E-government and access to information

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Among the many tools being developed to fight corruption, there has been much focus lately on e-government – the use of communications technology like the Internet and mobile phones to open up government processes and enable greater public access to information. E-government includes the publication of information on a website so that citizens can download application forms for a variety of government services. It can also involve the actual delivery of services, such as filing a tax return or renewing a licence. More sophisticated applications include processing on-line payments.

In developed countries, these services are offered in a self-service mode through the Internet, often via portals that are a single point of interaction between the citizen and a broad range of departments. In developing countries, on-line service counters may operate in a department offering services related only to that department. In some countries, citizen service centres have been created at convenient locations where citizens can access on-line services of several departments. At these counters, run either by departmental or private operators, the public does not directly interact with computer screens, and collection of payments is often handled through conventional means.

The benefits from the on-line delivery of services include convenience (location and time) and shorter waiting periods. E-government systems may also lead to greater transparency and reduced administrative corruption. So far, however, the reduction of corruption opportunities has often been an incidental benefit, rather than an explicit objective of e-government.

Reducing corruption through e-government

The very process of building an on-line delivery system requires that rules and procedures be standardised across regions and made explicit and, therefore, capable of computer coding. This reduces the discretion and opportunity for arbitrary action available to civil servants when dealing with applicants on a case-by-case basis. Moreover, as the possibility of exposure of wrongdoing is enhanced, the fear of consequent embarrassment can be a deterrent to corrupt practices.

Though there have been few independent audits of the impact of e-government on corruption, several case studies in developing countries report an impact. Many governments have chosen to go on-line in departments that have a large interface
with the public or business and which are perceived to be relatively corrupt. Surveys indicate that tax collection agencies are particularly prone to corruption,\(^3\) and it is no surprise that a large proportion of documented e-government applications are built for departments dealing with tax collection.\(^4\)

To reduce corruption effectively, some features that lead to greater transparency and accountability need to be consciously built into the design. E-government applications must first increase access to information, then ensure that rules are transparent and applied in specific decisions and, finally, build the ability to track decisions and actions to individual civil servants. If all these objectives are pursued, corruption can be reduced significantly. Ignoring some of them can defeat the whole purpose. Numerous government websites are ineffective because they focus on the single objective of providing electronic access to information. Often the websites are little more than electronic copies of printed brochures. Not enough effort is made to ensure that transparency and accountability increase when government processes go on-line.

**OPEN, Seoul Municipality, South Korea**

The OPEN system of Seoul Municipality exemplifies the impact on corruption of making the decision-making processes and actions of individual civil servants more transparent.\(^5\) The system enables on-line tracking of individual applications for a variety of municipal licences.

Extensive municipal regulations in Seoul in the 1990s, spurred by the expansion of the city’s bureaucracy, created new opportunities for corruption. In 1998, the mayor declared an all-out war on corruption through preventive and punitive measures, increased transparency in the administration and enhanced public-private partnerships. The introduction of e-government was one element of a broader range of initiatives, many of them enacted prior to computerisation. These included cutting and simplifying regulations and actively involving citizens in anti-corruption activities.

The e-government programme involved setting up a portal called OPEN – Online Procedures Enhancement for Civil Applications. OPEN explains to users elements of the anti-corruption drive, displays an anti-corruption index on five services deemed most susceptible, offers citizens information on rules and procedures and enables real-time monitoring of progress of an application for permits and licences. By the end of 2000, the number of visits to the site reached 2 million.\(^6\) To encourage greater usage, the system was made accessible via mobile telephone in 2001.

The OPEN system has been evaluated in different ways. Results from a survey of 1,245 citizens showed that 84 per cent believed that OPEN had led to greater transparency. Surveys conducted by the South Korean chapter of Transparency International in 2000 and 2001 indicate a growing interest in OPEN, but a marginal decline in user satisfaction over time.\(^7\) The system is credited with saving
time and facilitating access, but it was viewed as offering marginally less improvement in terms of transparency and anti-corruption than the year previously.

As a whole, the focus of Seoul’s anti-corruption programme is not information technology – technology for technology’s sake – but the simplification of regulations and procedures, re-engineering of work practices, transparency in procedures and effective communication with citizens. For anti-corruption efforts to be effective, reformers must look beyond individual instances of corrupt behaviour and target the structural factors that allow corruption to develop. Seoul shows the success of a multipronged attack. Two factors particularly contributed to the success in implementation. First, there was strong leadership by the mayor and, second, widespread citizen participation.

**Computerisation of land records, Karnataka, India**
The *Bhoomi* (‘land’) project of on-line delivery of land records in Karnataka, one of India’s 26 states, demonstrates the benefits of making government records more open so as to enable citizens to challenge arbitrary bureaucratic action. It also illustrates how automation can be used to remove discretion from civil servants.8

The department of revenue in Karnataka has computerised 20 million records of land ownership for 6.7 million farmers in the state. Under the manual, paper-based system, 9,000 village accountants maintained land records. Farmers had to seek out the village accountant to obtain a copy of their ‘Record of Rights, Tenancy and Crops’ (RTC) – a document essential for obtaining bank loans. Village accountants were not easily accessible. The time taken to provide RTCs ranged from three to 30 days, depending upon the importance of the record to the farmer and, therefore, the size of the bribe. A typical bribe could range from Rs.100 to Rs. 2,000 (US $2 to $40).

All ‘mutation requests’ – requests to alter land records upon sale or inheritance of a piece of land – had to be filed with the village accountant, who was required to issue notices to the interested parties and post the information at the village office. Often neither of these actions was carried out and no record maintained. If no objections were forthcoming within a 30-day period, an update of the land records was to be carried out by a revenue inspector, a practice that could take up to two years.

The Bhoomi initiative reduced the discretion of public officials by introducing provisions for recording mutation requests on-line. Farmers can now access the database and obtain a printed copy of the RTC on-line at 180 computerised kiosks for a fee of Rs.15 (less than US $1). A farmer can check the status of his application on a touch screen provided on a pilot basis in three of the computerised kiosks. Operators of the computerised system are made accountable for their decisions and actions by the use of a system that authenticates every log-in through a thumbprint.9 In the next phase of the project, all the databases will be uploaded to a central, web-enabled database. RTCs will then be available on-line at Internet kiosks, which are planned for rural areas.10
Nevertheless, since the project affects the work of the village accountant but not the role of the revenue inspector in passing the mutation order, corruption in the process may only decline in part. Ultimately, there is no substitute for good management.

Implementation of land record computerisation has typically been difficult in India. Bhoomi succeeded because there was a strong departmental head in charge and because staff resistance was minimised through harnessing political support. Extensive training coupled with a participatory style also helped to diminish opposition to the initiative. Overall, Bhoomi limited the opportunities for bribery by land management administrators, while empowering citizens to follow up and challenge the actions of petty civil servants.

Electronic procurement in Chile

Electronic procurement increases transparency and probity by keeping a traceable record of government transactions on-line. A comprehensive e-procurement system includes three main components: information and registration, e-purchasing and e-tendering. The Chilean system focuses on the first component, providing adequate public notification and facilitating oversight. In contrast to other countries, a private company operates Chile's system.

Following the introduction of a system of e-procurement, companies hoping to do business with the public sector no longer have to search through newspapers or the Internet for information about bidding opportunities. They need only to register, indicating the areas that interest them – office furniture, construction services, IT consulting, etc. Whenever a public agency needs to purchase goods or services, it files a request in the system specifying the job and including all necessary documentation. E-mails are automatically sent to all the registered contractors, minimising response time and providing an equal opportunity to all firms to submit their bids.

The system also supplies on-line all information related to procurement operations, including the public organisation's full contact details and the name of the officer in charge of the tender. At the conclusion of the bidding process, the e-system provides the results: who participated, the proposals, the economic and technical scores and, lastly, who won the contract. Historical information about the organisation's previous contracts is also made available.

Entirely Internet-based, the e-system was launched at www.compraschile.cl in October 1999. A new presidential act was passed that allowed e-commerce transactions and replaced the main government procurement agency with a smaller agency that provides technical assistance and supervision. In the first phase, 454 suppliers in 75 separate business sectors and 16 public agencies were registered in the e-system, but within a year the number registered rose to nearly 4,000 firms.

However, although participation in the e-system was expected to be mandatory for all public organisations, less than 18 per cent of public procurement was notified on the website after two years of operation. This was attributed to strengthening...
political support and resistance from within the administration. In the absence of a systematic study, it is difficult to quantify the impact on corruption, although savings ranging from 7 to 20 per cent have been reported on public sector procurement enacted through the site.

Central Vigilance Commission, India

The launch of a website by India’s Central Vigilance Commission (CVC) illustrates the kind of catalytic role the Internet can play in anti-corruption efforts, especially in connection with print and electronic media whose greater reach allows the digital divide to be overcome. In 1998, following a supreme court directive, the CVC was made a statutory body with a mandate to launch investigations under the 1988 Prevention of Corruption Act. The commission launched a website in 1999 informing the public about its role and strategies and instructing citizens on how to lodge complaints against corruption without fear of disclosure. It highlighted the performance of various departments responsible for conducting investigations. In an effort to focus media attention on corruption, the CVC published the names of personnel in the elite administrative and revenue services against whom investigations had been ordered or penalties imposed for corruption.

By April 2002, three years after its establishment, only 180,000 visitors had logged on to the CVC site, prompting questions about the value of the Internet as an anti-corruption weapon in countries like India, where there is low computer penetration. But India’s vibrant free press and electronic media used the CVC website for stories that they subsequently disseminated across the country. The site had a much wider impact than might be expected from its low visitor count.

The CVC’s experience with the Internet highlighted the fickle nature of the media, which, despite the large amount of information available, tended to focus on the names of prominent politicians entangled in corruption inquiries. The practice of ‘naming names’, moreover, was controversial and many questioned the fairness of publicly identifying civil servants who had not been proven guilty. Nevertheless, polls revealed that 83 per cent of respondents believed that the naming of charged officers would have a deterrent effect: Newsweek magazine carried an article about the CVC’s technique, dubbing it ‘e-shame’.

Institutionalising transparency: lessons learned

The impact on corruption of e-government applications has been audited independently only in a couple of cases. Systematic surveys of citizens and other stakeholders could help establish linkages more clearly and provide feedback on areas for improvement.

Corruption reflects the power distance between civil servants and the public, particularly for citizens in remote areas. This gap in power can remain after the
Ecuador’s constitution guarantees that all information about the functioning of the state, with the exception of information that is restricted for national security reasons, should be made readily available to the public. For a variety of reasons, however, public institutions have only limited access to information in practice. For example, the Public Contracting Law states that every tender over a specified sum of money must be announced in the press, but it is often hard for citizens to locate tender announcements spread through the numerous newspapers in the country.

In an effort to improve the situation, the Latin American Corporation for Development (CLD), the Ecuadorian chapter of Transparency International, in collaboration with two groups of socially responsible entrepreneurs – People for Change and Ecuador Positivo – launched a project in 2001 to facilitate public access to information and increase transparency in public procurement. When the lack of political will on the part of government officials initially hindered the initiative, CLD and its partners adopted a more innovative approach.

The team wanted to develop a source of public information that would be widely available and employ state-of-the-art technology. The goal was to create a website that would provide both businesses and citizens with timely information on every bidding opportunity at a single, consolidated location. The system needed to be cost effective and easily accessible. The result was www.Licitenet.com, a website launched on 3 September 2001.

Licitenet.com is an Internet-based tool for the promotion of transparency in public procurement in Ecuador. It serves the dual function of making information about government contracts available to the public and to private businesses. The site also provides information on awarded contracts, the names of businesses with winning bids, the price paid, as well as subscriber access to ongoing auctions and current contracting opportunities. Although 80 per cent of the information on the site is available to anyone who visits it, parts of it can only be viewed on payment of a fee, which allows the project to be sustainable.

By maintaining the website, CLD seeks to increase public awareness of the importance of transparency in the public tendering process and to put pressure on the government to implement e-procurement on a wider scale in Ecuador. On 18 May 2002, the National Telecommunications Council invited Licitenet.com to participate as a member of the Commission on On-line Government in the development of a national agenda for connectivity.

Licitenet.com is constantly searching for ways to provide a wider range of information to a differentiated audience. Several public institutions have recognised the benefits of the website and cooperative agreements that may lead to further e-projects have been signed with the national telecommunications council, the solicitor-general’s office, the controller-general’s office and the Ecuadorian association of municipalities. Licitenet.com is also consulting with the National Commission of On-line Government to explore ways to establish an official government site for e-procurement before December 2002.

This initiative encourages healthy competition, better pricing and a higher quality of offers. While no website alone is sufficient to ensure absolute transparency in government procurement, it is a valuable first step. Furthermore, it creates opportunities to influence the direction of government policy in the area of e-procurement and builds public and private sector awareness of the negative effects of corruption in government contracting.

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introduction of e-government applications. It is important to supervise and monitor the performance of newly installed e-government systems until higher norms of service are instilled in civil servants. A further risk is that the impact of new systems can weaken after a change in leadership or as corrupt employees learn ways to beat the new system.

The publication of budgetary allocations and expenditure on the web, systems for tracking the status of licence applications and sharing performance data are known to increase accountability. But increasing the availability of Internet-based information does not necessarily mean that citizens will use it to demand greater accountability. The proportion of citizens who are prepared to be consistently engaged in the process of governance is relatively small. Even where there are high rates of Internet penetration, experience has shown that creating a good website or on-line portal does not guarantee its use. Extra efforts, through advertising and education, may be required to persuade citizens of its value.19

Furthermore, intermediaries are often needed to analyse the information provided by governments. The Center for Responsive Politics in the United States is one such agency.20 Its website illustrates the constructive role of intermediaries in presenting information on campaign finance in a format that helps citizens take action. The Center’s analysis is based on data in the public domain that is not normally presented in a form that highlights the possibility of corrupt practice. As CVC illustrated, traditional media can also play this intermediary role, channelling the information provided by the government to citizens in more direct ways, although journalists may need workshops and seminars to be made aware of the scale of information that is available on the web.

E-government can lead to transparency only if there is a legal framework that supports free access to information. National secrecy laws must be replaced by freedom of information legislation. At the same time, governments need to address the risks of increased use of Internet applications to privacy and security. Guidelines may be required to govern the release of public information that may contain personal or sensitive data.

**Conclusion**

E-government offers a partial solution to the multifaceted problem of corruption. It reduces discretion, thereby curbing some opportunities for arbitrary action. It increases chances of exposure by maintaining detailed data on transactions, making it possible to track and link the corrupt with their wrongful acts. By making rules simpler and more transparent, e-government emboldens citizens and businesses to question unreasonable procedures and their arbitrary application.

Combating corruption can be targeted as a specific objective of e-government. The OPEN and CVC systems in South Korea and India were intended to transform e-government into key components in broader anti-corruption strategies enabling
more effective communication and increased transparency. Service delivery improvement initiatives were implemented in notoriously corrupt departments.

Executives and senior civil servants require specialist training if they are to be made aware of how best to initiate successful projects. The first step is to identify pilot schemes in departments that have some exposure to computerisation, a large interface with the public and a legacy of corruption. The benefits of the pilot projects need to be articulated in specific terms, with transparency, corruption and poverty the underlying concerns.

In designing e-government applications that address these concerns, system designers need to identify the processes that enable corrupt behaviour. The traditional analytical methods of consulting companies are often insufficient since high levels of participation by citizens and civil servants are necessary to make an appropriate assessment: in successful projects, such analysis tends not to be outsourced. In addition, specific benefits may need to be provided to employees who will ‘lose’ in the reduction of bribes.21 Strong leadership at the political and administrative levels is essential for introducing reform.

In countries where pilot schemes have been implemented and systematic surveys have revealed a definite impact on corruption, projects have to be rolled out on a wider scale to cover more departments and more locations. Issues of weak technological infrastructure, the absence of an enabling policy framework and lack of funds will all have to be tackled for a wider impact to be felt.

No developing country is fully ready to embrace a comprehensive programme of e-government. In many areas, however, e-government applications can be developed that enable a large part of government services to be provided electronically and that deliver significant benefits in reducing corruption. Rather than wait for total readiness, governments are advised to learn by doing.

1 The term e-government is sometimes confused with e-governance and the two terms are often used interchangeably. E-governance is a broader concept that includes the use of information and communication technologies by government and civil society to promote greater participation of citizens in the governance of political institutions. For example, it covers the use of the Internet by politicians and political parties to elicit views from their constituencies in an efficient manner, or the publicising of views by civil society organisations that are in conflict with the ruling powers. E-government, by contrast, is concerned specifically with improving access to government functions, whether information or services. For definitions and scope of e-government see: www.archives.nysed.gov/pubs/recmgmt/egovernment/definiti.htm, Roadmap for E-government in the Developing World, Pacific Council on International Policy, April 2002, www.pacificcouncil.org; E. Tambouris, S. Gorilas and G. Boukis, 'Investigation of Electronic Government', www.egov-project.org/egovsite/tambouris_panhellenic.pdf; J. Caldow, 'The Quest for Electronic Government: A defining vision', Company Report, IBM Corporation, 1997, www.ieg.ibm.com.

2 For example, Beijing’s Business E-park, the computerised interstate check post in Gujarat (India), VOICE online delivery of municipal services in Vijaywada (India) and Philippine customs reform. See www1.worldbank.org/publicsector/egov.


4 Designers of ASYCUDA (Automated System for Customs Data) report that their software is in use in 80 countries for on-line processing of customs clearance. See www.asycuda.org.


Transparency International Korea, Special Report: Survey of the Seoul City’s OPEN System, Newsletter, June 2001, ti.or.kr. Between 2000 and 2001 the percentage of respondents familiar with OPEN grew by 19 percentage points to 74 per cent. Nearly 90 per cent intended to use OPEN in future (up by 20 per cent), while actual users grew to 16 per cent of respondents (an increase of 5 percentage points). The proportion of satisfied users declined from 56 to 48 per cent and the proportion of dissatisfied users grew marginally to 9 per cent.


In a biometric log-in, a thumb impression is captured at every log-in by an inexpensive electronic device and validated against a pre-existing stored image of the thumb.

Internet kiosks are being set up in rural areas by the department of agriculture, NGOs and the private sector, but the numbers are very small. Hindu (India), 3 April 2002.

One of the best-known and most comprehensive on-line procurement systems is Mexico’s CompraNet. Other initiatives (including at local government level) have been implemented in Argentina, Bulgaria and the Philippines.

See www.compraschile.cl.


For more details, see www.cvc.nic.in; also Subhash Bhatnagar, ‘Central Vigilance Commission Website: A Bold Anticorruption Experiment’, www1.worldbank.org/publicsector/egov/cvc_cs.htm.

Newsweek (US), 21 February 2000.

For example, a report by PAC, Bangalore, India, ‘State of the Art as Art of the State: Public Feedback on E-governance’, www.pacindia.org/default.asp?channelId=33.

Only 11 per cent of Canadians use their government’s on-line portal, whereas 60 per cent have access to the Internet. To promote usage, every citizen that visits a department to transact a service is provided with training on how to use the portal.

The Center is a non-partisan, non-profit research group based in Washington, D.C. It conducts computer-based research on campaign finance issues for the news media, academics, activists and the public at large. See www.opensecrets.org.

Such benefits could be remodelled office space, less tedium in work and creating a sense of pride in the department by public appreciation of reform. See the case study on the CARD project in Andhra Pradesh, India: www1.worldbank.org/publicsector/egov/cardcs.htm.