

Open Government and E-Government: Democratic Challenges from a Public Value Perspective

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ABSTRACT

We consider open government (OG) within the context of e-government and its broader implications for the future of public administration. We argue that the current US Administration's Open Government Initiative blurs traditional distinctions between e-democracy and e-government by incorporating historically democratic practices, now enabled by emerging technology, within administrative agencies. We consider how transparency, participation, and collaboration function as democratic practices in administrative agencies, suggesting that these processes are instrumental attributes of administrative action and decision making, rather than the objective of administrative action, as they appear to be currently treated. We propose alternatively that planning and assessing OG be addressed within a "public value" framework. The creation of public value is the goal of public organizations; through public value, public organizations meet the needs and wishes of the public with respect to substantive benefits as well as the intrinsic value of better government. We extend this view to OG by using the framework as a way to describe the value produced when interaction between government and citizens becomes more transparent, participative, and collaborative, i.e., more democratic.

Categories and Subject Descriptors

J.4. [Computer Applications]: Social and Behavioral Sciences – Communication. C.4 [Performance of Systems]: Design studies; Measurement techniques; Performance attributes

General Terms

Design, Theory, Experimentation, Human Factors, Management, Measurement, Performance

Keywords

E-government, e-governance, e-democracy, open government, collaboration, participation, transparency, democracy, public value, social media.

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1. INTRODUCTION

Barack Obama's use of the Internet and social media technologies in his 2008 presidential bid is widely credited with revolutionizing the contemporary art of political campaigning [52]. Having engineered a campaign organization that capitalized on the strategic contributions of volunteers and that engaged voters with wide ranging opportunities for contact with the candidate, victory had scarcely been declared before predictions circulated that Obama would seek to translate features of this experience into the day to day administration of the executive branch [53]. Dubbed the first "Internet Presidency" [55], the President-Elect and his transition team quickly made good on these predictions. In one of his first executive actions on January 21, 2009, President Obama issued a Presidential Memorandum on Transparency and Open Government [41] instructing the Office of Management and Budget to promulgate an Open Government Directive within 120 days. The memorandum established transparency, participation, and collaboration as the hallmarks of open government.

The Open Government Directive ultimately issued on December 8, 2009 foregrounded the principles of transparency, participation, and collaboration as "the cornerstone of an open government" [43]. The Directive instructed federal agencies "to implement these principles" by broadening access to government information (including the reduction of Freedom of Information request backlogs), improving the quality of government information, and creating and institutionalizing a "culture of open government" that would focus on involving people with "insight and expertise" and forming "high impact collaborations with researchers, the private sector, and civil society" [43:5]. Emerging technologies, which have the potential to "open new forms of communication between a government and the people" [43:5], are viewed as key to this enterprise. The Directive also instructed relevant Federal agencies to identify and propose revisions to any existing policies that might pose impediments to using new technologies to promote open government goals. Agencies complying with the Directive have subsequently made ample use of the Internet and the Web, as well as new capabilities offered by social media, in the Open Government plans they have produced (see <http://www.whitehouse.gov/open/documents/flagship-initiatives> for an overview). Thus, in one breathtaking move, the Obama

Administration substantially redefined the focus of e-government practice at the federal level for at least the next 3 years.

The novelty of the Open Government (OG) Initiative may best be appreciated by comparing it with those of prior administrations. In the 90s, the Clinton Administration's National Performance Review and subsequent Partnership for Reinventing Government focused on using technology in the back office to effect business process improvement, and using the emerging World Wide Web to make accessible to citizens information about government services and programs through the creation of agency web sites. The goals were to improve agency performance, and ultimately reduce the size of federal bureaucracy [15,23]. The Presidential Management Agenda introduced by the Bush Administration focused on developing cross-agency projects and platforms to make it easier to access relevant services and programs; reducing the business costs of providing information to government; improving information sharing between federal, state, local, and tribal governments; and improving federal government efficiency [23].

In contrast, the goal of the OG Initiative is to make information and decision making processes in federal agencies accessible to citizen examination and input, and in so doing create democratic structures that "facilitate citizens' social and political judgment" [26:107] about the outcomes of government work. Broader access to government data and other documentation, the ability to contribute information and perspectives to decision making processes within government agencies, and the possibility of responsible engagement with agency leadership in such decision making processes are incrementally more democratic actions that lie at the heart of the open government vision. Thus, it appears that a substantially new and expansive approach to democratic governance may be unfolding at the federal level, supported by new technologies that may now significantly alter the relationship between citizens and government agency leaders.

What is not yet clear is how to assess the impact of the programs and policies created in pursuit of transparency, participation, and collaboration. While these key terms resonate in familiar and positive ways, it is not obvious how to determine what actions and programs count as transparent, participative, or collaborative, and from whose perspective such judgments should be evaluated. For example, Sifry [50] reports that "[1]literally hundreds of thousands of data streams are coming online at Data.gov and in the process a whole new kind of public engagement with public information is being enabled" [50:119]. But even if one assumes that the data is both usable and of high quality, which cannot be taken for granted [2,16], does the act of making greater amounts of government data available to the public by itself count as "transparency" and what kinds of metrics present a clear basis for making this case? Will involving citizens in agency decision making increase the extent to which that agency is viewed as "participative," and whose perceptions count in arriving at such a conclusion? These are difficult issues that have not yet been directly confronted.

In this paper, we consider OG within the context of the academic field of e-government and its broader implications for the future of public administration; we further propose a conceptual framework to guide policy makers in planning and assessing their open government programs. We begin by situating OG within two traditions of thought addressing the relationship between technology, democracy, and government – e-democracy and e-government – suggesting that the OG Initiative blurs these

distinctions by incorporating historically democratic practices, now enabled by emerging technology, within administrative agencies. We then consider how transparency, participation, and collaboration function as democratic practices in administrative agencies. Our analysis suggests that these values are instrumental in producing an environment characterized by democratic practices. Transparency, participation, and collaboration are potential attributes of administrative action and decision making, but not in themselves the end or objective of administrative action. Instead, they are means to greater ends, although what those ends might be is not completely evident.

We propose alternatively that planning and assessing OG related programs and projects be addressed within a "public value" framework. The concept of public value is borrowed from existing work that draws upon the larger, ultimately political, character of public administration. The creation of public value, represented in information, programs, and benefits, is the goal of public organizations; through public value, public organizations meet the needs and wishes of the public. We extend this view to OG by using the framework as a way to describe the value produced when interaction between government and citizens becomes more transparent, participative, and collaborative, i.e., more democratic. We conclude that OG efforts may ultimately have the effect of stimulating deeper changes in the structure and organization of the federal bureaucracy by exposing the ways in which more transparent, participative, and collaborative administrative mechanisms produce concrete outcomes that are valued by government agencies and their stakeholders.

2. TECHNOLOGY, DEMOCRACY AND GOVERNMENT

The idea of using new technologies to support, enhance, expand, or re-invigorate democratic practices is not novel. The history of 20th century media has demonstrated that the introduction of new communication technologies routinely gives rise to intense speculation about their impact on the processes and practices of democracy [29]. In the case of computer-mediated communication and information technologies, that speculation has been particularly intense, and has been applied to broad processes of democratic decision making and e-democracy as well as to more targeted forms of government action as e-government.

Studies of e-democracy generally focus on the ways that the Internet and its associated technologies may work to "amplify the political voice of ordinary citizens" [32:6] in broad political processes. This happens by increasing the availability of information required for the development of policy preferences; by dislocating entrenched monopolies on information distribution by media elites in favor of other information providers; by encouraging political participation in campaigning, referenda and voting; interacting with elected representatives; and by engaging in deliberation over policy in the public venues.

In contrast, the field of e-government has focused more squarely on the use of technology within the routine activities undertaken by public organizations [15]: the provision of public services, the quality and cost-effectiveness of basic government operations, citizen engagement and consultation, the statutes and legislative mandates required to effect these processes, and the administrative and institutional reforms undertaken in pursuit of innovation. Indeed, as Chadwick and May [7] have demonstrated through their examination of e-government initiatives in the United States,

Great Britain, and the European Union, a “managerial” mode of interaction through information and communication technologies (ICT) between citizens and the federal agencies has been historically privileged at the expense of more consultative or participatory modes of interaction. This is not to say that participation and engagement have not figured at all within the e-government field. Riley [46] and Cullen [13] have differentiated between e-government and e-governance, with the latter defined as programs that invite “citizens to engage in the policy processes of oversight through a range of technologies from e-mail, to social networking applications, and online conferencing. Electronic consultation includes more formal systems of e-engagement, initiatives such as the US E-rulemaking process, and e-participation initiatives” [13:58]. However, e-governance activities have not been the focus of previous presidential administrations, nor have they been evident at most state or local government levels.

This may be because administrative agencies have not traditionally been viewed as sites for political decision making. The decisions made by administrators have been assumed to be largely technical, taken principally to implement legislative mandates, and best made by agency employees who are assumed to possess requisite expertise. Thus, participation with the public is not needed. More recently, this perspective has been sharply critiqued. Some doubt the assumption that administrators invariably possess the expertise required for wise decision making [40]. But it is also increasingly recognized that agencies “make decisions that they believe are technical that in fact are not” [10:14]. Administrators exercise discretion in selecting among options for designing and implementing policy; in doing so, they make value judgments at all stages of the policy process [47:5]. These value judgments are implicit in competing visions in society of what is “good” and bureaucrats confront trade-offs between the different values to be pursued [10]. In this sense, the decisions taken by administrative agencies are far from value-neutral; on the contrary, they are political and very much wrapped up in the dynamics of democratic politics.

It is increasingly recognized that administrative agencies must be responsive to public will [33], which can be accomplished indirectly through action by elected representatives. Directly, legislation such as the Administrative Procedures Act of 1946 has compelled administrators to consult the public about proposed rulemaking activities across various agencies. The Federal Advisory Committee Act, which implicitly recognizes that expertise can lie outside the agency, recognizes the merits of seeking advice from citizens. But these solutions are only partial. The OG Initiative extends responsiveness more radically by acknowledging that citizens must have information to hold agencies accountable and the desirability of direct input in the decision making-processes taken by administrative agencies.

Thus, although e-democracy in political and e-government in administrative realms have historically been largely separated, it now appears OG brings these two spheres of activity together. But regardless of whether federal agency attempts to implement open government are best viewed as e-democracy or e-governance, it seems clear that these efforts take place in contexts that lack the conceptual frameworks and the performance benchmarks for evaluating their success (see, e.g., [37]).

3. TRANSPARENCY, PARTICIPATION, AND COLLABORATION

The idea of “open government” is animated by optimism over what can be accomplished politically through the use of new technology; the term draws in part on the philosophy and methods of the “open source” programming movement. “Just as open source software allows users to change and contribute to the source code of their software,” according to Lathrop and Ruma, “open government now means government where citizens not only have access to information, documents, and proceedings, but can also become participants in a meaningful way” [36:xix]. The open source movement is characterized by its advocates as transparent, participative, and collaborative, but these terms also represent political values with a substantial history in democratic theory, directly relevant to broad processes of citizen action related to voting and public policy choices, now also applied in the context of routine administrative actions within government bureaucracy. In our discussion below, we show how transparency, participation, and collaboration, which relate directly to democratic theory, have become increasingly relevant to administrative contexts.

3.1 Transparency

The relationships between information, transparency, and democracy are fundamental and basic. Information is essential to the formation of such basic democratic competencies as formulating preferences and opinions, testing choices, and participating in decision making [19,54]. Without such competencies, a citizen cannot negotiate the marketplace of ideas and is denied effective voice and the exercise of First Amendment rights to free speech [6]. Thus, “good” information, in sufficient quantity, quality, and accessibility, is a prerequisite for “good” democracy [17].

Without information it is similarly impossible for citizens to hold the governments they elect accountable to their collective will. According to De Ferranti [21], transparency refers to “the availability and increased flow to the public of timely, comprehensive, relevant, high quality and reliable information concerning government activities” [21:7]. In a representative democracy in which citizens delegate authority for decision making, such information is essential to providing a continuing basis for consent. Transparency thus describes the extent to which government actors make available the data and documents the public needs in order to assess government action and exercise voice in decision making [22]. The Freedom of Information Act (FOIA) enables federal agencies to negotiate between the right to know and justified needs for secrecy, giving citizens a mechanism for requesting information that has otherwise not been released. The voluntary and routine disclosure of budgets, audits, policies, and executive actions provides a basis for citizens to assess the efficacy of administrative action and make demands about the kinds of public services that are provided by government; these acts coincidentally also generate pressure for improved performance.

But it is worth noting, as has Fung [26], that transparency is not an unalloyed good. Maximizing the transparency of government processes, for example, may bring into sharp focus the ways in which government decision making is problematic, without due regard for the goods and benefits that are produced along with these problems. He calls for “public accounting systems” that

would enable citizens to provide ongoing feedback and broader evaluations of government services.

Beyond its potential for fostering accountability and generating improved government performance, transparency has also been discussed as an instrumental solution to legitimacy problems. As Curtin and Meijer [14] point out, transparency may enhance the public's willingness to accept institutional structures in a variety of ways: by clarifying the way that an authority structure has been constituted, by demonstrating the concrete benefits of institutional actions, and by cultivating the belief that citizens have a fair chance to influence institutional decisions and evaluate results, to name a few. These are empirical questions, of course; the extent to which transparency is related to its many hypothesized objectives has yet to be fully established (see [30]).

3.2 Participation

Based on the model of the Athenian polis, the earliest form of democratic governance is participatory democracy, which does not distinguish between those who govern and citizens [31]. Through face-to-face discussion and, sometimes, deliberation, citizens engage directly in decision making about their civic affairs. Since such processes have become impractical for all but small communities, the emergence of new technologies excited many with the possibility of including more individual voices in political discourse and reinvigorating civic life and political participation [5, 28].

In contrast to representative government, participatory democracy requires individuals to become more knowledgeable about the perspectives of others and the interests that underlie those perspectives [48] so they may deliberate more effectively. Opinion exchange takes place in a variety of venues. For Habermas [27], the link between the public and democratic government is forged through discourse in the “public sphere” that is, through the social intercourse that takes place between citizens discussing issues of common concern in a variety of public places—coffee houses, salons, and journals of opinion. For communitarian democracy [1,20] and its contemporary analogues or extensions (e.g., “strong democracy,” [4]), this interaction takes place in neutral gathering places or “great good places” [42] where citizens meet as community members to discuss issues that sustain community life and build civic commitment. Regardless of venue, the assumption is that all citizens have equal influence over decisions ultimately taken, and that they exert their influence under conditions of individual autonomy.

When applying this model to administrative agencies, public participation is the “process by which public concerns, needs, and values are incorporated into governmental and corporate decision making” [10:7], a process that is democratically justified when it is acknowledged that decisions taken by administrative agencies have a political character.

Public participation has the potential to include diverse citizens' voices in the public policy process [18]; when traditionally excluded voices are included, policies may be designed that can help them overcome disadvantageous positions. Social equity is recognized as a core objective of public administration [24] and public participation is instrumental to achieving this objective. Public participation can serve as a means for “redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included

in the future” [3:216], thus yielding decisions that are characterized by social justice.

Public participation in agency decision making is also thought to yield concrete benefits for the decision making at issue. Public participation processes present different perspectives that can help decision makers make more informed decisions; citizens may know as well as bureaucrats, or perhaps even better because they deal with such problems more frequently, what options constitute desirable policy [35:72].

Finally, like transparency, public participation has the potential to be instrumental in helping contemporary governments address the problem of legitimacy [25]. Government action is considered legitimate if the public has good reasons to support it. Public participation in government decision making can increase legitimacy by incorporating the public interests in the decision making process; support comes from the recognition that the government is responsive to the interest of the public, rather than organized interest groups [25].

Although public participation in administrative decision making is acknowledged to hold considerable potential, there is also considerable evidence to suggest it is not always successful [34]. It is not the case that more participation is always better; a contingency approach recognizes different levels of participation are more or less desirable depending on the characteristics of the policy process and the goals pursued. The extent and kind of public participation should depend on the potential contribution to be made and the potential adverse consequences that may ensue [9:533]. According to this approach, participation varies in three different dimensions: (1) who participates, (2) how participants exchange information and make decisions, (3) the link between public participation and decision making [25]. Public participation initiatives vary on these three dimensions depending on the desired outcomes.

3.3 Collaboration

Unlike transparency and participation, collaboration has not traditionally been directly associated with democratic political theory. Instead, Noveck [40] argues that collaboration is “a form of democratic participation” [40:19] that differs in important ways from traditional participative and deliberative practices, which often take place in circumstances disconnected from decision making. Deliberation often turns into an opportunity for the exchange of views, rather than the context for determining a specific course of action. While there are benefits to ensuring that diverse viewpoints are incorporated into government action (as we have seen above), she argues that collaboration as a contemporary form of participative democracy brings individuals with expertise together with government decision makers to create solutions that will be implemented.

This approach to collaboration finds its foundation in recent public administration theory as collaborative public management, the “process of facilitating and operating in multiorganizational arrangements in order to remedy problems that cannot be solved- or solved easily- by single organizations” [38:33] and in analogous models such as “new governance” [49:8]. Collaboration helps governments address public problems described as “wicked” because they have no easy solutions. Addressing “wicked issues requires a new style of governing. It

involves a capacity to work across organizational boundaries, to think holistically and to involve the public” [8].

Just like participation, collaboration can potentially enhance the effectiveness of governments, but it does so by recognizing that impartiality, expertise, resources, discipline and time to make public decisions are resources that are distributed in society and by incorporating them into policy processes. Collaboration calls for different sectors of society to work together, recognizing that citizens possess complementary information that can be used to solve public problems [49] and that collaboration can potentially build social capital needed for citizens to play “value adding” roles [51]. The potential of collaborative approaches is greatly enhanced by new technologies that give rise to permeable “networked” structures allowing people to connect across organizational boundaries [38].

However, collaboration has also been criticized in the public administration literature. For instance, the reliance of governments on third party actors has generated the image of the hollow state to describe governments that become distanced from the services they deliver to citizens [45]. Additionally, accountability issues may arise for holding these new participants responsible for their actions [44]. There is limited understanding of the impact of collaboration on program outcomes and a generalized assumption that more collaboration is always desired [38]. But collaboration is desirable to the extent that it can meet its potentials and lead to more effective problem solving.

These perspectives reflect the same quality of instrumentality that characterizes transparency and participation. As Noveck [40] points out “Collaboration is a means to an end. Hence the emphasis is not on participation for its own sake but on inviting experts, loosely defined as those with expertise about a problem, to engage in information gathering, information evaluation and measurement, and the development of specific solutions for implementation.” [40:39]

4. THE PUBLIC VALUE FRAMEWORK

It should be clear from the prior discussion that transparency, participation, and collaboration are best viewed as instrumental to the accomplishment of democracy in that they enable citizens to enact their various roles as citizens. That is, transparency is not an end citizens pursue for its own sake. Citizens may desire their government to be transparent, but that is largely because something else is at stake: Information and actions must be transparent so that citizens can scrutinize and assess the concrete outcomes of government action. Similarly, participation for the mere sake of participating is an empty and alienating exercise; instead, citizens participate in order to produce government action that responds to and reflects their input in meaningful ways. Collaboration only makes sense where participants can contribute useful expertise, and substantive decisions are under consideration. It's important to note that, although these instrumental values may not be ends in themselves, when implemented, they must be genuinely enacted. Citizens must be assured and trust that these values have not been co-opted in the service of other politicized agendas. At the same time, as we have pointed out, it is also not the case that more transparency, participation, or collaboration is necessarily beneficial. Instead, care must be taken to determine the ways and the occasions in which these processes are undertaken. Thus, metrics that merely quantify how many datasets are available or how frequently

opportunities to participate or collaborate are available cannot be taken as unequivocal indicators that open government has been successful.

We suggest that when transparency, participation and collaboration are meaningful, it is because they enable groups of people to pursue their objectives. If that is true, what are these objectives? In the section below, we propose that the “public value” framework enables us to understand how to determine the value of government activities and to do so from multiple stakeholder perspectives, not just a “citizen” viewpoint.

4.1 Public Value in Public Administration

The public value perspective, introduced by Moore [39], assumes that administrative organizations make decisions that are inevitably political, and argues that managers must therefore determine how best to make such decisions. Just as privately owned economic organizations create “private value” for their owners, Moore proposes that public organizations create “public value” for citizens and a wide range of other stakeholders. Private value is created when goods and services are bought and these transactions produce a profit; it is reasonably easy to discern and measure. Public value, on the other hand, is the product of governmentally-produced benefits, which are undertaken when market mechanisms are unable to guarantee their equitable production. Part of public value is derived from the direct usefulness of such benefits; another part is derived from the fairness and equitability of their production and distribution, and meets citizens' requirements for “properly ordered and productive public institutions” [39:53].

This perspective makes clear that efficiency and effectiveness measures are not necessarily the only or even the principal way that government programs or services might be assessed. As Moore puts it [39:38] “In the end none of the concepts of 'politically neutral competence,' 'policy analysis' and 'program evaluation,' or 'customer satisfaction' can finally banish politics from its preeminent place in defining what is valuable to produce in the public sector. Politics remains the final arbiter of public value just as private consumption decisions remain the final arbiter of private value.” Citizens each have individual perspectives on the relative worth of governmental activities, but ultimately whether a government action creates public value is a collective judgment. The extent of value perceived is likely to vary based upon interest group perspectives and location in the hierarchy, and may also change over time. Since the desirability of government action is not derived from legislative mandate, public managers must attend actively to perceptions of public value produced by agency programs and services. Moore offers considerable advice about how best to engage in these managerial processes.

However, he does not offer a systematic method for analyzing public value. Since financial metrics such as efficiency, profit, and productivity cannot be wholly transported to this context, we must find analogous methods for analyzing public value. To address this problem, Cresswell and his colleagues [11, 12] have designed a set of strategies for linking the concrete interests of multiple stakeholders to specific government activities, and particularly those related to ICT investments designed to achieve open government principals.

4.2 Public Value Impacts

Public value, in the most general sense, focuses our attention on the collective and societal interests that are served by particular institutional forms and actions of government. We can speak in broad terms about those interests, but to be most useful the analysis of public value must center on particular stakeholder groups and their interests. The distribution of value across multiple stakeholders will vary according to their particular interests and expectations for government. They will also vary in the benefits they receive from the same government action; some stakeholders may also suffer from an action. Because of this distribution, considering public value as an absolute indicator of government outcomes misses the variety of interests and possible benefits across many stakeholders. Past literature and government declarations link open government initiatives to the broad all-inclusive category of “citizens.” By treating such a diverse population as one group and analyzing it as one group, the analysis falls woefully short of understanding the value of the government action. Instead we treat each government action as potentially presenting value to multiple and diverse stakeholders from both inside and outside the organization. But this outcome represents a set of complex, iterative interactions between multiple stakeholders and the operations of a government agency or program.

The cornerstone of the public value rationale lies within the link between government action and the multiple types of public value that can accrue. Public value types distinguish between the *intrinsic* value of government as a societal asset and the *substantive* value of government actions and policies that deliver specific benefits directly to individuals, groups, or organizations. Public value can be described in terms of six general types that capture the range of possible results of government in the ways of interest here.

- **Financial** – impacts on current or future income, asset values, liabilities, entitlements, or other aspects of wealth or risks to any of the above.
- **Political** – impacts on a person’s or group’s influence on government actions or policy, on their role in political affairs, influence in political parties or prospects for public office.
- **Social** – impacts on family or community relationships, social mobility, status, and identity.
- **Strategic** – impacts on person’s or group’s economic or political advantage or opportunities, goals, and resources for innovation or planning.
- **Ideological** – impacts on beliefs, moral or ethical commitments, alignment of government actions or policies or social outcomes with beliefs, or moral or ethical positions.
- **Stewardship** – impacts on the public’s view of government officials as faithful stewards or guardians of the value of the government in terms of public trust, integrity, and legitimacy.

Of these, the first four types are impacts related to the substantive private interests of individuals or groups. The remaining two types are related to intrinsic or societal and democratic outcomes. The

public value of stewardship results from greater integrity, responsiveness, and legitimacy of government leading to increased trust and satisfaction with the government overall. Ideological public value aligns government action with moral and ethical preferences or beliefs.

From identifying these six basic types of value impacts, we can move to considering issues related to how value is created. Value is produced by value generating mechanisms; identifying these mechanisms allows us to specify the means by which a government action is related to the production of one or more public values. The value generating mechanisms reveal the instrumental pathways by which a given government action is related to the creation of a value. According to our framework, actions to effect transparency, participation, and collaboration belong within this group of value generators. Taken as a whole, the set of value generators consists of:

- **efficiency** – obtaining increased outputs or goal attainment with the same resources, or obtaining the same outputs or goals with lower resource consumption.
- **effectiveness** – increasing the quality of the desired outcome.
- **intrinsic enhancements** – changing the environment or circumstances of a stakeholder in ways that are valued for their own sake.
- **transparency** – access to information about the actions of government officials or operation of government programs that enhances accountability or influence on government.
- **participation** – frequency and intensity of direct involvement in decision making about or operation of government programs or in selection of or actions of officials.
- **collaboration** – frequency or duration of activities in which more than one set of stakeholders share responsibility or authority for decisions about operation, policies, or actions of government.

Connecting a value type with a value generating mechanism makes clear how a government program results in one or more public values. For example, an IT investment in putting license application and renewals online may increase efficiency or effectiveness and yield strategic or financial public value for stakeholders that use such licenses.

Transparent, participative, or collaborative actions taken by government may have the effect of enabling a citizen to derive substantive financial, social, political or strategic values and/or intrinsic value related to government itself. For example, when provided with environmental information (with transparency as the enabling value generating mechanism) a citizen may derive a couple of types of value. In this case, a citizen who acquires information about a toxic chemical release in his neighborhood may derive social benefits for his/her family and the community, but may also gain greater trust in the stewardship of a government agency that provides such information. But conversely, it is also possible that some stakeholders will derive negative public value from this release of information. The same citizen who learns of a toxic chemical release may sue the business allegedly responsible, resulting in negative public value for that business stakeholder. It

is also possible that a group of internal governmental stakeholders may accrue positive political and strategic value by releasing the information because it meets an open government requirement; while another set of internal stakeholders may see that as negative political impact. Therefore, determining the value of any government action requires the systematic analysis of multiple stakeholder perspectives so that both positive and negative impacts are identified and understood. It is with the information generated through this careful analysis that more informed decisions can be made about open government initiatives.

4.3 Applying the public value framework

We are currently developing this approach to provide a foundation for more systematic and detailed analyses, but a number of implications may be highlighted at this point. First, a public value analysis requires a relatively complete inventory of stakeholders for a government agency or unit. Agencies do not serve “the public” at large; instead, they serve particular groups of people with particular needs and desires, and need to be able to connect their initiatives to the stakeholders they are committed to serving.

Second, a public value analysis requires that an agency link its open government initiatives to its mission and priorities. The open government principles of transparency, participation, and collaboration are best viewed as strategies that government takes to accomplish organizational objectives (which should already be rooted in public values), that provide the opportunity to achieve greater or additional value through incorporating these democratic practices. More information, participation or collaborative actions may enable better decisions that provide stakeholders with financial, social or strategic values while also enabling them to achieve the stewardship value of increased trust in the responsiveness of government.

Third, government leaders may benefit from this approach by using it to plan, design, and assess open government initiatives. The selection and design of open government initiatives can be enhanced by a clear understanding of who is served by a particular initiative, by specifying what values an initiative seeks to create, and by understanding the value generating actions that are required to achieve benefit. This is a recipe for clear-minded planning and design that we trust will improve the progress of open government planning. Planners can conduct their analyses by initiative, asking what stakeholders and values are targeted by initiatives in their portfolios, thus insuring that initiatives each have a discernible audience and anticipated outcomes. They can also analyze their portfolios by stakeholder, asking what initiatives serve each stakeholder group and in what ways they will derive value, thus insuring that the agency is addressing the needs of those segments of the public they are mandated to serve.

Conversely, government leaders may also benefit from using this approach to evaluate their open government initiatives. Our approach suggests that initiative stakeholders, rather than the public at large, will be best situated to evaluate a specific initiative. Further, rather than metrics focused on numbers of datasets available, numbers of downloads, participation opportunities, numbers of discussion posts, etc., agencies will need to assess the validity of the pathways from an initiative to one or more stakeholders, through value generating mechanisms and finally to one or more values derived.

Open government will have achieved its goals when stakeholders derive substantive or intrinsic value from government actions that are at least in part characterized by transparency, participation, and/or collaboration. We predict that agency stakeholders who derive one or more public values from initiatives that are transparent, participative, and/or collaboratively conducted will perceive that government agency to be more responsive, accessible, engaged, and thus more open.

5. CONCLUSION

Our public value approach to open government, and to the democratic aspirations at the heart of this effort, is still under construction and requires empirical testing. However, as e-government researchers, we believe that this effort is vitally important. As our analysis has shown, our field's conceptualizations of e-government have roughly mirrored those advanced by elected leaders, rather than serving as inspiration to those who seek to lead. While we have included democratic enhancements in our e-government typologies, they have received little development in our field. It is remarkable to see the e-government aspirations of the Obama Administration following the lead of the open software movement, rather than the field of e-government. As researchers, we must be pro-active in helping federal government leaders implement, develop, and assess the open government vision.

This is all the more important given the nature of transparency, participation, and collaboration, as instrumental concepts themselves, since they are so easily misunderstood. The open government principles can be relatively easily operationalized. However, doing so without reference to value carries the risk that such actions will be empty scaffolding. Transparency, for example, will not be achieved through the mere downloading of data sets. The data sets must consist of reliable and valid data, the data must be useful, and, most crucially, they must enable citizens to do something they find valuable and important. If not, transparency is just another empty promise, and will contribute to growing cynicism within the electorate. Similarly, participation and collaboration must be meaningful, must be directed toward goals that are carefully defined, must be acknowledged by ample government feedback, and the citizen input they generate must be represented in outcomes that are visible to stakeholders in the decisions and the value produced.

At the same time, open government reconciles the divergent paths of e-democracy and e-government. While transparency, participation, and collaboration may initially take more time and resources, they bear the promise of ultimately improving policy performance – the historic focus of e-government – by creating shared understandings of current performance and generating pressure to improve, increasing the pool of applicable ideas, tapping into new sources of expertise, and building civic capacity. All these may ultimately turn out to be the key to concrete improvements in policy outcomes and the quality of public services.

But achieving such outcomes will inevitably require changes in the structure and organization of government. Fountain (2005) has observed that such structural changes rarely materialize through e-government initiatives. Instead, technology enactment all too often reproduces existing rules, routines, norms, and power relations, despite the new and innovative capabilities that new technologies introduce. The promise of open government is to

provide a source of pressure that counteracts these tendencies, a promise that may be fulfilled provided that open government changes the nature of relationships between stakeholders and government, producing innovative forms of organizing that enable groups to link across organizational boundaries and functions. The creation of public value may be the best possible argument for stimulating and justifying such structural changes.

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