



Review Paper

E-Government and Social Media as Openness and Anti-Corruption Strategy

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Abstract

In recent years, many governments have worked to increase openness and transparency in their actions. Information and communication technologies (ICTs) are seen by many as a cost-effective and convenient means to promote openness and transparency and to reduce corruption. A well-planned e-government strategy can build a more efficient, accountable and transparent government. This review paper first illustrates the advantages of e-government services; discusses examples of e-government where corruption was significantly reduced; and draws lessons on leadership and managerial issues in deploying information and communication technology (ICT) to combat corruption. In addition, the paper discusses the e-government as an anti-corruption strategy in India. This paper explores the potential impacts of information and ICTs – especially e-government and social media – on cultural attitudes about transparency.

Keywords: E-government anti-corruption corruption ICT transparency, social media.

Introduction

Over the last decade, societies have come to realize the extent to which corruption and bribery have undermined their welfare and stability. Governments, the private sector and civil society alike have consequently declared the fight against corruption to be of highest priority. In the Asia-Pacific region, twenty-three countries have expressed their commitment to fight corruption by endorsing an anti-corruption action plan within the framework of the ADB/OECD. The Action Plan comprehensively promotes the regions' objectives and needs for reforms to develop effective and transparent systems for public service, to strengthen anti-bribery initiatives, to promote integrity in business operations, and to support citizens' involvement. The beginning of the 21st century is marked by developments made in the fields of information and technology. The primary role of information is to equip citizens to make informed choices.

Corruption of one kind or another exists in every society however with varying intensities. Corrupt behaviors are so diverse and the concept of corruption so generic that any precise and detailed definition of institutional corruption is difficult to frame. It can be broadly defined as "the abuse of public power for private benefit"¹. It is commonly considered to be one of the most obvious obstacles to economic development. The World Bank identifies corruption as the key element in economic under performance and a major obstacle in poverty alleviation and development. Many governments, including the United Nations, are working hard to get rid of problems associated with corruption². "Business Crime Control" and "Transparency International" are two major Non Governmental Organizations that have done a lot of remarkable work in combating corruption.

Among many tools that are being developed to fight corruption, there has been much focus lately on e-government – the use of communications technology like Internet, World Wide Web and mobile phones to deliver information and services to citizens and businesses³⁻⁶. It can include publication of information about government services on a web site, for example, so that citizens can download application forms for a variety of services. It can also involve the actual delivery of services, such as filing a tax return, renewing a license, etc. Benefits to citizens and businesses from on-line delivery of services include convenience (location and time) and shorter waiting periods. In addition, e-government systems may lead to greater transparency, resulting in reduced administrative corruption. In terms of international practices in transparency, the Internet has greatly reduced the cost of collecting, distributing, and accessing government information. As a result of these capacities, recent years have seen trends toward using e-government for greater access to information and for promotion of transparency, accountability, and anti-corruption goals.

E-government: More and more countries are making use of information technology for the provision of certain services to the public. This approach often referred to as "e-government", can help reduce opportunities for corruption in several ways. On-line transactions depersonalize and standardize the provision of services and leave little room for payment or extortion of bribes. In addition, the use of computers requires that rules and procedures be standardized and made explicit and thus reduces discretion and respective opportunities to corruption. Computerized procedures additionally allow tracking decisions and actions and thus serve as an additional deterrent to corruption. Australia, Hong Kong, China; Korea; Malaysia; Pakistan; the Philippines and Singapore have undertaken

extensive efforts to implement e-government. In Korea, for instance, citizens can real-time monitor the progress of an application for permits and licenses on-line. In Pakistan, the entire tax department is currently being restructured, and information technology is being introduced with the purpose of reducing contact between tax collectors and taxpayers. In India and the Philippines, documents related to public procurement must now be made available on-line. Cambodia enhanced the use of information technology to provide administrative services.

ICTs and Transparency Initiatives: ICTs offer countries a new approach to creating transparency and promoting anti-corruption. ICTs can reduce corruption by promoting good governance, strengthening reform-oriented initiatives, reducing potential for corrupt behaviors, enhancing relationships between government employees and citizens, allowing for citizen tracking of activities, and by monitoring and controlling behaviors of government employees. To successfully reduce corruption, however, ICT-enabled initiatives generally must move from increasing information access to ensuring rules are transparent and applied to building abilities to track the decisions and actions of government employees. In India, putting rural property records online has greatly increased the speed at which the records are accessed and updated, while simultaneously removing opportunities for local officials to accept bribes as had previously been rampant. The Bhoomi electronic land record system in Karnataka, India, is estimated to have saved 7 million farmers 1.32 million working days in waiting time and Rs. 806 million in bribes to local officials in its first several years. Before the system, the average land transfer

required Rs. 100 in bribes, while the electronic system requires a fee of Rs. 2. Table-1 represents the type of information where greater transparency can be enabled through e-government applications, which in turn can create disincentives for corrupt officials and businesses by increasing the chances of exposure.

ICTs also offer new avenues for openness by providing access to social media—content and interactions that are created through the social interaction of users via highly accessibly web-based technologies. Social media can be used to refer to both the enabling tools and technology and to the content that is generated by them. Social media include but are not limited to blogs, wikis (e.g. Wikipedia), social networking sites (e.g. Facebook), micro-blogging services (e.g. Twitter), and multimedia sharing services (e.g. Flickr, YouTube). Social media are often associated with such concepts as user-generated content, crowd sourcing, and Web 2.0. In terms of anti-corruption, social media has four major potential strengths: collaboration, participation, empowerment, and time. Social media is collaborative and participatory by its very nature as it is defined by social interaction. It provides the ability for users to connect with one another and form communities to socialize, share information, or to achieve a common goal or interest. Social media can be empowering to its users as it gives them a platform to speak. It allows anyone with access to the internet the ability to inexpensively publish or broadcast information, effectively democratizing media. In terms of time, social media technologies allow users to immediately publish information in near real time.

Table-1
Impact of E-Governance

Type of information being made transparent	Resulting benefits	Examples of e-government applications
Rules and procedures governing services; names of public officials responsible for different tasks; text of citizen’s charter.	Standardized procedures for delivery of services. Citizens can resist attempts to delay processing. Reduces arbitrariness, e.g. demand for additional documents.	Web sites of government departments in many countries. Budget disclosure in Argentina and Karnataka, India
Outcomes of government decisions, e.g. award of contracts and licenses, allocation of resources.	Exposure of corruption and improved accountability	E-procurement in Chile, Philippines.
Data about individual entities in Government records such as land and buildings, , status of tax payments	Exposure of manipulation for bribery and corruption. Empowerment of citizens to challenge arbitrary actions	Bhoomi, on-line land records in Karnataka, India
Actions/decisions of government functionaries such as comments on applications for licenses, bills of entry for goods	Tracking attempts to extort bribes so as to fix individual responsibility	OPEN in Seoul, Korea, On-line processing in Customs
Performance indicators for Government departments: indices of corruption; performance of investigating agencies	Civic engagement in governance Greater accountability	School performance in UK
Names of citizens with large outstanding loans, taxes; civil servants under investigation or convicted	A kind of punishment for the corrupt through public exposure	Central Vigilance Commissioner Web site, India
Disclosure of assets and income of election candidates, elected representatives, ministers or civil servants	Creates disincentive for corruption by creating fear of exposure	Opensecrets in US; Public Affairs Council, India

Examples of popular applications of social media to anti-corruption efforts have been developed both by governments and by nongovernmental organizations. Wikileaks is a Web site that allows users to anonymously publish sensitive information. To date, it houses over 1.2 million documents. Wikileaks is an ideal example of how social media technologies can be used to fight corruption. Another recent example is a web site created in 2009 by the National Democratic Institute to help users explore, analyze, and visualize the data associated with the 2009 Afghanistan presidential election.

IT Enabled Application in CVC for the Core Processes: The Central Vigilance Commission (CVC) has taken the initiative of formulating a National Anticorruption Strategy, which would serve as a concerted and coordinated approach to fighting corruption in India. CVC has been working towards leveraging IT for not only simplification of processes but also enhancing interaction with all the stakeholders in the fight against corruption. An IT enabled application for complaints processing online has been developed and implemented in the commission. This application handles complaints from all sources in electronic form and ensures expeditious disposal.

In this process, complaints on which it has been decided to send the same for 'Necessary Action' (NA) are being forwarded to the concerned CVO by the commission through this application. Such complaints sent for necessary action would henceforth not be sent in hard copy and will be transmitted electronically. However, the complaints sent for investigation and report to the CVO will continue to be handled /sent by post. In addition, the CVOs can also send their monthly reports electronically through this portal. E-mails and SMS systems are also being integrated by this application for sending alerts to all the CVOs and for status updates to the complainants.

Initiatives taken by the Commission: Leveraging Technology to Prevent Corruption: The Commission has adopted the strategy of "Leveraging Technology to Prevent Corruption" since 2004, wherein organizations are persuaded to adopt e-governance measures and computerize on priority all those activities that are vulnerable to corruption. The progress of various organizations in this regard has not been very assuring. The commission proposes to recommend to the government to adopt a mission mode approach towards computerizing all delivery of public services.

Integrity in Public Procurement: Public procurement, being the government activity most vulnerable to corruption, has been a priority concern of the commission. The commission has adopted the following measures to mitigate corruption in public procurement: i. Issuing guidelines to promote integrity in public procurement, ii. Persuading organizations to adopt e-procurement, iii. Since 2007, commission has been promoting the concept of Integrity Pact developed by the Transparency International.

Computerization of Commission's Work: A project for workflow automation and IT enabling of the functioning of the Commission has been completed on 31st August, 2010, and is in the process of full roll out. The project is targeted to be fully operational by November, 2010. This would enhance the efficiency of the commission in handling complaints and processing of investigation reports.

NIC at the Forefront for Active Promotion and Implementation of ICT: National Informatics Centre (NIC) is a premier S and T institution of the Government of India, established in 1976, for providing e-government/e-governance solutions adopting best practices, integrated services and global solutions in government sector. NIC has spearheaded the e-governance drive in the country for the last few decades. As a major step in ushering e-governance, NIC has been involved in supporting the government in areas of Internet/Intranet infrastructure and IT empowerment of officers at all levels, preparing IT Plans for sectoral development and developing IT based services including G2G, G2B, G2C and G2E portals. NICNET, the Pan India, computer communication network of NIC has been the backbone for e-governance applications. A number of major initiatives have been undertaken for strengthening backend automation and implementation of citizen centric services. E-payment for various government services, SMS service for sending alerts and updates, e-tendering, e-office, web based counseling for admission into professional courses are some such activities.

E-Governance Standards: Policy on open standards was released by the department in November 2010. The metadata and data standards in person identification and land region codification version 1.0 have been notified and released by the department. The documents on face image data standards and fingerprint image and minutiae data standards for Indian e-governance applications have been released and published in November 2010. Phase I report on identified technical standards as per the policy on open standards has been prepared for the areas identified by the department. It is web published for public review. Two documents were prepared by expert committee as base documents. Using them, CCA, the department issued the following documents for use by e-governance applications: i. Interoperability guidelines for digital signature certificates issued under information technology act, ii. Guidelines for usage of digital signatures in e-governance for information security.

A tool has been designed for uploading, managing and version controls of e-forms at server using x-forms as standard. The task force has developed sample e-forms using x-forms technology, and working on evaluation of available latest technology tools in this area. Quality assurance framework (QAF) and conformity assessment requirements (CARE) documents were prepared and released.

E-Government Applications Developed and Implemented by NIC: NIC has conceptualized, developed and implemented a very large number of projects for various central and state government ministries, departments and organizations. Many of these projects are continuing projects being carried out by various divisions of NIC at New Delhi headquarters and state/district centers throughout the country. Some of the most noteworthy projects are presented in Table-2 to highlight a glimpse of the multifaceted, diverse activities of NIC, touching upon all spheres of e-governance and thereby influencing the lives of millions of citizens of India.

Challenges and Opportunities: The combination of e-government, social media, web-enabled technologies, mobile technologies, transparency policy initiatives, and citizen desire for open and transparent government are fomenting a new age of opportunity that has the potential to create open, transparent, efficient, effective, and user-centered ICT-enabled services. The challenges, however, are also real. A wide range of nations with varying technology infrastructure have created numerous procurement, tracking, anti-corruption, and other systems that assisted national and state governments engage in transparent government activities. Moreover, the systems opened government to citizen scrutiny, thereby reducing corruption.

Rather than technology development being the barrier, technology access and literacy may be a concern in the near term. In India, for example, nearly 70% of households still do not have internet access. Substantial growth, however, has occurred in the adoption of mobile technologies, including nations that have low landline and internet penetration, thus supporting the emerging nature of mobile e-government (or m-government) as holding great promise for deployment of transparency initiatives. Coinciding with technology access is the need for users to be able to understand and use technologies through which transparency tools are available. The digital divide is long documented and broadly defined as the gap between those who have access to technologies and those who do not. However, there are in fact multiple divides that can exist, of which access to the ICTs is but one. Embedded within the divide are such issues as:

Technology literacy: The ability to understand and use technologies

Usability: The design of technologies in such ways that are intuitive and allow users to engage in the content embedded within the technology

Accessibility: The ability of persons with disabilities to be able to access the content through adaptive technologies (in fact, some mobile technologies such as the i-Phone are completely inaccessible to persons with visual impairments due to the touch screen design which lacks a tactile keyboard)

Functionality: The design of the technologies to include features (e.g., search, e-government service tracking; accountability measures, etc.) that users desire. Thus, it is important to both use technologies that are widely deployed to provide a broad base of technology access, but there is also often a substantial need to provide training, and engage in usability, functionality, and accessibility testing to ensure the broadest ability to participate in e-government services and resources. The use of social media as a core part of transparency initiatives also can create both new opportunities and new challenges. For example, the use of social media in combination with open government data has been promoted as a new way of enabling and facilitating transparency. This approach is typified by the nascent and ambitious plan by the Obama administration to make vast amounts of government data available through the www.data.gov web site. These types of transparency initiatives are directed toward the more technically inclined citizen: researchers, technologists, and civic-minded geeks.

Conclusion

E-government not only can improve the efficiency of the government, but also it reduces discretion, thereby curbing some opportunities for arbitrary action. A well-planned e-government strategy can build a more efficient, accountable and transparent government. Combating corruption can be targeted as a specific objective of e-government. As in OPEN in Korea and the CVC in India, e-government can become one of the key components of a broader anti-corruption strategy enabling effective communication in addition to the increased transparency. Service delivery improvement initiatives can be implemented in corrupt departments. E-government can become one of the key components of a broader anti-corruption strategy enabling effective communication in addition to the increased transparency. By using e-government, it increases chances of exposure by maintaining detailed data on transactions, making it possible to track and link the corrupt with their wrongful acts.

The case studies demonstrate that e-government offers at least a partial solution to the complex problem of corruption. It is important to recognize this potential. To create awareness, training programs need to be organized for political executives and senior civil servants where successful projects can be discussed. The first steps are to identify a few pilot projects in departments that have some exposure to computerization, a large interface with public, and have been assessed to be corrupt. Benefits of implementing the pilots need to be articulated in specific terms. The impact on transparency, corruption and poverty must be the underlying concern.

In designing e-government applications which address these concerns, system designers need to identify the processes that enable corrupt behavior. Often the traditional methods of analysis used by consulting companies are not adequate to make such a determination. A high level of participation by citizens and knowledgeable civil servants is necessary to make such an

assessment, and in successful projects such analysis tends not to be outsourced. In addition, specific benefits¹ need to be provided to employees who stand to lose the opportunity of taking bribes. Strong leadership at the political and administrative level is essential for introducing such reform. In countries where pilots have been implemented and systematic surveys have proven a definite impact on corruption, these pilots will 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 have to be tackled for a wider impact. No developing country is likely to be fully ready to embrace a comprehensive program of e-government. However, in many areas, applications can be developed which e-enable a large part of government services and deliver significant benefits in reducing corruption. Rather than wait for total readiness, an approach of learning by trial and consolidating small gains is recommended.

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Table-2
Examples of E-Government Applications Developed and Implemented by NIC

Computerization of Food grain Supply Chain of Food and Civil Supplies department	Web Based Payroll System for State Government Departments
e-File implementation in National Rural Health Mission project at Maharashtra	COIN (Co-Operative banking in Place) - A Total Banking Solution for Co-operative Sector
District Passport Collection Centre System	License Fee Monitoring System
e-Finance.Net - ICT based Integrated Workflow of Finance Department	e-KHAZANA (Computerization of Budget, Treasuries and State Provident Fund)
Integrated Workflow System for Paperless Admissions to AICTE approved Courses in Haryana	Computerization of allotment of liquor shops on the basis of Draw of lots by Excise department
NREGA-National Rural Employment Guarantee Act	Consumer Forum Computerization (CONFONET)
Project Monitoring and Information System (PMIS)	Online passport, Online VAT
e-mandi-Online Agricultural Marketing System	BHOOMI for Revenue Department
Comprehensive Modernization of Land Records (CMLR)	RIMS (Ration Card Issue and Maintenance System)
eHospital, ePanchayat, e-Scholarship Portal	LAS-Lokayukta office Automation System