May 29, 2002

To: Developing a Basic Research Program for Digital Government workshop participants
From: Paul DiMaggio
Re: “White Paper”

I apologize both to Jane Fountain and to my fellow workshop participants for the lateness of this memo, which reflects both an overwrought end-of-semester schedule and a certain diffidence stemming from my lack of expertise in the topic of the workshop. My own empirical research on digital technologies has dealt with how typical Americans – that is, the cross-section of folks that a well designed sample survey can pick up – use the Internet. Unlike most of you, I have not studied how the new digital technologies change organizational structures or how, from the producer’s side, they affect service delivery. Consequently, my comments shall be largely “theories and conceptual frameworks,” as much by default as by choice. I’ll cover three topics below: (1) The enduring value of the Weberian problematic for the study of government accountability, which I take to be a central issue in this research area; and (2) A few issues raised by my own research on the consumer side (which has dealt with government services only in the most limited way, but from which one can at least derive a couple of questions).

The theory of bureaucracy as a way into the question of research agenda
Let’s start with the relevance of Weber’s model of bureaucracy to the issue of government accountability. There are at least three kinds of accountability. One, the effectiveness with which legislative and regulatory bodies referred to the organized efforts of interest groups and other collectivities to take part in the policy formation process, is one to which the new digital technologies are relatively, but not entirely, irrelevant.

Two others forms of government accountability are perhaps more predictably influenced by the adoption of digital technologies. These are (1) responsiveness to clients who come into contact with government on a day-to-day basis and (2) the absence of corruption. We can think of these two types of accountability as positive accountab-

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1 See, e.g., Jane Fountain’s excellent *Building the Virtual State*. I am writing this in a white heat, hoping to make it available before the meeting – as a result, I shall not include the usual scholarly references, but will occasion refer to an author’s work casually and in passing.
ility (enabling the citizen to trust in the competence of government) and negative accountability (enabling the citizen to trust in the integrity of government).\(^2\)

Corruption and performance are related intuitively to accountability. I think of government as accountable if I can expect to be treated fairly and competently in my dealings with government representatives. This is the *Reinventing Government* type of accountability – smart organization and a focus on citizens as clients facilitate more responsive government on a day to day basis. I think of corrupt government as unaccountable because it represents a departure from universalism: Corrupt government may be very accountable to favored constituents but very nonresponsive to those who are not part of the dominant coalition.

Corruption and performance are also intuitively related to one another. That is because corruption provides an alternate basis (alternate to the consent of the governed expressed through the electoral process) for the power of office holders, by giving the beneficiaries of corruption a stake in the officeholders’ retention. Thus officeholders in corrupt polities are often protected from being held accountable for their ineffectiveness. Moreover, because reforms that improve government effectiveness --- including some reforms that entail use of the new digital technologies -- often increase the flow of information and make government more transparent, corrupt officials will tend to oppose them.

These are the connections that enthusiasts of digital government tend to emphasize: the new digital technologies improve government by it more responsive to citizens (*positive accountability*) and by making it more transparent to citizen inspection (*negative accountability*).

There is probably a great deal to this claim, but I would like to suggest that it may not be the whole story, however. Max Weber opened up the question of the relationship between corruption and effectiveness in his famous essay on bureaucracy. He depicted bureaucracies as unparalleled devices for the control of lower employees by bureaucratic elites. Because bureaucracies permitted elites (within constraints) to control subordinates for a wide range of purposes, we cannot assume that bureaucratic control ordinarily

\(^2\) Some of this discussion may draw loosely on some of the contributions in Valerie Braithwaite and Margaret Levi, eds., *Trust & Governance* (NY: Russell Sage Fnd. 1998).
fosters responsiveness in governments --- for example, in totalitarian states it fosters the opposite. But for present purposes we shall assume that we are talking about polities with democratic governments whose leaders would, for the most part, prefer bureaucrats to be effectively responsive to citizens than the opposite.

Bureaucracy, then, enhances responsiveness (type 1 accountability) through three mechanisms. First, by making it easier for elites to control subordinates, it permits elites to hold subordinates accountable for their actions. Second, by making the division of labor and job requirements more precise, it makes it possible to determine the competencies that effective provision requires. Third, Weber believed that bureaucracy enhanced performance by making expertise and skill the primary criteria for recruitment and an important criterion for advancement. Weber recognized an affinity between the bureaucratic form of administration, the expansion of formal education, and the inclusion of experts in the administrative apparatus.

Bureaucracy, for Weber, reduces corruption (i.e., enhances type 2 accountability) by creating administration “without regard to persons” in Weber’s telling phrase, by mandating standardized routines, by fostering universalistic values, and by effectively harnessing the interests of the bureaucrat to those of the organization. Indeed, bureaucracy emerged alongside of modern notions of “corruption”: Bureaucracy reduced the incidence of what had been standard operating procedure for all pre-modern forms of organization (nepotism, elision of the boundary between public and private interest, self-dealing, and so on). Such behaviors only came to be widely defined as “corruption” with the normative institutionalization of bureaucracy and the values that sustained it.

What Weber never resolved, and what has kept organization theorists and public management experts busy for generations, is the fact that these “effects” of bureaucracy – on positive and negative accountability, respectively – were not always mutually supportive. Many scholars have noted the tension between routine (which enhances negative accountability by reducing variance in performance and ensuring that it is universalistic) and expertise (which enhances positive accountability by creating better systems and providing more effective responses to nonroutine situations).

Weber never resolved this pervasive tension between universalism – the absence of corruption and equal treatment of all citizens – on the one hand; and, on the other, the
ability of government’s to harness expertise to enhance average performance. Historically, the challenge for government reformers – from the Progressives of the 1920s to Vice President Gore’s Reinventors of the 1990s – has been to acknowledge the tradeoff between accountability as universalism and accountability as performance and to push the tradeoff frontier further away from the origin. Certainly compared to prebureaucratic systems of governance, they have been effective in this quest. A recent study by Professor Stephen Knack of the World Bank estimates that (among states in the U.S.) the correlation between these two forms of accountability is about .15 (with a rather weak proxy measure standing in for performance) and that it may be higher if one samples nations rather than U.S. states. At the same time, governments continue to struggle with the inability of administrative systems built on routine to guarantee effective and responsive service to citizens. In other words, on the ground we often see tension between positive accountability (if only staff had more discretion they could use their skills to solve problems for clients more readily) and negative accountability (rules and standardized procedures may be the best defense for clients who have reason to believe that bureaucrats may treat them unfairly).

This is where the new digital technologies promise to be especially useful. In the past, reforms that enable employees to use their expertise and/or experience to provide more flexible service have been achieved at the cost of grants of discretion and departures from routine. Whereas under certain conditions, accompanied by adequate programs of training and socialization, such employee empowerment can be all to the good, it nonetheless remains the case that, as Fountain has noted, employees may use discretion to violate norms of universalism – that is, to give a different qualities of service to different kinds of clients. Those technological fixes that use expert systems as distinct from “expert humans” can achieve, in theory, the best of both worlds – enhancements in positive accountability, i.e., flexible responsiveness to client problems (including nonroutine problems), without any reduction in universalistic consistency (negative accountability).

Of course, reforms rarely operate in practice as they are meant to in theory, which makes research important. In particular, it makes it important to:

(a) Create taxonomies of uses of digital technology for service provision that distinguish different types of uses on the basis of the extent to which they (i)
foster flexible responsiveness on the part of service staff and (ii) foster control of service staff to ensure the provision of universalistic services (with the understanding that these two types may be analytically orthogonal dimensions rather than alternatives);  
(b) Use such taxonomies as bases for sampling cases from different regions of the state space, and undertake case studies that focus on the effects on both responsiveness and universalism of reforms that aim to make government more responsive to clients or to make public servants more universalistic;  
(c) Identify reforms that achieve each of these ends with the least sacrifice of the other (or that manage to enhance responsiveness and universalism simultaneously), with the object of understanding how this can be the case.  
One general observation: Research of this kind may benefit from collaboration between social scientists and technical people. Students of organizations are really good at identifying how systems actually work (or fail to work) and technologists understand how technical systems should work and what is and is not possible. Ultimately, we need to produce a generation of scholars who are sufficiently well trained in both the social science and technology to work independently. At present, I suspect there are too few such people to do all the work that needs to be done, so that collaborations have a lot of promise.  

A little evidence on who actually uses the Internet to access government Web sites  
To switch topics entirely, a few factoids based on analysis of the 2000 General Social Survey module on Internet use. In spring 2000:  
---50% of Americans used the Internet  
---45% of Americans used it for more than e-mail  
---20% used it for four or more hours per week (for purposes other than e-mail).  
---Users were more likely than non-users to be highly educated, employed, white, male, and young.  
---39% of all Internet users and about 55% of “regular” web users (4 or more hours per week) reported that they had “visited a web site for government information” during the
previous 30 days. If we assume that this figure is similar to the proportion who visited a “government web site,” then this represents approximately 1 in 5 Americans.

--- For web users only, and controlling for the number of hours one spends on-line in a logistic regression, the probability of visiting a government web site was significantly greater for those with more years of formal education, more prestigious occupations, and higher scores on aptitude tests. (It was not significantly related to race, gender, or family income.)

In other words, attempts to use the Internet to improve the quality of government services reach only a small percentage of Americans; and these Americans are doubly selected for socioeconomic privilege – first, in comparison to their fellow citizens who are not on-line and, second, in comparison to their fellow Internet users who do not use the Web in this way.

I state this more as an hypothesis, and as a call to include the study of inequality of access in any research program on digital government, rather than as concrete fact. The GSS measure leaves much to be desired (although it is more likely to overestimate than to underestimate the number of Americans being reached by direct government service-delivery efforts). But the results to present plenty of prima facie reason to be concerned and to undertake research that:

--- Measures actual use of sites offering government services more carefully, identifying non-users as well as users;

--- Uses survey analysis and interviews to try to understand why (a) non-users do not use sites; and (b) use of government service sites is biased (as it seems likely to be) towards Internet users with longer schooling and better jobs. The answers may not be obvious, and different answers would imply different policy solutions.

--- Uses analysis of search engine searches and of the network structure of web sites to identify barriers to accessibility of government service sites for less skilled Internet users, and to suggest means of improving the situation by altering Web site design.