bureaucracy, they are also willing to spend money to bring their concerns before the appropriate officials.

project was controversial from the start. In January 2004, six months after the project was awarded and barely four months before the national elections, the Supreme Court ruled that COMELEC “awarded the subject Contract not only in clear violation of law and jurisprudence, but also in reckless disregard of its own bidding rules and procedure”.²⁷ It ordered that the election computerisation effort be stopped and the polls be reverted to manual counting.

This reversion to manual counting contributed to the agonisingly slow vote count in the 2004 presidential elections. But it is important to note that the Supreme Court questioned the credibility of the bidding process, not the automation of elections.²⁸ The computerisation of elections is high on the political agenda of President Arroyo.

Initiatives

The First Philippine Development Innovation Marketplace showcased the innovative development ideas of civil society groups. Out of about 1,800 submissions, about 100 ideas were selected and showcased during a two-day exposition. Among them were the Computer Education on Wheels and the Entrepreneurship for the Masses programmes.

The Bagong Henerasyon (New Generation) Foundation plans to set up a computer learning centre on wheels to provide free computer skills training in a formal school setting to out-of-school and out-of-work youths. The idea is to bring the school to the most remote and depressed areas in the country using a mobile computer laboratory set up in a container van. It will be equipped with 20 computers complete with the necessary teaching tools. The van will stay parked for five weeks in each location to train at least 300 youths in basic computer and livelihood skills. The training and certification will be provided by an established computer education centre.

In another initiative, the Let’s Go Foundation proposes to package audiovisual presentations and programmes on entrepreneurship in VHS tapes and VCDs. VHS tapes and VCDs are widely used even on remote islands in the Philippines. With the entrepreneurship videos, the foundation aims to instil an entrepreneurial spirit around the country, as well as equipping its audience with appropriate skills and knowledge required for becoming a successful entrepreneur.

The Philippine Center for Investigative Journalism – a pioneer in investigative journalism in the country with a record of exposing and fighting corruption in government – launched an information website called I-site (<http://www.i-site.ph>). The site provides information such as government structures, the assets of government officials, the family, businesses and other interests of bureaucrats, their legislative performance and other election-related facts. Original documents not ordinarily available to the public, such as government reports, are also provided.

A pioneering effort to use SMS in the development community is Tambuli Txt.²⁹ The Foundation for Media Alternatives, a Filipino NGO, developed Tambuli Txt to provide civil society organisations an SMS communication platform to help them strengthen their networks, enhance community building, and strengthen the social capital in the country. Tambuli Txt broadcasts development-related content using a system that allows simultaneous delivery of text messages (of 160–320 characters in length) in real time to very large numbers of recipients who have access to mobile phones. Messages are sent to a server and, upon editorial approval by designated content managers, are then transmitted simultaneously to the subscribed members of a particular group. This process is similar to the production of a newsletter for dissemination. The system is effectively an SMS newsletter. Subscribers are charged the normal value-added service rate for wireless content (Php 2.50 per message).

Trends

The fresh electoral mandate given to President Arroyo augurs well for the development of ICT in the Philippines. In her June 2004 inaugural speech as the 14th President of the Philippines, she identified ten goals that she hopes to achieve by 2010. Significantly, digital technologies and their widespread use are explicitly identified as necessary in reaching three of those goals, which are education for all children in computer-equipped schools, connecting the country through transportation networks and digital infrastructure, and automation of the election process.³⁰

Even if President Arroyo did not give prominence to ICT in her inaugural address, her past support for ICT development would still have given ICT-for-development advocates reason to cheer her continuation in office. In her first three years in office, Arroyo had been very supportive of ICT-for-development efforts, exemplified by her assumption as chair of the Information Technology and E-Commerce Council, the public–private body that formulated ICT policies in the country. As was noted earlier, she also created the Cabinet-level CICT as well as the e-government fund.

While support from the highest level for ICT initiatives can be expected, the precarious fiscal position of the government might negatively impact on ICT development. It is not unlikely that there will be reduced government expenditure for e-government projects, but the fiscal challenge can also be an opportunity to show how deployment of ICT can make a difference to revenue collection in particular and solving the fiscal crisis in general.

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