Inter-American
Development Bank

Institutions for
Development Sector

TECHNICAL NOTES

No. IDB-TN-355

From Information to Participation: The Potential of New Technologies on Accountability Initiatives

Paloma Baena Olabe
Theodore Kahn

May 2012

From Information to Participation: The Potential of New Technologies on Accountability Initiatives

Paloma Baena Olabe
Theodore Kahn

Inter-American Development Bank
2012

Inter-American Development Bank. 1300 New York Ave. N.W. Washington D.C. 20577

Paloma Baena Olabe (paloma.baena@post.harvard.edu), Theodore Kahn (theodorek@iadb.org)

Abstract*

The potential for access to information policies to increase accountability and oversight of the government both by citizens and civil society groups (vertical and diagonal accountability) and also within the government (horizontal accountability) has been well established. To maximize their potential as effective transparency accountability tools, access to information initiatives should facilitate the active use of the information by relevant stakeholders, thus participating and informing the policy-making process. This technical note considers the role of information and communications technology (ICT) in promoting the use of information and active participation among various stakeholders in the context of access to information initiatives, and in transparency and accountability efforts more broadly. Such participation, in turn, has the potential to bring about concrete improvements in institutional capacity in the public sector, public policies, and governance.

Keywords: Transparency, Information and Communications Technology, access to information, accountability, e-governance, monitoring, public management.

* The authors are grateful for comments received from Pablo Alonso, Silvana Rubino-Hallman, and Alberto Chong.

[1] In fact, transparency initiatives have often not met expectations. For example, most countries in the region have passed access to information laws over the past decade. But in many cases government agencies and offices lack the

Table of Contents

List of Boxes

About the Authors

Paloma Baena Olabe, an American and Spanish citizen, joined the Inter-American Development Bank (IDB) in 2006 as a Young Professional. She now works as a senior specialist on public governance, and is head of the technical transparency area. Baena concentrates on issues relating to governance and transparency; accountability; and strategic questions of public management. She has led and participated in numerous State modernization projects in Latin America and the Caribbean. She has led an IDB wide-ranging Plan of Action for transparency and anticorruption and the launch of an innovative new trust fund focused on transparency. She has conducted political economic analysis for various diagnostic studies of growth in diverse countries and participated in governance evaluations. Before joining the IDB, Baena worked for the World Bank as a consultant on business climate-related matters and public/private partnerships in Latin America and Africa. In the private sector, she served as a strategic management consultant on public sector entities and as legal advisor for various international project financing operations. She has published studies about institutions and growth, as well as on transparency policies. She holds a Juris Doctor from the Complutense University (Madrid, Spain), a Masters in International Law from Aix-Marseille III (Aix-en-Provence, France), and a Masters of Public Administration from Harvard University (Cambridge, Massachusetts), focused on political and economic development and public leadership.

Theodore Kahn, an American citizen, joined the IDB in 2011 as a consultant in the Institutional Capacity of the State Division, where he focuses on transparency, access to information, and public sector management. Before joining the Bank, he worked as a researcher on access to information and citizen participation for Global Integrity, a Washington-based civil society organization, and contributed to a governance project on political transitions for the Center for the Implementation of Public Policies for Growth and Equity (CIPPEC) in Buenos Aires. He also worked for several years as a journalist in Washington DC and Santiago, Chile, writing for publications such as *The Atlantic*, the *Washington Examiner*, and the *Santiago Times*. Kahn has a Masters in International Affairs and Economics from the Johns Hopkins University School of Advanced International Studies, and a BA in Government from Harvard College.

1. Introduction

The purpose of this technical note is to build upon the findings of a previous IDB study on the importance of access to information as a tool to increase transparency and promote accountability, thus contributing to the discussion ideas on how to implement more effective access to information mechanisms through the use of information and communications technology (ICT) (Baena and Vieyra, 2011; Baena, 2010).

The potential for access to information policies to increase accountability and oversight of the government both by citizens and civil society groups (vertical and diagonal accountability), and also within the government (horizontal accountability), has been well established. However, there is no guarantee that access to information initiatives will, per se, fulfill their potential as effective transparency and accountability tools.[1] To bring about these salutary effects, access to information policies must have certain characteristics: they must be flexible and tailored to the particular sector, locale, and target population; they must involve effective and appropriate channels for communicating information; and they must provide efficient means for all users (including civil society groups, other government agencies, and citizens) to not only access but also *effectively use* that information (Baena and Vieyra, 2011).

These recommendations stem from the insight that access to information becomes an increasingly effective tool when stakeholders use it to exercise accountability. The implication is that access to information initiatives should be designed to promote active participation among all stakeholders—in government, civil society, and among the general population.

This technical note aims to explain how ICT can enable access to information initiatives, and transparency and accountability (TAC) efforts more broadly, to promote active participation among various stakeholders, and why such participation matters.

In particular, the focus is on how to develop ICT initiatives that lead to the dissemination of public information that is accessible, useful in transparency and accountability (TAC) efforts,

[1] In fact, transparency initiatives have often not met expectations. For example, most countries in the region have passed access to information laws over the past decade. But in many cases government agencies and offices lack the capacity or the will to apply these laws in practice, while citizens at times are unaware of the laws, do not understand its benefits, or do not have the means to access information. As a result, in practice there will be little effective improvement in access to information. For more information see Open Society Justice Initiative (2006).

relevant to users, and provides opportunities for interaction, thus encouraging active participation among diverse stakeholders. Such participation has the potential to bring about concrete improvements in institutional capacity in the public sector, public policies, and governance.

The note proceeds as follows. First, a background discussion traces the theoretical developments that lead us to zero in on the role of ICT in transparency efforts. Next, it lays out some basic attributes and characteristics of ICT tools in TAC efforts. The note goes on to suggest a model for designing and assessing ICT initiatives. The model is based on whether the initiative leads to useful, relevant, and actionable information; and whether the information is presented so that it is accessible, facilitates analysis, and allows for interaction and dialogue. Two case studies, one from Mexico and one from the United States, illustrate the successful application of these principles and show where some obstacles may arise. The note's conclusion highlights lessons learned and offers guidelines and policy recommendations for the use of ICT in TAC efforts.

2. Information, Incentives, and ICT

Public sector opacity and corruption have been linked to a variety of negative economic, political, and social effects, including discouraging investment, hindering poverty reduction efforts, obstructing delivery of public services—especially to the poor—and undermining the legitimacy of the state (Schleifer and Vishny, 1993; Bardhan, 1997). As a result, the development community, especially over the past decade, has focused increasingly on strategies and mechanisms to increase transparency and to curb corruption (Campos, 2007). While these efforts require a highly context-specific approach at both the country and sector levels, the prevalence of corruption is generally related to the opportunities and potential gains expected from corrupt behavior, versus its perceived costs (e.g., Becker, 1968).

Public access to information can change incentives in both the demand and the supply side of this equation. By helping to expose and publicize instances of corruption and thus increase the likelihood that perpetrators are held accountable, it increases the perceived costs of engaging in corrupt activities. It also reduces the scope of opportunities for corrupt behavior by bringing greater efficiency to public management, creating opportunities for citizen involvement in monitoring and oversight of government performance, and strengthening the institutional capacity of the public sector to exercise accountability in its own activities.[2] The potential impacts of access to information on anticorruption efforts are thus indirect; they include incorporating new actors into the behavior equation, empowering accountability institutions and mechanisms, and facilitating detection of corruption deviations, among other aspects.[3] In addition, access to information initiatives can leverage their potential by promoting the availability of relevant information and facilitating its use by stakeholders to exercise accountability.[4]

[2] For a broader discussion on access to information as an anticorruption tool, see Baena and Vieyra (2011).
[3] There is little to no evidence on the direct impact of access to information on corruption. This lack stems from two facts: corruption is a complex, opaque behavior, and efforts to measure corruption are still incomplete. For a broader discussion on measuring corruption, see, for example, UNDP (2008).
[4] There remains a gap in the literature concerning whether the simple availability of public information can have an impact on accountability or governance outcomes or whether, as we suggest, access to information initiatives must complete a full cycle, from access to use to participation, to effectively achieve that purpose. Qualitative evidence from the programs supported through the Anticorruption Activities Trust Fund managed by the IDB show that

In practice, the question of how, when, and why a particular access to information initiative brings about these desired outcomes is still open to debate. One line of thinking is that the threshold for information to have an impact is actually quite low: simply publishing information provides public officials and office seekers with significant incentives for integrity. This view draws support from studies showing that increased information decreases reelection chances of corrupt officials, discourages misuse and theft of public resources, lowers the incidence of opportunistic behavior among public officials, and promotes equitable resource distribution (Chong et al., 2010).

However, other experiments point to the need for a supportive apparatus that ensures relevant information actually gets in front of citizens in a format that is comprehensible. Banerjee et al. (2010) found that information on the performance of incumbents significantly affected reelection prospects of municipal officials in Delhi, but only after a targeted information campaign consisting of door-to-door visits, a report card in a local newspaper evaluating the incumbent, and follow-up discussions to help explain the results. While India has a Right to Information law that in theory provides universal access, only those who received targeted information in a particular format—such as a report card evaluating incumbent performance—acted on the available information at the voting booth. In addition, while publishing information can discourage corruption in the short term, these deterrents tend to weaken without additional mechanisms to enforce accountability. Savedoff (2010) describes an experiment in Buenos Aires where the city health authority announced it would begin collecting and publishing prices paid by city hospitals for basic medical supplies. After the announcement, the variation in prices paid by different hospitals for equivalent items dropped significantly—a strong indication that fear of exposure had dissuaded corrupt procurement practices. However, after several months the average price and range of prices increased again, suggesting that without mechanisms to hold officials accountable for discrepancies, publication of prices lost its power as a deterrent.

How can access to information trigger robust, sustained accountability mechanisms? Examples abound of civil society organizations, public sector oversight agencies, media, and interested citizens actively engaging with public information to assess the effectiveness of policies, identify instances of waste or corruption, and recommend improvements in public

---

focusing on the information cycle renders these initiatives successful in terms of achieving relevant policy changes. For further information on these programs, please see www.iadb.org/transparency

policies or services. These activities create additional layers of accountability that do not necessary arise from access to information *per se*. Specific cases are discussed in more detail in Section 5.

While better understanding is needed of the path from access to public information to effective accountability, we posit that active use by key stakeholders of public information is central to the process. The implication is that access to information initiatives should look to increase the availability of relevant, targeted information that facilitates stakeholder use to exercise accountability, for example, by identifying possible corruption risks or by monitoring a specific aspect of public policy. [5] [6]

ICTs, including the Internet, social media and Web 2.0 applications, have dramatically reduced the time and costs associated with gathering, distributing, managing, and accessing government information (Roberts, 2006). Indeed, many of the access to information laws passed in LAC countries contain language explicitly requiring public bodies to develop websites to facilitate widespread access. In Mexico, the law goes a step further, requiring public agencies to make a computer available in areas where Internet coverage is low (Mendel, 2009).

Can we leverage the potential of ICT to render access to information initiatives effective oversight tools? If so, what elements or attributes need to be addressed in the design stage? The next section addresses these questions.

[5] Bertot, Jaeger, and Grimes (2010) discuss several reasons why ICT-based transparency efforts often fail, including lack of buy-in or acceptance among government officials, unwillingness or inability of citizens to utilize ICTs, and the creation of new, unforeseen opportunities for corrupt behaviors in the context of new technological systems.

[6] While there is an alternative school of thought which holds that simply "getting the information out there" is enough to effect positive changes in the performance and behavior of public institutions and officials, the evidence suggests that these benefits tend to be short-lived or attainable only in particular political moments such as elections. While there are many examples of the impacts on voting outcomes of publishing information on elected officials (such as criminal records, allegations of corruption, etc.; see for example Chong, et al., 2010; Goncalves, 2009; and Ferraz and Finan, 2008), it is important to note that elections represent a unique political moment in which average citizens can be expected to be more attuned to political developments and more willing to actively pursue information than during nonelection periods.

3. ICT Tools for Accountability: Attributes and General Approaches

Attributes

The potential of ICT as a tool in transparency and accountability (TAC) initiatives has been widely discussed especially with the rise of social media in the last several years (Salbu, 2001; Bhatnagar, 2003; Bertot et al., 2010). Its successful use in initiatives ranging from monitoring campaign finance spending to reporting election fraud in through SMS messages underscores ICT's ability to empower stakeholders in civil society, government, and the broader population to achieve better outcomes in transparency and anticorruption efforts. [7] [8]

The critical feature of ICT in these cases has been its power to greatly expand access to information through increased connectivity and to facilitate citizen-government interaction through accessible, user-friendly mechanisms, and platforms.

Yet the extent to which the use of ICT tools will lead to successful transparency and access to information initiatives will depend, as discussed earlier, on whether users take advantage of the information made available to them to actively contribute to effective oversight.

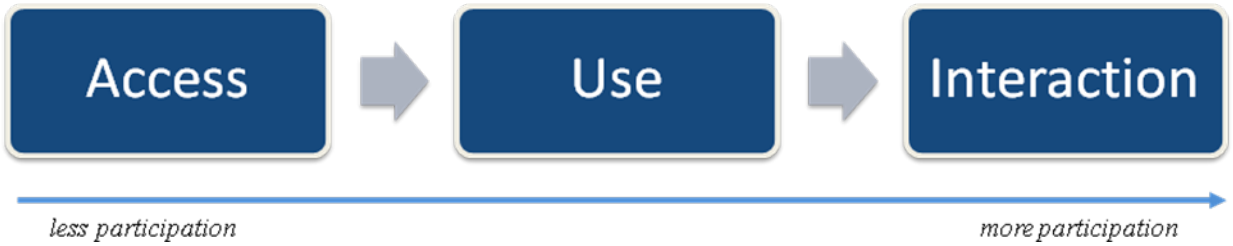
When designed with such a purpose, ICT tools can maximize the user-experience cycle in its interaction with and within the public sector by having incidence in **three key attributes** that render access to information an effective accountability tool: (i) the availability of public information (***access***); (ii) its accessibility and relevance for stakeholders (***use***); and (iii) its incorporation into decision making and/or policy discussions (***interaction***).[9]

[7] One of the earliest and most successful ICT-based TAC intervention is Open Secrets, a civil society organization-sponsored website to track the sources of campaign donations to U.S. Congressional and Presidential candidates (www.opensecrets.org). The site takes advantage of official records to produce easily comprehensible reports on the influence of large corporations and lobbyists on U.S. politics. It has become an important source for investigative journalists, bloggers, and activists and won numerous awards for journalism and activism.

[8] More recently, mobile phones and SMS messaging in particular have become an important tool for sharing information in the developing world, and there are many instances of this technology being used in anticorruption and transparency efforts.

[9] A number of studies have documented how the behavioral impact of knowing that information is being made public disappears in the absence of other factors that reinforce accountability (see, for example, Savedoff, 2010). In addition, Fung et al. (2004), in a study of eight distinct "transparency systems" operating in the United States, conclude that in order for transparency policies to have positive policy effects, "users must perceive, consider, and act on information" disclosed.

Figure 1. Key Attributes of a Participatory Model



- ***Access***. Providing users, whether internal or external, with access to information is generally the starting point for a TAC initiative. Publishing information clearly represents a necessary and important first step toward achieving participation in transparency initiatives. However, simply providing information does not by itself give users the opportunity to exercise accountability or participate in public processes. Data is often disseminated in a way that makes it difficult for average citizens and even civil society or the media to understand, for example if it is presented as aggregated reports or in highly technical language. Even if the information is understandable, simply providing access does not necessarily create opportunities or incentives for users to go beyond being passive recipients. Consider the hypothetical example of a website tied to a project to improve management, oversight, and transparency in public finances. The website makes available basic budget information through aggregated annual reports that make it difficult for users to quickly identify information that is relevant to them. A critical element here is the alignment between the information provided and the interests of the relevant stakeholders. The IDB's earlier study concluded that transparency initiatives should be focused on sectors that are important for public management and should be aligned with the interests and concerns of relevant stakeholders (Baena and Vieyra, 2011).
- ***Use.*** The ability to analyze information, for example by comparing different data sets, making *ad hoc* requests for customized data, or uploading information to a different electronic platform represents the next step toward greater user participation. Performing this level of analysis allows users to make sense of information provided and to monitor government performance in a more meaningful way, thus contributing to improving

oversight and accountability. At the same time, it is critical to consider the means through which information is disseminated. Whether access to information initiatives successfully engender active stakeholder participation depends on the quality and effectiveness of information channels, as well as the means, capacity, and incentives of citizens and other stakeholders to access and use the information. An example of a successful TAC initiative is the U.S. Open Government Initiative launched in 2009. The initiative empowers the U.S. administration to require all federal agencies and offices to develop and publish "high-value" data; substantive time-series data relevant to an agency's performance can be uploaded to other formats such as XLM, XLS, and CSV for further analysis. Today, it is a robust information source with over 100,000 distinct data sets that allows filtering by sector, or geographic area, facilitating analysis and inquiry.

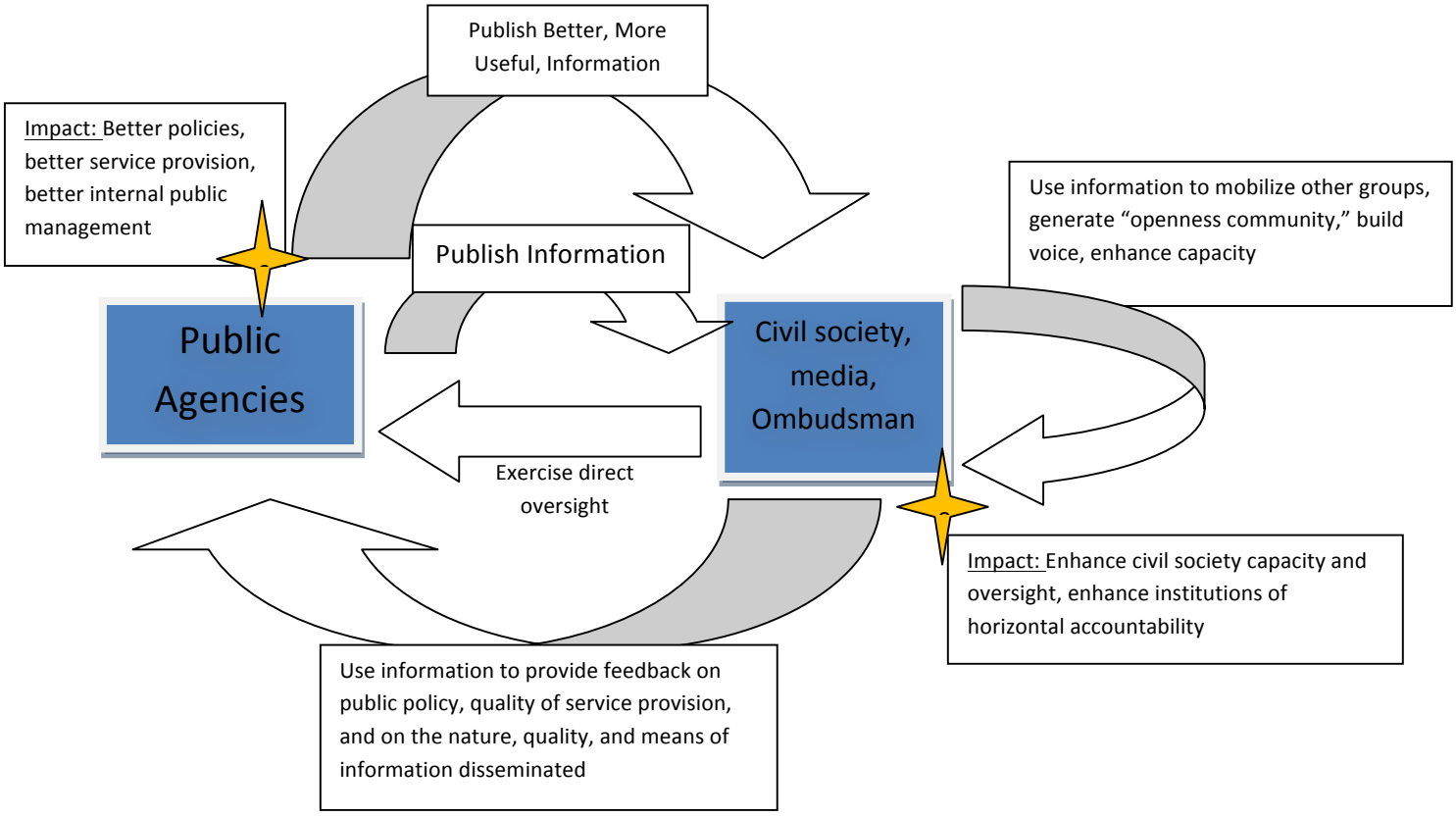
- ***Participation and Interaction[10].*** The ability to interact directly with other users of information and with government agencies, for example by offering feedback on the quality of public services or by providing useful information for future policy design, represents the final step toward greater participation in the user-experience cycle. This type of interaction can take the form of an online dialogue (e.g., chat room or blog) embedded within the site or of other opportunities to provide feedback and recommendations, report instances of corruption and abuse[11], participate directly in a transaction, take advantage of a service, or even collaborate to improve the site's content and technological applications (crowdsourcing). Integration with Web 2.0 applications (see Annex I) can greatly facilitate user participation by allowing for rapid sharing of public information, thus expanding a site's potential scope and breadth of information dissemination. These types of interactions can

[10] Participation and interaction can take different forms: (i) information is used by civil society groups, journalists, independent government oversight agencies, or other "watchdog" groups to reveal abuses, inefficiency, possible corruption, or gaps in government spending and other public policies; (ii) publishing information encourages civil society, academics, or other independent observers to do more analysis and research, to transform data and present it in innovative ways, and to use information to encourage and empower new stakeholders; and (iii) participation through user feedback—both on the effectiveness and appropriateness of information channels and on issues of public policy or service provision—provides government agencies with valuable information and knowledge of constituents, which can be used to design new policies and to improve service delivery, internal processes, the quality of available public information, and channels for communicating it.

[11] It is important to stipulate, however, that in order for "feedback/recommendation" features to meaningfully encourage interaction in the spirit of the user-experience framework, there needs to be a sense that the user's input is in fact being considered and ideally responded to. Consider the difference between an anonymous email form to issue a complaint and a real-time online discussion forum with a public official.

lead to better results in a specific public service or policy area by engaging citizens directly in oversight efforts, as well as by fostering a stronger, more collaborative relationship between the government and its constituents. Figure 2, below, provides a graphical representation.

Figure 2. Participation for Accountability



General Approaches

Potential impacts of these various modes of interaction range from improved internal processes in public agencies, better service provision, and more effective public policies to strengthening the capacity of civil society[12], the media, and institutions of horizontal accountability.

[12] It is important to note, however, that even if channels and modes for disseminating information are devised in such a way to facilitate and encourage citizens to access, use, and interact with the information, there must be desire and capacity on the part of citizens and civil society to do so. While fostering this type of civic engagement is an

In fact, when analyzing ICT interventions in TAC, one can think of two broad categories: One is primarily *internal* and encompasses tools that allow the government to improve efficiency, management, and oversight of its own processes and information, thus reducing opportunities for internal corruption. The second category relates to active participation with an *external* focus.

The first category includes, for example, ICT solutions that lead to simplified and standardized processes in areas like human resources or internal accounting.[13] [14] Better internal management enables government agencies to provide more relevant, practical, and accurate information to citizens or other arms of the government. This group of policies thus indirectly supports active participation in TAC by improving the government's internal capacity to produce relevant, useful, and actionable information[15]. Box 2 presents an example of an ICT-based initiative supported by the IDB in Brazil.

Box 1: The Observatory of Public Expenditure in Brazil

In Brazil, the Comptroller General of the Union (CGU) is the country's Supreme Audit Institution (SAI), exercising external control over all federal public agencies. For entities like the CGU, having access to high-quality, timely information on public sector activities and the ability to use and analyze that information is critical to perform an oversight role. ICTs can play a major role in enhancing the capacity of oversight agencies to effectively analyze and use information to improve public accountability.

The CGU, with support from the IDB, incorporated a new ICT-based tool, the Observatory of Public Expenditure (ODP in Portuguese), which utilizes various applications to allow officials to scan massive quantities of procurement data in order to identify irregularities that might indicate wasteful spending or abuse of the system. The ODP has led to tangible improvements in public procurement in Brazil by discovering systematic abuses of corporate credit cards by public officials, resulting in new regulations in this area and revealing specific instances of abuse concerning competitive bidding systems for public

uncertain and long-term process, one immediate implication is the importance of educating the public about the existence, uses, and benefits of access to information or other transparency initiatives.

[13] For more information on specific ICT technologies and concepts that can be employed to improve internal management in the public sector, see Annex I.

[14] To better understand the potential for corruption in the context of human resource management in government agencies, and the opportunities and challenges for ICT-based interventions, see the following case study from Sub-Saharan Africa: http://www.egov4dev.org/success/case/centralpersis.shtml

[15] It is important to distinguish between ICT-based transparency and anticorruption initiatives and e-government. The latter term generally refers to the use by government agencies of information and communication technologies to improve the reach and quality of public services and make government more efficient and transparent. While there is significant overlap between e-government initiatives and the TAC efforts that are the focus of this paper, they are not identical; the main difference relates to the specific purpose of enhancing transparency and expanding access to public information.

contracts. Altogether, the ODP flagged some 5.5 percent of federal procurement transactions, equivalent to US$ 3.9 billion of public expenditure.

The ODP provides a clear example of potential public sector benefits of ICT tools that facilitate the analysis and use of information to bring about transparency and accountability. This case also illustrates the importance of considering ICT-based transparency initiatives to support initiatives within the public sector itself.

Source: Inter-American Development Bank. Anti-Corruption Activities Trust Fund Annual Report, 2010.

The second group of initiatives has an *external* focus and bears more directly on the question of active participation. These involve the actual content of public information, channels through which the government disseminates it, and the opportunity and ability that users have to access and analyze it and to interact with other users and with the government—in other words, to exercise meaningful anticorruption and transparency activities. These initiatives seek to facilitate external oversight by allowing users of the ICT tool to access, analyze, and share information on government activities.

Box 2: Public Inputs for Legal Reform in Mexico

During March and April 2011, the Mexican Congress considered amendments to the country's freedom of information laws that included measures that would have weakened the authority of the Federal Institute of Access to Information (IFIA), the independent agency charged with overseeing Mexico's access to information laws.

In response to these proposals, the Mexican anticorruption and transparency organization "Fundar" organized a Twitter campaign, encouraging people to use the micro-blogging application to send messages to Mexican legislators voicing their opposition to the proposed changes. The barrage of Twitter messages from constituents helped sway lawmakers on a key committee to abandon the elements seen as weakening Mexico's FOI regime and instead to pass a package of amendments that expanded the scope of access to information laws.

The ability to share information via a popular social media site greatly increased the breadth of participation in what otherwise might have been a narrow, NGO-sponsored campaign. Given the power of such technologies to rapidly engage a wide population of users, their integration into ICT-based TAC efforts can greatly increase participation.

Source: "Improvements to Mexican transparency law passed." Freedominfo.org. http://www.freedominfo.org/2011/04/improvements-to-mexican-transparency-law-passed

Both external and internal accountability initiatives are important components of a robust and effective TAC policy that encourages participation, and there are ample opportunities to utilize ICT tools to improve outcomes in both areas: the existence of robust and effective channels for information communication and government-citizen interaction (*external*) helps produce more accurate, relevant, and useful information (*internal*). This interaction has the effect of encouraging further citizen participation.

True potential for success exists when both approaches converge in one initiative through developing platforms that strengthen the government's ability to manage information and deliver services, and also create multidirectional flows that engage a diverse range of stakeholders as users of information. The IDB is in the process of implementing a project with these characteristics for the government of Haiti (Box 4).

Box 3: The Haiti Integrated Government Platform

In January 2010, Haiti was hit by a devastating earthquake that destroyed much of the country's infrastructure, initiated a massive rebuilding process, and sparked an enormous influx of foreign aid from various sources, with $9.8 billion pledged by the UN in the months after the quake. The reconstruction effort thus put a premium on having access to reliable information and being able to manage and share that information in real time, particularly when much of the government's information infrastructure was destroyed.

The IDB in partnership with Microsoft Corporation and Infusion Development approved a program with two main objectives: (i) to provide the Government of Haiti with the immediate capacity to manage information and resources in the reconstruction effort, and (ii) to install a core technology capacity by implementing the Haiti Integrated Government Platform (HIGP). The HIGP would provide the foundations of e-governance with a roadmap to guide the process of transforming the Haitian public sector. The HIGP is an open platform accessible by various channels—including mobile phones—, which supports delivery of government services and facilitates sharing of important information among public agencies, international donors, Haitian citizens, and other important stakeholders such as the private sector and the Haitian diaspora.

One application developed for the project has the objective of allowing the Government of Haiti to efficiently manage and share information relating to rebuilding, including monitoring the status of projects throughout the country and the availability of aid funding from different sources. The goals have been to achieve an efficient and cost-effective use of resources and to promote transparency and accountability during rebuilding. This example illustrates how ICTs can be designed to facilitate multidirectional information flows that simultaneously enhance transparency, improve the quality of available information, and facilitate information sharing, further enhancing transparency.

Source: IDB (2010).

4. Leveraging ICT for Greater Accountability: An Evaluative Framework

In order to develop a framework for evaluating different ICT initiatives in the TAC realm, this section builds on the three attributes that have been identified as critical to successfully access information initiatives for accountability (access, use, and interaction). In defining specific criteria for each attribute, it is helpful to think in terms of two important categories: **content of information** and **presentation of information**.

In the first area, ICT initiatives should provide information that is: i) comprehensible for average users, ii) useful for TAC purposes, and iii) relevant to users' lives. With respect to presentation of information, ICT initiatives should have the following features: i) accessibility, ii) ease of analysis, and iii) opportunities for interaction and dialogue. Table 1 summarizes the proposed evaluative framework.

Table 1: Guiding Criteria

Attribute	Guiding Criteria	Scope
Access	• Comprehensible • Accessible	Content of information Presentation of information
Use	• Ease of analysis • Useful for TAC • Relevant to users	Presentation of information Content of information Content of information
Interaction	• Opportunities for interaction	Presentation of information

- **Information is comprehensible:** The first qualification simply implies that the information be understandable by a nonspecialist, ensuring that using the information is not compromised by an inability to understand it. Another important consideration is the existence of educational tools and online guides that can enhance a user's understanding of issues.
- **Information is useful for TAC purposes:** This criterion seeks to ensure that the information provided is of sufficient scope, depth, and timeliness that it can be utilized effectively in TAC efforts. For example, are there time-series data that would allow the monitoring of

trends over time? Can users compare information from different areas or subsectors of public activity in order to evaluate an agency's performance in different areas?

- **Information is relevant to users:** This criterion is slightly more subjective but emanates from the insight that users are more likely to actively participate in TAC efforts when they feel invested in the outcome or have reason to believe they have a stake in the efficiency and performance of the government in the area under consideration (Baena and Vieyra, 2011).
- **Information is accessible:** Accessibility speaks to how easy and intuitive the ICT platform is to use. It is important not to throw up unnecessary barriers to user participation, and a confusing online interface does precisely that. Accessibility includes considering which technology platforms are more likely to be accessible to and used by stakeholders.
- **Information is easy to analyze:** Ease of analysis takes into consideration the manner of presenting information. It should be easily manipulated and uploaded to other applications or otherwise analyzed for the purpose of pursuing TAC activities, such as the modes of interaction described above. An important consideration is whether users can request information tailored to their interests on an *ad hoc* basis.
- **Information can lead to participation:** Finally, presentation of information ideally should allow diverse channels for interaction among users, including the ability to share information through social media, to report abuses or instances of corruption, and to collaborate to improve the ICT application—either through technical innovations or via suggestions about information content.

These criteria all encourage users, in different but complementary ways, to take advantage of ICT tools to participate actively in TAC efforts by facilitating analysis, sharing, and interaction. Fostering this type of participation is critical to ensuring that ICT-based initiatives go beyond merely publishing information to become effective tools that increase transparency and discourage corruption. Table 2 summarizes the framework laid out above.

Table 2: Guiding Criteria and Indicators

Category	Criteria	Indicators
Information content	**Comprehensible to average user**	• Can a nonspecialist easily understand the content of the information? • Are there educational tools/resources to help users better understand issues being treated?
	Useful for TAC	• Is the information current? • Is historical information available? • Is the information of sufficient depth and scope to do meaningful analysis? • Can users compare across different government agencies/offices/policies? • Is information available in both aggregated and disaggregated form?
	Relevant to users	• Does the information relate to policy areas that impact peoples' daily lives? • Can information be disaggregated on a regional or local level or sector policy basis?
Information Presentation	**Accessible**	• Is the interface user-friendly and intuitive? • Are the portals for interaction/dialogue featured prominently?
	Ease of analysis	• Can information be uploaded to Excel or other applications? • Can users make *ad hoc* requests for customized data?
	Opportunities for interaction	• Is the application integrated with Web 2.0 applications such as Facebook, Blogger, Twitter, etc.? • Is there a portal for direct feedback/communication with government agencies? • Does the site solicit citizen participation in improving the application both technically and in terms of information provided?

5. Case Studies

The two case studies that follow present ICT-based initiatives that successfully apply the principles outlined above, providing relevant information in a way that encourages active stakeholder participation by facilitating analysis, sharing, and interaction through the online platform. The first case, drawn from Mexico's access to information initiatives begun a decade ago, represents a broad, national transparency and anticorruption effort that attempts to define official anticorruption and transparency policies across the national government. The second example illustrates an initiative undertaken by the U.S. government that attempts to improve transparency and oversight in the context of a particular public policy—the 2009 American Recovery and Reinvestment Act, commonly referred to as the "stimulus package." The ability of these initiatives to elicit active stakeholder participation in accountability efforts attests to the great potential for ICT-based initiatives.

Mexico's Freedom of Information Act and Infomex Portal

Mexico boasts one of the region's most robust frameworks for ensuring freedom of information. The centerpiece of the country's freedom of information system is the 2002 Freedom of Information Act, which has been viewed as a model worldwide for transparency standards. The law created an independent federal agency, the Federal Access to Information Institute (IFAI) to implement and enforce the law at the national level. Over the decade since its creation, IFAI has staked out its ground as an effective, independent public agency with the capacity and political will to hold other public agencies to the transparency standards envisioned in the law. The agency also plays the role of arbiter in disputes between government offices and citizens over freedom of information requests. A 2007 constitutional amendment further enshrined principles of transparency in Mexico's legal framework by setting uniform standards for access to information that apply to Mexico's 31 states and the Federal District and strengthening the original law in important areas like maximum disclosure and protecting personal information.[16] The amendment was quickly ratified by every state and has been in effect since 2008. The adoption of a constitutional amendment represented an important step toward protecting the freedom of information laws from shifting political attitudes.

[16] "Mexico's Constitutional Reform Guarantees the Right to Know," The National Security Archives. George Washington University. http://www.gwu.edu/~nsarchiv/mexico/constitution.htm

Mexico's FOI regime has successfully incorporated a variety of ICT tools, which have considerably aided the law's implementation, effectiveness, and reach. Beginning in 2003 with the enactment of the FOI law, citizens could request information electronically through the System of Information Requests (SISI). A new online portal, Infomex, replaced SISI in 2008 and allows citizens to submit freedom of information requests to local, state, and national government agencies. Infomex contains a number of innovative features that go beyond basic access to information and offer opportunities to analyze, share, and interact with respect to information on the site.

First, Infomex allows users to submit *ad hoc* information requests tailored to particular interests and purposes. These requests can be specific to a geographic location or apply to the national government and include a range of government agencies. This flexibility encourages analysis and also allows users to formulate requests that are relevant to their lives rather than receive pre-bundled packets of information from government offices. The layout of the site is straightforward, with its most relevant features easily found; it includes educational materials and guides to information solicitation.

In addition, records are kept of all requests made on the site and responses to them. Users can do searches that help them analyze patterns and trends in agency responsiveness, a feature that empowers civil society groups and citizens to exercise diagonal and vertical accountability by overseeing the government's compliance with its transparency obligations. The site also allows users to appeal decisions made by solicited agencies through IFAI. This application creates space for communication between government and constituents and envisions a more robust interaction than the one-way provision of information from government to constituents.

The Infomex portal, and Mexico's FOI efforts overall, have succeeded in eliciting active stakeholder participation. The federal government in Mexico receives one of the highest numbers of ATI requests in the world (Hernández-Valdez, 2009). [17] Numerous examples of civil society groups using access to information to effect meaningful changes have occurred, from stopping a sewage project after it was shown to be polluting indigenous lands to allowing inmates to access

[17] As of May 2011, IFAI had received over 600,000 information requests online. Between 2003 and 2006—the first three years in which the law was in effect—approximately 76 percent of all information requests were satisfied. A study carried out by the Centro de Investigación y Docencia Económicas (CIDE) over the course of 2010 found that 84 percent of information requests had been satisfied, and 82 percent of these responses came via electronic media.

their criminal records; the latter effort resulted in the release of 35 unjustly-held prisoners (Box 5).

Box 4. Uses of Mexico's Freedom of Information Law and the Infomex Portal to Improve Public Policy

Since the advent of Mexico's Freedom of Information Law in 2002, and the growth of a vibrant community of civil society activists, journalists, and academics around its use and implementation, numerous cases of information being used by citizens to identify poor or ineffective policies, wasteful or abusive public spending, or outright corruption have occurred, resulting in improved public sector management and more efficient spending in a variety of areas.

In 2006, an environmental NGO, Maderas del Pueblo del Sureste, filed access to information petitions to investigate a sewage project intended to bring sanitized water to an indigenous community that inhabited a nature reserve in Chiapas state. The information released through IFAI showed that the system had serious design flaws, and a filter that was supposed to be installed was never built. The water had to be manually treated with chlorine, which was flowing into a nearby river and causing environmental damage. This revelation halted the project and changes were made to its design and technical aspects to rectify its flaws.

In the state of Nuevo Leon, a human rights group, Ciudadanos en Apoyo a Derechos Humanos, took a different approach, training prison inmates in the use of access to information laws to empower them to defend their own rights in the context of the judicial system. Most of these 200 inmates were being held for minor offenses, but were unable to afford a defense attorney. Over 100 inmates requested their personal records, and while these were at first denied, an appeal to IFAI was successful and also established a precedent protecting inmates' right to their personal records throughout Mexico's federal prison system. Thirty-five of the inmates trained were released based on the information obtained.

In 2002, FUNDAR, a civil society organization that has focused on social policy and budget oversight, used access to information requests to expose abuses of federal health care spending. The group investigated the diversion of 30 million pesos, which had been assigned to women's health and similar programs, to a group of nongovernmental Centers to Assist Women. FUNDAR, working in conjunction with five other civil organizations, revealed that these centers were linked to Provida, a pro-life organization whose agenda ran counter to what the government was trying to accomplish with its women's health policies. In addition, the majority of the funds were being sent to "ghost" organizations with the same address as Provida. An internal audit confirmed FUNDAR's findings and resulted in a 13 million peso fine against Provida, which was barred from received public money for 15 years.

Sources: De Renzio, Paolo and Krafchik, Warren. "Lessons from the Field: The Impact of Civil Society Budget Analysis and Advocacy in Six Countries." International Budget Project, 2007; http://www.freedominfo.org/2009/03/mexico-success-stories

In addition to providing access to information through the Infomex portal, the Mexican government has taken other measures to mobilize ICT to increase transparency and improve public accountability. The Ministry of Public Administration has created a Guide for Citizen

Monitoring that informs about the citizen rights established in the federal FOI legislation; it also provides guidance on how to define an inquiry and monitoring techniques such as surveying users of public services, interviewing public officials, and visiting government institutions.[18] In addition, IFAI offers workshops and training to educate public officials on access to information issues such as how to handle information requests, classify privileged or confidential information, and protect personal data (Hernández-Valdez, 2009).

Concerns and gaps remain in Mexico's transparency apparatus, especially regarding the accuracy of responses to more complex requests and the evenness of implementation across the national space (Cejudo and Cázares, 2011).[19] However, one undeniable success is that the initiative has motivated active participation among citizens and civil society. A host of civil society-based online platforms have arisen over the past decade to further monitor transparency; many of these efforts have joined under the banner of Mexico Informate and utilize Facebook, Twitter, and blogs to reach out to a broader segment of the population. There is evidence that the FOI initiative has engendered a strong sense of civic consciousness surrounding transparency issues.

United States Recovery.gov

In February 2009 the U.S. Congress passed the American Reinvestment and Recovery Act to revive the U.S. economy through a variety of programs that cost more than $800 billion. The law required that all recipients of this stimulus money report quarterly on use of the funds and created an independent entity, the Recovery Accountability and Transparency Board, to ensure proper use of stimulus money.[20] The bill also stipulated that a website be developed under the aegis of the entity's board to aid in this effort. Recovery.gov went live the day the bill was signed, allowing users to track stimulus spending and also report suspected fraud and waste in disbursal and use of funds.

---

[18] The guide is available online at www.monitoreociudadano.gob.mx

[19] The CIDE report concluded that unevenness among and within states, especially with respect to the institutional capacity of agencies charged with implementing access to information legislation, was the biggest roadblock to effective exercise of the right to access information in Mexico. It is also worth noting that the study was commissioned by the Conferencia Mexicana para el Acceso a la Información Pública, which is made up of the 32 state-level agencies responsible for implementing access to information laws, as well as IFAI, the relevant federal agency. Soliciting such a performance review by a civil society group suggests a high level of commitment on the part of these agencies.

[20] http://www.recovery.gov/About/Pages/Recoverygov.aspx

Recovery.gov provides comprehensive information on federal stimulus spending, including recipients of funds and spending agencies. Users can access disaggregated information focused on a specific locality or project and compare funds designated for a certain project or region, including amounts actually distributed. Information from the site can be uploaded to other applications such as Excel and Adobe Acrobat or added to users' web pages. These features empower users to compare stimulus spending in different regions and on different kinds of projects. They also provide information specific to users' particular locale or area of economic activity, making the site not only useful in TAC efforts but also relevant to users in general. It offers tools to enforce accountability, such as links to Government Accountability Office reports, project audits, lists of funding recipients that did not comply with the Act's quarterly reporting requirements, and quality control tools such as polling that enables evaluation of intended outcomes.

Several tools ensure that the information provided is accessible to average users, including educational videos and a comprehensive Q&A section that outlines different ways to use the site. Information is comprehensible, and the site is easy to navigate. Users can scroll over the "Looking For?" tab, which redirects to links and tools that are most relevant for different user categories—interested citizens, data users, members of the press, and recipients. This particular feature was added to the site in 2010, the result of consultation between the Recovery Board and various stakeholders, including the public (Recovery Accountability and Transparency Board, 2010).

The site is highly integrated with social media, and users are explicitly encouraged to utilize these tools to share site information. In addition to icons connecting to Facebook, Twitter, Youtube, and Blogger, the site contains a "social media hub" that presents all social media activity on the site's blog, Facebook page, and Twitter account in one space. Social media uptake has been considerable: the board has 6,000 followers on Twitter, almost 4,000 Facebook fans, and its YouTube videos have been viewed more than 100,000 times.

From the initial design phase, there was a deliberate attempt to tailor the site to the needs and interests of the various classes of users. Various questions were asked: i) How would the average citizen want to view the data? ii) What information would the public want to retrieve from Recovery.gov? iii) How would those preferences differ from what the press, special interest

groups, or Congress might want? (*ibid*). The board, in conjunction with consultants, developed a series of trials and tested them in focus groups throughout the country. It sponsored a week-long electronic town hall in spring 2009, soliciting ideas from IT experts and interested citizens. A consistent theme was that "people wanted to know how Recovery money was impacting their own neighborhoods" (*ibid*) This insight led to the development of a mapping feature, which allows users to search stimulus projects by zip code and to visualize exactly where and how this money is being spent in their neighborhoods.

Preliminary results suggest that the designers of Recovery.gov succeeded in creating a website that would attract robust user participation. Over the 12 months through March 2011, it received between 600,000 and 1,000,000 page views each month.[21] Visitors to the site reported 5,994 incidents of suspected wrongdoing as of February 28, 2011, and 1,214 of those led to active investigation by the Office of the Inspector General.[22] On the whole, Recovery.gov has been extremely effective in ensuring transparency in the use of federal stimulus funds, as measured by the percentage of recipients in compliance with information disclosure requirements. As of the end of 2011, only 366 spending reports were outstanding–less than one-half of one percent of the total number of recipients (Brodsky, 2011).[23] The chairman of the Recovery Accountability and Transparency Board attributed the high level of compliance in part to the negative publicity generated from publishing the names of noncompliers on Recovery.gov. In February 2010, the site published a list of "two-time losers": recipients who failed to report in two periods (*ibid*).

While relationships between citizen feedback and recipient reporting are only starting to be systematically tracked, officials from the Office of Management of the Budget report that public commentary and scrutiny has led to improvements in the accuracy and completeness of information published and has caused the agency to make adjustments in how it receives and processes information from recipients. The Recovery Board receives between 125 and 200 emails a week from users of the Recovery.gov site, in addition to the formal complaints and reports of abuse described above (Government Accountability Office, 2010). [24]

[21] http://www.recovery.gov/About/Pages/Recoverygov.aspx
[22] http://www.recovery.gov/Accountability/Pages/investigations.aspx
[23] http://www.govexec.com/dailyfed/0411/041211RB1.htm

User participation has improved the effectiveness and usefulness of the Recovery.gov portal itself. One section of the website is devoted to third-party applications; it features web applications developed by outside users that can be applied to Recovery.gov data to better visualize, present, or analyze trends in stimulus spending.[25] These can be used by other visitors to the site. For example, one application helps organizations communicate funding priorities by creating visualizations of the geographic distribution, progress, and status of various projects.

Another component of the initiative that has encouraged participation is a high level of integration among federal agencies and with state and local authorities. The Recovery Act stipulated that all federal agencies receiving stimulus funds maintain their own Recovery Act websites that allow users to report fraud and provide access to reports from the Office of Inspectors General relating to the Recovery Act. Over 90 percent of agencies were in compliance with these requirements, according a report by a council of federal inspectors general in 2010 (Office of Inspector General, 2010). There is evidence that this coordination has had spillover effects on the internal operation of various agencies involved in dispersing stimulus funds, with several agencies adopting practices used in the context of the Recovery Act for investigating fraud. In addition, most states maintain a Recovery Act site; in 2010, the Government Accountability Office reported that state websites were an important source of additional information when recipient reporting to the federal site was incomplete (Government Accountability Office, 2010). The Recovery.gov framework has thus served as an important forum for fruitful interaction among federal agencies and between federal, state, and local entities.

[25] See http://www.recovery.gov/FAQ/Developer/Pages/otherWidgets.aspx

Box 5: Key Figures on Participation from Recovery.gov

- The Social Media Hub presents all real-time social media activity on the site's blog, which includes 6,000 followers on Twitter, almost 4,000 Facebook fans, and its YouTube videos have been viewed more than 100,000 times.
- Over the 12 months through March 2011, it received between 600,000 and 1,000,000 page views each month. Visitors to the site reported 5,994 incidents of suspected wrongdoing as of February 28, 2011, and 1,214 of those led to active investigation by the Office of the Inspector General.
- The Office of Management of the Budget reports that commentary and scrutiny from the public have led to improved accuracy and completeness of the information published and caused the agency to adjust how it receives and processes information from recipients. The Recovery Board receives between 125 and 200 emails a week from users of the Recovery.gov site, in addition to the formal complaints and reports of abuse described above.
- One section of the website, devoted to third-party applications, features web applications developed by outside users that can be applied to Recovery.gov data to better visualize, present, or analyze trends in stimulus spending.
- Finally, over 90 percent of agencies maintain their own Recovery Act websites, which allow users to report fraud and provide access to reports of the Office of Inspectors General.

6. Conclusions

This paper has discussed how transparency initiatives and access to information can help reduce corruption and improve performance and efficiency in public administration by increasing accountability, and highlighted the important potential of information and communications technologies in devising and implementing these initiatives. Despite such potential, ICT-based accountability initiatives often fail to meet their objectives for any number of reasons: lack of capacity or buy-in among government officials and employees, poor project design, implementation problems, and lack of citizen awareness, to name a few.[26] To avoid these pitfalls, ICT-based accountability initiatives should be designed and implemented to encourage stakeholders to participate in oversight through providing opportunities to analyze and share information and to interact with other stakeholders. This paper outlines certain criteria that help ensure that ICT-based initiatives reach this objective. This concluding section offers a series of recommendations for designing and implementing ICT-based accountability projects so that they meet these criteria. These are not hard and fast policy recommendations, but rather general guidelines that are broadly applicable.

Overall strategy:

Relevance to users' everyday lives. Initiatives that provide information tailored to local realities or specific areas of policy most relevant to people's lives are most likely to elicit active participation. Sector-specific interventions might be more effective than broad national policies because the former have an immediate impact on potential users. In addition, it is important to be aware of the different needs of various potential users, from citizens to the media to other public institutions. Tailoring information to various classes of users was an important consideration in designing the Recovery.gov platform.

[26] A 2006 survey by the Institute for Development Policy and Management estimated that only 15 percent of e-government initiatives undertaken in developing countries could be classified as a success, which was defined as realizing the major goals of most stakeholder groups without incurring significant undesirable outcomes. See http://www.egov4dev.org/success/sfrates.shtml. While e-government comprises a broader category of policies than the ICT-based TAC initiatives discussed in this paper, there is significant overlap between the two, and many of the challenges in implementation are the same.

Encourage bottom-up TAC initiatives. Within or among government agencies and offices, policies should not be top-down, emanating from the presidency or agency head, but should incorporate the ideas and be open to the initiatives of public employees at all levels. To achieve the buy-in necessary for effective implementation and to ensure projects are well-suited to the environment in which they will be used, the public servants who will be involved in the day-to-day operations of the project, including interacting with citizens, must have input into the project, beginning with project design. Otherwise, projects run the risk of being out of touch with the specific context in which they will be implemented (Heeks, 2005).

Design of website/ICT platform:

Allow information to be easily uploaded, compared, and amenable to customized requests. Allowing users to request and access customized information rather than preexisting reports greatly increases the relevance of the site for user analysis, thus encouraging active participation.

Integrate and incorporate social media. Social media should be viewed not just as an efficient and effective mechanism to disseminate information from the government to users (for example through institutional blogs, RSS feeds to keep users informed on TAC activities and news, etc.). It is also critical to harness the power of Web 2.0 applications as anticorruption and transparency tools in their own right. These technologies, which benefit from broad participation, can be valuable sources of information with respect to the government's TAC performance (including ideas on how to improve ICT components), thus increasing the impact of the transparency and freedom of information efforts.

Educational components:

Include educational resources. Videos, interactive Q&A forums, and formal training courses on accountability can be effective and user-friendly ways to encourage active participation by providing a practical guide to the site and also to increase awareness and contribute to greater engagement in the long run.

Provide education and training for public officials. It is important that officials and public employees who will be responsible for carrying out TAC policies and interacting with citizens

understand the ethical, legal, and political issues surrounding transparency and anticorruption efforts. Training will not only ensure appropriate implementation of the initiatives, but will encourage active participation and buy-in among public employees. These better trained public employees might be expected to be more engaged on accountability.[27]

Institutional considerations:

Focus on processes. Improving internal processes and information management systems of government agencies can lay the groundwork for an effective TAC initiative by ensuring that the agency can produce information that is useful and relevant for promoting accountability. Adopting policies to improve internal management, then, is an important, if indirect, way to improve participation in TAC initiatives. A variety of ICT tools—generally referred to as e-government applications—is especially useful in this area. Specific ICT applications and concepts that will improve internal management and processes are discussed in Annex I. In addition, the opportunity for corruption is reduced when processes are systematized and standardized through adopting ICT, because opportunities for corruption often arise from imperfect processes (Bertot, Jaeger, and Grimes, 2010).

Foster synergies among public institutions. ICT-based transparency initiatives offer opportunities to enhance collaboration among public sector institutions, and their success often depends on taking advantage of these. First, as discussed previously, public agencies themselves are critical sources of information, providing important inputs to transparency initiatives based in other branches or levels of government. For example, increasing fiscal transparency in the federal Finance Ministry might depend on cooperation and information sharing with various national and subnational agencies.

At the same time, ICT advances in one area of the public sector can have positive spillover effects in other areas. One such case was when new tools and strategies to analyze information and identify fraud developed by the U.S. Recovery Accountability and Transparency Board were adapted by other federal agencies.

[27] For details on ICT tools that can facilitate educational programming and training for public employees, see Annex I.

Role of independent oversight agencies. With regard to national transparency standards that apply to various public sector agencies, ensuring compliance is a fundamental concern. Often, control entities such as supreme audit institutions, anticorruption agencies, or inspectors general within public agencies provide the necessary oversight and administer sanctions, if necessary. In other cases, new public agencies are created to implement and oversee transparency policies; this was the case with the IFAI in Mexico. To ensure consistent and thorough compliance across the public sector, the oversight body, whether a newly created agency or a traditional control institution, needs to be a credible, independent entity with the necessary capacity and political support to perform this role.

Each suggestion highlighted above encourages, in different ways, the development of an ICT initiative that goes beyond mere access to information and encourages users to analyze and share that information and to interact with each other and the government. By moving in this direction, an ICT platform can become a truly powerful tool in transparency and anticorruption efforts. However, the usefulness of any government-sponsored ICT platform depends in large part on the quality, meaningfulness, and relevance of information provided. There is a role for ICT even here: adopting ICT can greatly enhance information management in the public sector, giving it the capacity to provide relevant, accurate, and updated information. (For a more detailed discussion of technologies and applications that are useful in this realm, please see Annex I.) In addition, with the rapid pace of technological advancement in ICTs, the potential for innovative uses of ICT in accountability efforts is always present. This rapid pace makes it imperative that public sector-led initiatives keep apprised of new technological developments so that obsolete technology or applications do not discourage potential users.

Pioneering uses of ICT in accountability include integration with smart phones that allow mobile phones to connect to the Internet. Recovery.gov (see case study above) recently unveiled an application that allows its features to be accessible via smart phones.[28] Crowdsourcing[29] offers another potential next step in the development of interactive, participatory ICT-based TAC initiatives. Apps for America, an initiative of the Sunlight Foundation, has sought to use crowdsourcing to solicit ideas on how to best present government information to the public in an

[28] http://www.intomobile.com/2011/04/04/recoverygov-ios-app-allows-citizens-follow-recovery-money-spent/#

[29] Crowdsourcing refers to using ICT and especially Web 2.0 applications to outsource to the general population of Internet users a job or task that would traditionally be performed in-house or specifically contracted out.

effective and user-friendly way.[30] The third-party applications featured on the Recovery.gov site provide a good illustration of how crowdsourcing can help disseminate public information. Still, there must be sufficient will to sustain meaningful transparency initiatives. Often, ICT components of accountability initiatives consist primarily of websites that provide information on what the government is doing (or planning) in terms of anticorruption and transparency policies (Castillo, 2009). This type of platform, even when it encourages feedback and user participation, can appear to be propaganda rather than a real tool for accountability. Of course, the precise content and quantity of information to be published online is primarily the prerogative of each government or agency. It is not the role of any international interlocutor to pass down requirements on what information is made available in the context of TAC initiatives. Regardless of the exact nature of a particular government or agency's accountability efforts, the general recommendations made herein contribute to developing transparent and accountable governance by ensuring that these efforts attain maximum potential in the fight against corruption.

There is still much uncertainty regarding the links and potential causalities among access to information, meaningful transparency,[31] and accountability. One analytical framework has focused on the "supply side"—the institutional capacity, political will, and disposition of public agencies to provide meaningful, useful information in a manner conducive to real transparency. More recently, attention has turned to the role of citizens and civil society organizations in driving change toward transparency and accountability. This view focuses on mechanisms such as social audits that empower local communities to exercise oversight over government agencies and public policies. The unique advantage of ICT-based initiatives is that they locate themselves at the interface between the public sector and the citizenry, and facilitate both supply and demand of information that promotes transparency and accountability. By allowing the various interactions that help transparent, accountable governance to occur with ease, intensity, and timeliness, ICTs have the potential—where windows of opportunity and pockets of political will do exist—to capitalize on these and generate virtuous cycles of increasing participation, as well as better policy outcomes.

[30] http://sunlightlabs.com/contests/appsforamerica2/

[31] Meaningful transparency is intended to distinguish the mere availability of information (which may or may not make public policies and institutions more transparent) from the publication of information that is useful, comprehensible, and relevant to citizens.

References

Anechiarico, Frank, and James B Jacobs. 1994. "Visions of Corruption Control and the Evolution of American Public Administration." *Public Administration Review*. 54 (5): 465–73.

Baena, Paloma, and Juan Cruz Vieyra. 2011. "Access to Information and Targeted Transparency Policies." IDB-TN-321. Washington DC: Inter-American Development Bank.

Baena, Paloma. 2010. "Informing Policy Decisions: Indicators to Assess Institutional Performance in the Prevention and Control of Corruption." IDB-DP-113 Washington DC, Inter-American Development Bank.

Banerjee, Abhijit, Donald Green, Jennifer Green, and Rohini Pande. 2010. "Can Voters be Primed to Choose Better Legislators? Experimental Evidence from Rural India."

Bardhan, Pranab. 1997. "Corruption and Development: A Review of Issues." *Journal of Economic Literature*. 35 (3): 1320–346.

Becker, Gary. 1968. "Crime and Punishment: An Economic Approach." *Journal of Political Economy*, 76: 169–217.

Bertot, John C., Paul T. Jaeger, and Justin M. Grimes. 2010. "Using ICT's to Create a Culture of Transparency: E-government and Social Media as Openness and Anti-corruption Tools for Societies." *Government Information Quarterly* 27 (3): 264-71.

Bhatnagar, Subhash. 2003. "E-government and Access to Information." In: *Global Corruption Report 2003,* edited by Peter Eigen, 24-9. Berlin: Transparency International.

Brodsky, Robert. 2011. "Recovery Act Reporting Becoming the Norm," *Government Executive.com*. April 12. http://www.govexec.com/dailyfed/0411/041211RB1.htm

Campos, Edgardo. 2007 "A Practical Approach to Combating Corruption: The Value Chain Methodology." Washington D.C: Asian Development Bank.

Castillo, Ricardo. 2009. "Strengthening of Transparency & Anti-Corruption Initiatives through Information and Communication Technologies." Washington DC: Inter-American Development Bank.

Cejudo, Guillermo M., Sergio López-Ayllón, and Alejandra Ríos Cázares. 2011. "Assessing Transparency across Levels of Government in Mexico: Rules, Institutions, and Practices." Mexico City: Centro de Investigación y Docencia Económicas.

Chong, Alberto, Ana de la O, Dean Karlan, Leonard Wantchekron. 2010. "Information Dissemination and Local Governments' Electoral Returns: Evidence from a Field Experiment in Mexico." Forthcoming working paper. New Haven: Yale University.

De Renzio, Paolo, and Warren Krafchik. 2007. "Lessons from the Field: The Impact of Civil Society Budget Analysis and Advocacy in Six Countries." Washington DC: International Budget Project.

Doyle, Kate. 2008. "FOI in Practice**:** Measuring the Complexity of Information Requests and Quality of Government Responses in Mexico." http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB247/index.htm

Ferraz, Claudio, and Frederico Finan. 2008. "Exposing Corruption Politicians: the Effects of Brazil's Publicly Released Audits on Electoral Outcomes." *The Quarterly Journal of Economics*. 123(2): 703-745.

Fung, Archon, David Weil, Mary Graham, and Elena Fagotto. 2004. "The Political Economy of Transparency: What Makes Disclosure Policies Effective?" Ash Institute for Democratic Governance and Innovation. Cambridge, MA: Harvard University.

Goncalves, Sonia. 2009. "Does Exposing Corruption on the Internet Affect Electoral Performance?" Chapter 3, Ph. D. Thesis. London: London School of Economics and Political Science.

Government Accountability Office. 2010. "Recovery Act: Increasing the Public's Understanding of What Funds Are Being Spent on and What Outcomes Are Expected." Washington DC: Government Accountability Office.

Hanna, Nagy, and Christine Qiang Zhen-Wei. 2009. "National E-Government Institutions: Functions, Models, and Trends." In: *Information and Communications for Development: Extending Reach and Impact*. Edited by Mohsen Khalil, Philippe Dongier, and Christine Zhen-Wei Qiang, 83-102. Washington DC: World Bank.

Heeks, Richard. 2005. "E-government as a Carrier of Context." *Journal of Public Policy*. 25 (1): 51-74.

Hernández-Valdez, Alfonso. 2009. "Budgeting Implications for ATI Legislation: The Mexican Case." Access to Information Working Paper Series. The World Bank.

Instituto Federal de Acceso a la Información, http://www.ifai.org.mx/Estadisticas/#estadisticas.

Johnston, Michael. 1998. "Fighting Systemic Corruption: Social Foundations of Institutional Reform." *European Journal of Development Research*. 10 (1): 85–104.

National Security Archives. 2007. "Mexico's Constitutional Reform Guarantees the Right to Know." Washington DC: George Washington University. http://www.gwu.edu/~nsarchiv/mexico/constitution.htm

Office of Inspector General, U.S. Department of Agriculture. 2010. "Internet Access to Information on Office of Inspector General Oversight of Agency Implementation of the American Recovery and Reinvestment Act of 2009." Washington DC: USDA.

Open Society Justice Initiative. 2006. *"*Transparencia y Silencio. Encuesta sobre leyes y prácticas del acceso a la información en catorce países*."* New York: Open Society Institute.

Recovery Accountability and Transparency Board. 2010. "2010 Annual Report." Washington DC: Recovery Accountability and Transparency Board.

Recovery Accountability and Transparency Board. 2010. "On the Road to Accountability and Transparency: the Building of FederalReporting.gov and Recovery.gov." Washington DC: Recovery Accountability and Transparency Board.

Roberts, Alasdair. 2006. *Blacked Out: Government Secrecy in the Information Age*. New York: Cambridge University Press.

Salbu, Steven. 2001. "Information Technology in the War against International Bribery and Corruption: the Next Frontier of Institutional Reform." *Harvard Journal of Legislation*. 38 (1): 67-102.

Savedoff, William. 2010. "The Impact of Information and Accountability on Hospital Procurement Corruption." In: *Anticorruption in the Health Sector: Strategies for Transparency and Accountability*. Edited by Taryn Vian, William Savedoff, and Harald Mathisen, 85-92. .. Sterling, VA, United States: Kumarian.

Schleifer**,** Andrei, and Robert Vishny. 1993. "Corruption." *Quarterly Journal of Economics* 58 (3): 599-617.

Shim, Dong Chul, and Tae Ho Eom. 2008. "E-Government and Anti-Corruption: Empirical Analysis of International Data." *International Journal of Public Administration*. 31(3): 298–316.

United Nations Development Program and Global Integrity. 2008. "A Users' Guide to Measuring Corruption."

Annex I: Review of Technologies and Concepts[32]

The specific technologies and ICT concepts that are highlighted in this annex all have the potential to directly or indirectly promote active engagement among all stakeholders. They include tools that bear more directly on the efficiency and standardization of internal government processes, and others aimed at engaging outside stakeholders in TAC efforts. More specifically, these technologies and concepts contain features that improve how government operates, enhance relationships between government institutions and the constituents they serve, increase the value of the information provided, and empower people through learning over the Internet.

***Enterprise Resource Planning*:** Enterprise Resource Planning (ERP) refers to applications that integrate the data and processes of a large organization into a single system, allowing diverse functions to be performed via a unified database. For example, ERP can integrate accounting, budgeting, billing, procurement, and supply chain management, whereas otherwise each function would be managed via a stand-alone software system. Such integration facilitates standardization and integration of processes for government agencies, and has the potential to greatly improve the accuracy of data kept by these organizations.

***Citizen Relationship Management*:** The goal of Citizen Relationship Management (CRM) is to utilize ICT in an effort to improve the responsiveness of government to the needs of its citizens. It is an adaptation to the public sector of the idea of "customer relationship management"—the aim being to improve working relationships between, in this case, the government and the citizens it serves in order to better anticipate their needs and respond. ICT tools in this area include contact management applications, outreach programs, better case management, and citizen self-service through online portals. TAC efforts address CRM in terms of enhanced accountability for government organizations or elected officials; mechanisms to receive, process, and respond to citizen complaints or suggestions; and ways to encourage and act on ideas and proposals for TAC initiatives from government employees directly involved in citizen engagement.

[32] This information is based on the inputs provided by Ricardo Amado Castillo (2009) in a report for the Inter-American Development Bank.

***Business Intelligence*:** Business Intelligence (BI) encompasses a broad range of applications and technologies that facilitate advanced data management and analysis at the organizational level. BI is often used as a strategy to take advantage of existing information across multiple systems. BI tools could help create a platform that would allow outside stakeholders to perform complex operations with data, thus facilitating the type of information analysis envisioned in the user-experience cycle. For example, BI could provide detailed information on budget, government performance, and other issues that would allow for effective oversight.

E-learning and Learning Management Systems: E-learning refers to educational systems that take advantage of ICT to remotely carry out teaching and learning. E-learning can greatly expand educational access by surmounting geographical, space, and time constraints. It can play an important role in TAC efforts by providing a means to educate large numbers of citizens on issues relating to corruption. It can also facilitate training and education of public employees on TAC matters, including codes of conduct, ethics, and legal and administrative issues.

***Web 2.0*:** Web 2.0 is an elusive term, but it generally refers to a host of next-generation, highly dynamic Internet applications that encourage and, in some cases, depend on users interacting and creating original content. These applications—which include blogs, social networks like Facebook, MySpace, YouTube, wikis, and Twitter—embody the ethos that users should not be passive consumers of online content but rather contributors who redefine and customize applications by virtue of using them.

Clear synergies exist between Web 2.0 and the TAC initiatives that aim to promote active engagement among stakeholders. The crucial point is that the power of these technologies derives from their ability to play an active role in TAC efforts rather than simply serving to disseminate information. Finally, Web 2.0 applications can be easily embedded in any of the technologies mentioned to make them more widely accessible and more interactive.