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Cities @ Crossroads

DIGITAL TECHNOLOGY AND LOCAL DEMOCRACY IN AMERICA

Jennifer Shkabatur^{*}

Digital technology's transformative potential for democratic governance is hardly questioned, but it has not yet been tackled in legal scholarship. This article starts filling this gap by exploring digital technology's role in local governance.

The article situates the relations between cities and citizens along two complementary axes: (1) consumerism (i.e., citizens are regarded as consumers of city-provided services) and (2) participation (i.e., citizens play an active role in local decision making and agenda setting). The article explains how digital technology fits into this framework and develops performance criteria to evaluate local digital initiatives.

Next, the article argues, while American cities reasonably satisfy consumerist, service-provision requirements, they fail to benefit from digital technology's participatory potential. This result is lamentable, but it is not inevitable. Drawing on recent digital initiatives in various European cities, the article proposes a framework to enhance digital participatory practices in American municipalities.

INTRODUCTION

On his inauguration day in January 2009, President Barack Obama declared that "the way to solve the problems of our

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time, as one nation, is by involving the American people in shaping the policies that affect their lives." This statement was hardly surprising. A commitment to openness and citizen participation played a central role from the outset of Obama's presidential campaign. It was therefore particularly symbolic that the Memorandum on Transparency and Open Government was the first document signed by President Obama when he took office.²

The Memorandum articulated that transparency, participation, and collaboration are the three pillars on which Transparency ought government rests. to promote accountability and provide citizens with information about governmental activities in an easily graspable form.³ *Participation* is required since "[k]nowledge is widely dispersed in society," and hence Americans should be given "increased opportunities to participate in policymaking and to provide their Government with the benefits of their collective expertise and information."4 Lastly, collaboration is necessary "across all levels of Government, and with nonprofit organizations, businesses and individuals in the private sector," as it "actively engages Americans in the work of their Government."5 Striving to put these principles into practice, the president relied on digital technology as the major catalyst of the process. The Memorandum therefore instructed the U.S. Chief Technology Officer to issue the Open Government Directive to specify concrete steps to implement the presidential vision.⁶

The timing and urgency of the Memorandum and the Open Government Directive that followed it are telling. Scholars of democracy have been warning in recent decades that American politics is "beset with anxiety and frustration,"

President Barack Obama, Remarks by the President in Welcoming Senior Staff and Cabinet Secretaries to the White House (Jan. 21, 2009), http://www.whitehouse.gov/thepress-office/remarks-presidentin-welcoming-senior-staff-and-cabinet-secretaries-white-house.

Memorandum on Transparency and Open Government from President Barack Obama to the Heads of Exec. Dep'ts & Agencies, 74 Fed. Reg. 4685, 4685 (Jan. 21, 2009) [hereinafter Transparency and Open Government Memorandum].

See id.

Id.

Id.

Id. The Open Government Directive was issued in December 2009 and mostly targeted the transparency pillar, largely leaving aside participation and collaboration. See Memorandum on the Open Government Directive from Peter R. Orszag, Dir., Office of Mgmt. & Budget, to the Heads of Exec. Dep'ts & Agencies (Dec. 8, 2009) [hereinafter Open Government Directive Memorandum], http://www.whitehouse.gov/sites/default/files/omb/ assets/memoranda_2010/m10-06.pdf.

⁷ MICHAEL J. SANDEL, DEMOCRACY'S DISCONTENT: AMERICA IN SEARCH OF A PUBLIC PHILOSOPHY 3 (1996).

and that more and more citizens grow disappointed with the performance of the democratic institutions and political system.⁸ The decline of the "public" and the hatred of politics have become a common theme in studies of both national and local politics.⁹ The growth of the administrative state and the post-New Deal belief in bureaucratic expertise have weakened the prospects of meaningful public engagement and exacerbated the mutual distrust between citizens and government.¹⁰ Government appears remote, insensitive, and inaccessible, unwilling to truly listen and respond to public concerns.¹¹ Hence, faced with (at least seemingly) inattentive political institutions, American citizens "feel that they live in a time of big decisions; [but] they know that they are not making any.⁷¹²

Given this reality, the presidential Memorandum, though primarily addressed to federal agencies, is even more pertinent for local governments. Cities are smaller in size compared to other political entities, but at the same time bear responsibility over a wide range of matters that substantially affect the lives of their residents (e.g., police, health, schools, taxation, and zoning). The combination of these two features can generate, at least in theory, promising participatory structures in which citizens play an active and substantial role in the governance of their communities. The situation in practice, however, indicates that the participatory potential of cities is largely missed. Citizens' experience with local government is often marked by apathy, frustration, and lack of meaningful opportunities to influence local decision-making

⁸ Pippa Norris, *Conclusions, in* CRITICAL CITIZENS: GLOBAL SUPPORT FOR DEMOCRATIC GOVERNMENT 269 (Pippa Norris ed., 1999).

⁹ See, e.g., E.J. DIONNE JR., WHY AMERICANS HATE POLITICS (1991); DISAFFECTED DEMOCRACIES: WHAT'S TROUBLING THE TRILATERAL COUNTRIES? (Susan J. Phart & Robert D. Putnam eds., 2000); COLIN HAY, WHY WE HATE POLITICS (2007).

¹⁰ See, e.g., Gerald E. Frug, *The City as a Legal Concept*, 93 HARV. L. REV. 1057, 1070 (1980) (noting that "[w]hat makes the concept of popular participation so unrealistic to us is . . . our conviction that all decisionmaking requires specialization, expertise, and a chain of command"); Cass R. Sunstein, *Constitutionalism After the New Deal*, 101 HARV. L. REV. 421, 504-08 (1987) (arguing that "[t]he modern administrative agency has attenuated the links between citizens and governmental processes").

¹¹ DISAFFECTED DEMOCRACIES, *supra* note 9, at 8-10 (describing the decline of public trust in government in recent decades); Evan M. Berman, *Dealing with Cynical Citizens*, 57 PUB. ADMIN. REV. 105 (1997) (examining the extent of public cynicism toward governmental policies).

¹² C. WRIGHT MILLS, THE POWER ELITE 5 (1959); *see also* SANDEL, *supra* note 7, at 3 (expressing similar concerns).

processes—what has been described as a "you can't fight city hall" state of mind. $^{\scriptscriptstyle 13}$

The intuition that lies at the basis of the presidential Memorandum, the Open Government Directive, and other initiatives of this sort¹⁴ is that digital technologies possess a powerful transformative potential that can reverse the current trajectory of citizen-government relations. This aspiration, in line with a wide range of scholarly arguments, celebrates the potential of the internet to open up novel channels of communication between citizens and government, and begin a new chapter in citizen participation and public accountability.¹⁵

Due to these high theoretical ambitions and the abundance of online practical experiments in American cities, it is surprising that the legal literature has disregarded this phenomenon. This vacuum is worrisome. Guidance as to which paths are better to take and which should be abandoned is urgently required. Cities are currently at a crossroads in terms of their digital development—they can either benefit from the democratic potential embedded in digital technologies, or waste it.

This article is the first attempt to conceptualize the current and potential role of digital technologies in American cities. The article starts by presenting two basic axes consumerism and participation—on which the relations between a city and its residents can be situated. The consumerist axis represents a vertical structure, in which the primary role of the city is to provide residents with services

¹³ CLINT BOLICK, LEVIATHAN: THE GROWTH OF LOCAL GOVERNMENT AND THE EROSION OF LIBERTY xii-xiv (2004); PAUL E. PETERSON, CITY LIMITS 120 (1981); see also Frug, supra note 10, at 1070; see also Archon Fung & Erik Olin Wright, *Thinking About Empowered Participatory Governance, in* DEEPENING DEMOCRACY: INSTITUTIONAL INNOVATIONS IN EMPOWERED PARTICIPATORY GOVERNANCE 37-38 (Archon Fung & Erik Olin Wright, eds., 2003).

¹⁴ The most notable American organization in the field is the Sunlight Foundation. For an overview of its work, see *About Sunlight Foundation*, SUNLIGHT FOUND., http://sunlightfoundation.com/about (last visited Jan. 28, 2011).

¹⁵ See generally YOCHAI BENKLER, THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM 212-72 (2006); BRUCE BIMBER, INFORMATION AND AMERICAN DEMOCRACY: TECHNOLOGY IN THE EVOLUTION OF POLITICAL POWER (2003); ANDREW CHADWICK, INTERNET POLITICS: STATES, CITIZENS, AND NEW COMMUNICATION TECHNOLOGIES (2006); STEPHEN COLEMAN & JAY G. BLUMLER, THE INTERNET AND DEMOCRATIC CITIZENSHIP: THEORY, PRACTICE AND POLICY (2009); DEMOCRACY ONLINE: THE PROSPECTS FOR POLITICAL RENEWAL THROUGH THE INTERNET (Peter M. Shane ed., 2004); LAWRENCE K. GROSSMAN, THE ELECTRONIC REPUBLIC: RESHAPING DEMOCRACY IN THE INFORMATION AGE (1996); HOWARD RHEINGOLD, THE VIRTUAL COMMUNITY: HOMESTEADING ON THE ELECTRONIC FRONTIER (2000); ANTHONY G. WILHELM, DEMOCRACY IN THE DIGITAL AGE: CHALLENGES TO POLITICAL LIFE IN CYBERSPACE (2000); A. Michael Froomkin, Habermas@Discourse.net: Toward a Critical Theory of Cyberspace, 116 HARV. L. REV. 749 (2003).

and public goods in a manner that satisfies their preferences and needs. The participatory axis reflects a more horizontal structure, in which citizens play an active role in local decision making. The article discusses the normative underpinnings of consumerism and participation in city-citizen relations and argues that these two dimensions should complement each other to achieve a balanced and healthy local democracy.

The article then turns to the question of how digital technologies fit into existing city-citizen relations. It argues that the axes framework is equally valid in this context, as cities employ digital technologies either for consumerist (egovernment) or participatory (e-participation) purposes. Further, the article suggests five criteria—inclusiveness, transparency, communication/deliberation, impact, and costeffectiveness—that can help in evaluating, designing and comparing e-governmental and e-participatory initiatives. Drawing on these criteria, the article examines how digital technology is used in American municipalities.

The article reaches three major conclusions. First, the current uses of digital technologies in the United States fail to fulfill participatory goals and, in fact, waste the participatory opportunities opened up by digital technologies. Second, American cities fare well on the consumerist axis and benefit from digital technologies to provide better services to their residents. Lastly, popular digital initiatives disguise themselves in participatory rhetoric without offering genuine participatory opportunities, and hence distort and impoverish the meaning of participatory democracy.

Despite the grim state of participatory digital endeavors in American municipalities, the article maintains that initiatives that satisfy participatory criteria are not fictional. Drawing on digital initiatives from a variety of European cities, the article exemplifies how e-participation may yield promising results in areas such as participatory budgeting, urban planning, and structured consultations over policy matters. The article concludes by suggesting why municipal digital practices in the United States have not yet taken a participatory direction, and calls for cities to take a more participatory path in their digital pursuits.

Part I of this article discusses the consumerist and participatory dimensions of city-citizens relations. Part II examines the functions of digital technology in local governance and its challenges in consumerist and participatory realms. Further, it offers a set of evaluative criteria to assess and compare municipal digital initiatives. Part III explores the current role of digital technology in American cities and discusses its consumerist and participatory features. Part IV explores digital participatory initiatives in European cities, provides possible reasons for the lack of participatory initiatives in the United States, and suggests how to adopt them.

I. BETWEEN TWO DIMENSIONS OF THE CITY

Cities play an ambivalent role in American law. Formally, their legal status has been notoriously limited.¹⁶ However, the *de facto* autonomy of cities is substantially larger. In fact, some of the most important issues of public policy are resolved through local rather than state or federal mechanisms of decision making. For instance, all American states authorize cities to impose local taxes and use the revenue for the exclusive benefit of local residents.¹⁷ Most states grant local governments a largely unconstrained local land-use authority and police powers, and exercise only a lax control over the incorporation of new municipalities.¹⁸

The U.S. Supreme Court stated that "[t]he number, nature and duration of the powers conferred upon [municipal] corporations and the territory over which they shall be exercised rests in the absolute discretion of the State." Hunter v. City of Pittsburgh, 207 U.S. 161, 178 (1907). Although the broad rule of Hunter had been modified in subsequent decisions, the Court recognized that "the case continues to have substantial constitutional significance in emphasizing the extraordinarily wide latitude that States have in creating various types of political subdivisions and conferring authority upon them." Holt Civic Club v. Tuscaloosa, 439 U.S. 60, 71 (1978); see also David J. Barron, A Localist Critique of the New Federalism, 51 DUKE L.J. 377, 390-93 (2001) (delineating the scope of formal state power over cities) (hereinafter: Localist Critique); David J. Barron & Gerald E. Frug, Defensive Localism: A View of the Field from the Field, 21 J.L. & POL. 261, 264-67 (2005) (noting that "delegations of local power invariably come with limits that have not been approved locally and that can be removed only with permission from above"); Frug, supra note 10, at 1062-68 (arguing for city powerlessness and explaining why it matters); Daniel B. Rodriguez, Localism and Lawmaking, 32 RUTGERS L.J. 627, 631-32 (2001) (noting that the "principle of state supremacy in internal matters of state and local government has largely survived the constitutional home rule movement").

While the majority of states grant local governments power over municipal affairs ("home rule"), this power does not "immunize local actions from state preemption" (Barron, *id.*, at 392). Rather than generating a genuine local autonomy, home rule reflects "a mix of state law grants of, and limitations on, local power that powerfully influences the substantive ways in which cities and suburbs act" (David J. Barron, *Reclaiming Home Rule*, 116 HARV. L. REV. 2257, 2263 (2003)).

¹⁷ Barron, *Localist Critique*, supra note 16, at 394.

¹⁸ Id. at 395-96. Cities also benefit from various statutory immunities. See, e.g., Robert C. Ellickson, Cities and Homeowners Associations, 130 U. PA. L. REV. 1519, 1568-79 (1982).

Cities therefore take charge of matters as critical and diverse as "the preservation of life (police, fire, sanitation, public health), liberty (police, courts, prosecutors), property (zoning, planning, taxing), and public enlightenment (schools, libraries)."¹⁹ Not surprisingly, this wide range of responsibilities raises acute questions as to the optimal mechanisms of local decision making, and the character of city-citizen relations. As the nature of these relations may deeply affect the priorities and decision-making processes of the local authorities, it is important to fully grasp their meaning.

I suggest the following framework. The relations between cities and their citizens can be understood as located on two axes of a graph: consumerism and participation.²⁰ The consumerism axis measures the degree to which a city succeeds in effective provision of public goods and services to its residents, who are regarded as consumers. The participation axis reflects the degree to which a city facilitates citizen participation in governance and encourages community building. The axes are both descriptive (depicting the existing state of city-citizen relations) and normative (impelling local governments to act on both dimensions). A city that effectively provides information and services to its dwellers and also offers them substantial participatory opportunities will score high on both dimensions. A city that only excels in information and service provision but lacks participatory mechanisms of decision making will score high on the consumerist axis but low on the participation axis. An opposite case, poor services but abundant opportunities for meaningful participation, will locate a city high on the participation axis but low on the consumerism one. The following pages further explore these basic distinctions.

A. The Consumerism Axis

The creation of local political units and the delegation of powers and authority to them are frequently justified on the grounds of efficiency. According to this approach, the raison d'être of cities is the fact that they provide services and local

 $^{^{19}\;}$ Robert L. Lineberry, Equality and Urban Policy: The Distribution of Municipal Public Services 10 (1977).

²⁰ This distinction is loosely based on the analysis in Richard Briffault, *Our Localism: Part II—Localism and Legal Theory*, 90 COLUM. L. REV. 346, 392-403 (1990).

public goods better than larger political units do.²¹ Provision of services and goods is therefore regarded as the primary function of cities—a function by which they are defined, measured, and chosen by existing or potential residents.²²

This generic perception of cities is rooted in a seminal article written by Charles Tiebout in 1956. Tiebout labeled citizens as "consumer-voters," who "pick[] that community which best satisfies [their] preference pattern for public goods."²³ According to this model, citizens stay in a city only as long as the public goods they receive are in line with their preferences; move out when these public goods cease to satisfy them; shop among numerous localities for the "package" of goods and services that reflects their preferences; and eventually settle in the one that offers the best-fitting "package."²⁴ While cities are stable, with their revenue and expenditure patterns "more or less set," the consumer-voter's "act of moving or failing to move . . . replaces the usual market test of willingness to buy a good and reveals the consumervoter's demand for public good."²⁵

Although simple in its initial appeal, this model relies on several controversial assumptions. First, the preferences of consumer-voters and municipal budgets are assumed to be given and largely fixed. Second, consumer-voters are presumed to be fully mobile and possess all the information required for a thoughtful relocation decision. Third, the model assumes that there is a large number of communities that will "compete" for residents by offering preferred goods and services. Lastly, the model posits that the "packages" of goods offered by cities do not create externalities for neighboring communities.²⁶

²¹ Public goods are commonly defined as non-rival (the consumption of the good by one person does not diminish the ability of others to consume the same good) and non-excludable (no person can be effectively excluded from consuming the good). In the context of cities, "local public goods" can be defined to refer "to any goods that are typically provided publicly by local governments." Lee Anne Fennell, *Beyond Exit and Voice: User Participation in the Production of Local Public Goods*, 80 TEX. L. REV. 1, 4 n.7 (2001).

²² See, e.g., LYNN A. BAKER & CLAYTON P. GILLETTE, LOCAL GOVERNMENT LAW: CASES AND MATERIALS 337-40 (3d ed. 2004); Gerald E. Frug, *City Services*, 73 N.Y.U. L. REV. 23 (1998).

²³ Charles M. Tiebout, A Pure Theory of Local Expenditures, 64 J. POL. ECON. 416, 418 (1956).

 $^{^{24}\,}$ Id.; see also John R. Logan & Harvey L. Molotch, Urban Fortunes 41-42 (1987).

²⁵ Tiebout, *supra* note 23, at 420.

 $^{^{26}}$ Those are the main assumptions of the model, but this list is not exhaustive. For additional assumptions, see *id.* at 419.

Tiebout's article and, in particular, his assumptions have been heavily criticized.²⁷ But the article was also dubbed as "the most influential single article in the field of public economics"²⁸ and inspired numerous contributions that followed its theoretical footsteps.²⁹ Most importantly, for our purposes, Tiebout offered a powerful defense of local units as the most effective providers of public goods, and justified substantial delegation of authority to local governments and their legal empowerment.³⁰

The Tiebout model and its normative underpinnings therefore lie at the basis of the consumerist axis of city-citizen relations. The purpose of the axis is to reflect the degree to which the city succeeds in effectively providing services and public goods and satisfying citizens' preferences. As citizens are treated in this equation as consumers who pay with their tax money for goods that local governments sell, the axis that evaluates the effectiveness of the "transaction" is dubbed "consumerist."

Despite its central role in municipal affairs, the consumerist axis should not be regarded as the sole parameter by which city-citizen relations are evaluated. A demand to base

²⁸ William A. Fischel, *Preface to* THE TIEBOUT MODEL AT FIFTY: ESSAYS IN PUBLIC ECONOMICS IN HONOR OF WALLACE OATES ix (William A. Fischel ed., 2006) [hereinafter THE TIEBOUT MODEL AT FIFTY].

²⁷ The literature is voluminous. See, e.g., Wallace E. Oates, On Local Finance and the Tiebout Model, 71 AM. ECON. REV. PAPERS & PROC. 93, 93 (1981) (noting that Tiebout relied on "a set of assumptions so patently unrealistic as to verge on the outrageous"); Briffault, supra note 20, at 393, 415-35 (criticizing the model for externalities and jurisdictional size); Hongbin Cai & Daniel Treisman, Does Competition for Capital Discipline Governments? Decentralization, Globalization, and Public Policy, 95 AM. ECON. REV. 817, 818 (2005) (arguing that competition among cities leads to a polarizing effect); Sheryll D. Cashin, Localism, Self-Interest, and the Tyranny of the Favored Quarter: Addressing the Barriers to New Regionalism, 88 GEO. L.J. 1985, 1991-2015 (2000) (criticizing Tiebout for failing to consider equality and redistribution); Richard C. Schragger, Consuming Government, 101 MICH. L. REV. 1824, 1834 (2003) (criticizing the Tiebout model for failing to consider externalities); Daniel Shaviro, An Economic and Political Look at Federalism in Taxation, 90 MICH. L. REV. 895, 964 (1992) (criticizing Tiebout's mobility assumption).

²⁹ See, e.g., WILLIAM A. FISCHEL, THE HOMEVOTER HYPOTHESIS 58-61 (2001) (arguing that home-buyers possess full information and "shop for a community" that best fits their preferences); PETERSON, *supra* note 13 (analyzing urban public policy relying on Tiebout's assumptions); Vicki Been, "*Exit*" as a Constraint on Land Use *Exactions: Rethinking the Unconstitutional Conditions Doctrine*, 91 COLUM. L. REV. 473, 511-17 (1991) (applying Tiebout's model to predatory land use practices); Lee Anne Fennell, *Exclusion's Attraction: Land Use Controls in Tieboutian Perspective, in* THE TIEBOUT MODEL AT FIFTY, *supra* note 28, at 163, 164, 166 (referring to "foot-shoppers" who buy "a daily living environment in a particular neighborhood"); Hannah Wiseman, *Public Communities, Private Rules*, 98 GEO. L.J. 697, 727 (2010) (arguing that "[c]ommunity consumers may choose among various levels of sublocal public goods, as well as among the local governments that enable the provision of these public goods").

³⁰ See, e.g., Briffault, supra note 20, at 399-403; Cashin, supra note 27, at 2000-01; Rodriguez, supra note 16, at 634.

these relations on consumerist grounds alone might collapse citizens into "consumer voters" and lead to a situation in which "values commonly associated with democracy—notions of equality, of the importance of collective deliberation and compromise, of the existence of a public interest not reducible to personal economic concerns" become "of secondary concern, or no concern at all."³¹ Gerald Frug, the major advocate of this position, warns that the dominance of the consumerist state of mind not only influences the outcomes of governmental decision making, but also "affects the evolution of American society itself" by strengthening "the consumptive aspect of self over alternatives" and narrowing "the definition of 'human flourishing' that city services have the potential to foster."³² The aim of the participatory axis, which is described below, is to avoid this scenario.

B. The Participation Axis

Cities have traditionally enjoyed a unique status among democratic scholars as the most appropriate units for citizen participation in government.³³ Alexis de Tocqueville famously asserted that "[t]own-meetings are to liberty what primary schools are to science; they bring it within the people's reach, they teach men how to use and how to enjoy it."³⁴ John Stuart Mill similarly emphasized the importance of local political institutions as a training ground for democracy. He regarded participation in local government as particularly valuable because cities exercise authority over issues that directly affect the daily life of their dwellers, and may offer them substantial opportunities to voice their concerns and shape policy decisions.³⁵ Likewise, Mill insisted that only by practicing popular government on a limited scale, will the people "ever learn how to exercise it on a larger."³⁶ In the same spirit, almost one hundred

³¹ Frug, *supra* note 22, at 32.

³² Id. at 32-33.

³³ Frug, *supra* note 10, at 1069.

 $^{^{34}\,\,}$ Alexis de Tocqueville, 1 Democracy in America 76 (Henry Reeve ed. & trans., 2007) (1835).

 $^{^{35}\,}$ John Stuart Mill, Representative Government 347-48 (H.B. Acton ed., 1910) (1861).

³⁶ JOHN STUART MILL, *Tocqueville on Democracy in America (Vol. 1), in* ESSAYS ON POLITICS AND CULTURE 173, 186 (Gertrude Himmelfarb ed., 1963). Mill also argues that "[a] political act, to be done only once in a few years, and for which nothing in the daily habits of the citizen has prepared him, leaves his intellect and his moral

years after the publication of Tocqueville's opus on American democracy, John Dewey wrote that the demise of participation in local governments had been one of the major ills of the modern era and called for a revival of popular participation.³⁷

The theoretical attractiveness of cities as a platform for citizen participation and democratic education is due to several factors. First, citizen participation—similarly to the provision of public goods—is believed to be more effective in smaller units.³⁸ As local decision making affects multiple spheres of life in a city, citizens may reap significant benefits from their involvement in local political affairs. Assuming that the relative weight of each voice rises as the size of a political unit diminishes, the smallness of most municipalities may enhance citizens' opportunities to make their preferences heard in local decision making.³⁹ For similar reasons, public officials in smaller democratic units are expected to be more attentive to public preferences than officials in large political structures.

Further, citizen participation may improve the quality of policy and decision making, as the diversity of experience, opinion, and knowledge within a group can render the whole greater than the sum of its parts.⁴⁰ Individuals who represent a variety of perspectives and backgrounds may offer public officials unique and original insights into policymaking. As citizens are often deeply familiar with local issues, engaging them in local decision making may also generate "concrete and

dispositions very much as it found them." JOHN STUART MILL, *Tocqueville on Democracy in America (Vol. 2), in* ESSAYS ON POLITICS AND CULTURE, *supra*, at 214, 229.

⁷⁷ JOHN DEWEY, THE PUBLIC AND ITS PROBLEMS 143-84 (1927).

³⁸ See, e.g., FRANK BRYAN, REAL DEMOCRACY: THE NEW ENGLAND TOWN MEETING AND HOW IT WORKS passim (2004) (demonstrating that population size is the single best predictor of participation rates); ROBERT A. DAHL & EDWARD R. TUFTE, SIZE AND DEMOCRACY 66-88 (1973) (demonstrating a correlation between small government size and increased communication between voters and public officials); Robert A. Dahl, *The City in the Future of Democracy*, 61 AM. POL. SCI. REV. 953, 954 (1967) (arguing that "the city-state must be small in area and in population . . . so that when the youth becomes the man he knows his town, its inhabitants, its countryside"); Frug, *supra* note 10, at 1068-70 (arguing that only through small governmental units is meaningful participation by individual citizens possible); J. Eric Oliver, *City Size and Civic Involvement in Metropolitan America*, 94 AM. POL. SCI. REV. 361 (2000) (claiming that the degree of citizen participation significantly declines as the population of a city increases).

³⁹ See, e.g., Benjamin Constant, The Liberty of the Ancient Compared with That of the Moderns, in BENJAMIN CONSTANT: POLITICAL WRITINGS 314 (Biancamaria Fontana ed., 1988) (1816) (arguing that individuals participate more in smaller places because they are more likely to be able to influence outcomes).

⁴⁰ See generally JAMES SUROWIECKI, THE WISDOM OF CROWDS: WHY THE MANY ARE SMARTER THAN THE FEW AND HOW COLLECTIVE WISDOM SHAPES BUSINESS, ECONOMICS, SOCIETIES AND NATIONS (2004).

highly valued public goods."41 Similarly, citizen participation may help government to obtain legitimacy and political support to adopt new policies or test novel directions. The outcomes of genuine and meaningful participatory processes are also likely to be perceived as more democratic, as they better reflect the positions and preferences of the public. Moreover, even if the final outcome does not represent their preferences, studies have demonstrated that individuals evaluate positively processes in which they are permitted to participate and their views are considered by decision makers.⁴² As a result, the more involved individuals are in making rules, the stronger their sense of obligation to abide by them is likely to be.⁴³ A proper participatory process is therefore able to facilitate the implementation and enforcement of policies. It also can help in holding public officials accountable and increasing the general transparency of the system.⁴⁴

Moreover, meaningful participatory initiatives invite citizens to take part in decisions that deeply affect their lives and immediate environment. Hence, participation is first and foremost regarded as a tool for social empowerment:⁴⁵ it helps voice the concerns of weak groups in the society and train otherwise powerless citizens to interact with other social groups, take part in the democratic process, and pursue their policy preferences by democratic means. Citizen participation therefore nurtures citizens' sense of community and facilitates their social and political affiliation with others.⁴⁶ It engages individuals in a process of learning from others, opening their minds to different and, at times, contested ideas, and reshaping their preferences through that learning. At its best, it therefore

⁴¹ Archon Fung, Empowered Participation: Reinventing Urban Democracy 15 (2004).

⁴² E. ALLAN LIND & TOM R. TYLER, THE SOCIAL PSYCHOLOGY OF PROCEDURAL JUSTICE 147-72 (1988) (referring to procedural justice in the political arena); *see also* TOM R. TYLER, WHY PEOPLE OBEY THE LAW 3-4 (2006) (arguing that people obey the law if they believe in its legitimacy, and not due to a fear of punishment).

⁴³ See, e.g., Cynthia R. Farina, *The Consent of the Governed: Against Simple Rules for a Complex World*, 72 CHI.-KENT L. REV. 987, 1027-32 (1997) (discussing the important role that perceptions of fairness play in determination of administrative legitimacy).

⁴⁴ FUNG, *supra* note 41, at 20.

⁴⁵ FUNG, supra note 41, at 1-30.

⁴⁶ Id.; see also Paul Brest, Further Beyond the Republican Revival: Toward Radical Republicanism, 97 YALE L.J. 1623, 1624 (1988) (referring to "discursive participation," which "induces us to listen to other people's positions and justify our own"); Robert H. Salisbury, Research on Political Participation, 29 AM. J. POL. SCI. 323, 326-29 (1975) (explaining the different meanings of citizen participation).

leads to an informed and involved citizenry that understands the challenges and conflicts of the community and possesses the tools to resolve them.⁴⁷

No doubt, this rosy account of the benefits of citizen participation in local government rests on presumptions that are no less controversial than those of the Tiebout model. Chiefly, it assumes that participatory mechanisms are applied in good faith and strengthen civic empowerment across the board. However, as James Madison famously asserted, the smallness of local governments can make them particularly vulnerable to "mischiefs of factions" and a majority rule running amok.⁴⁸ Participatory processes may likewise be vulnerable to capture and abuse by dominant social groups and officials. Frequently, they may reinforce social public inequalities and further disempower groups that were supposed to gain voice as part of the process.49 Even if the process is carried out in good faith, participants may behave incompetently, be motivated by parochial interests, and suffer from mob psychology. All of those factors, so the argument goes, may obstruct citizens from understanding and pursuing the common good.⁵⁰

Hence, the ultimate participatory challenge is to attain the benefits of citizen participation, and avoid, as much as possible, the traps. This task surely requires a nuanced institutional design, which the Article discusses in greater detail below.

* * *

There are, then, two major dimensions of city-citizen relations—consumerism and participation. The former presupposes a vertical relationship in which citizens consume public goods that are sold to them by the local government. The latter depicts a more horizontal relationship, in which citizens take an active part in local decision making. These two

 $^{^{\}rm 47}$ $\,$ Carole Pateman, Participation and Democratic Theory 22-44 (1970).

⁴⁸ THE FEDERALIST NO. 10, at 79 (James Madison) (Clinton Rossiter ed., 1961).

⁴⁹ See, e.g., Lynn Sanders, Against Deliberation, 25 POL. THEORY 347, 351-54 (1997) (stressing the inequalities embedded in deliberative processes); Cass R. Sunstein, Deliberative Trouble? Why Groups Go to Extremes, 110 YALE L.J. 71, 111-13 (2000) (noting that participatory practices are often marked by the exclusion of disadvantaged groups).

 $^{^{50}}$ See, e.g., JOSEPH A. SCHUMPETER, CAPITALISM, SOCIALISM, AND DEMOCRACY 283 (1943) (arguing that "the electoral mass is incapable of action other than a stampede").

dimensions are by no means mutually exclusive. On the contrary, cities should attempt to fulfill both consumerist and participatory ideals, scoring high on both axes and offering citizens a full plethora of opportunities.

The rest of the Article examines how digital technologies fit into the citizen-city framework and where they are situated on the consumerism-participation axes.

II. CITIES & THE "E" FACTOR

Since the 1990s, digital technology has been widely employed at all levels of government in the United States. In the local context, it has been regarded as a "powerful tool for reinventing local governments" and a "paradigm shift" in citycitizen relations.⁵¹ How transformative were these tools in practice? A closer look at how digital technologies are employed by local governments two decades after their introduction hardly reveals new patterns in city-citizen relations. Cities turn to digital technologies either to enhance the efficiency of their service provision, or to provide citizens with better participatory opportunities. The consumerism and participation axes that captured the traditional relationship between cities and citizens are therefore equally valid for digital technologies.

In the context of digital technologies, the consumerist dimension is dubbed "electronic government," or, more commonly, "e-government": "the use by the Government of webbased Internet applications and other information technologies ... to ... enhance the access to and delivery of Government information and services to the public \dots "52 The participatory dimension is labeled "e-participation": online actions performed by citizens and "directed at influencing, directly indirectly. the formulation. adoption. or or implementation of governmental or policy choices."53 The following pages explain the meaning of these two phenomena in further detail and develop evaluative criteria to better assess their implications.

⁵¹ Alfred Tat-Kei Ho, *Reinventing Local Governments and the E-Government Initiative*, 62 PUB. ADMIN. REV. 434, 434 (2002).

⁵² E-Government Act of 2002, Pub. L. No. 107-347, 116 Stat. 2899, 2902 (2002) [hereinafter E-Government Act].

 $^{^{\}rm 53}\,$ James S. Fishkin, When the People Speak: Deliberative Democracy and Public Consultation 45 (2009).

A. E-Government

The primary use of digital technologies in local governments aims to fulfill the consumerist function of cities: open up and optimize access to public information and improve the provision of governmental services.⁵⁴ When e-government was first introduced, the hope was that it would encourage public officials to abandon the "traditional bureaucratic paradigm" and opt for "coordinated network building, external collaboration, and customer services."55 Given this potentially effect. e-government transformative has caught the imagination of American public officials, leading to the enactment of the federal E-Government Act in 2002, and a widespread adoption of e-governmental features at federal, state and local levels.⁵⁶

At its best, e-government provides citizens with "onestop-shops," which allow them to obtain all governmental information and services in a "timely, convenient and userfriendly manner from a single source."⁵⁷ Information offered on official local websites may include issues ranging from explanations of municipal functions, legal procedures and online minutes of city council meetings, through downloadable forms and content designed for specific segments of the population (e.g., families, elderly citizens, or children), to traffic updates, crime statistics, or descriptions of the cultural heritage of the city. In line with the consumerist orientation, the information is often complemented by online surveys or

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⁵⁴ Donald F. Norris & M. Jae Moon, Advancing E-Government at the Grassroots: Tortoise or Hare?, 65 PUB. ADMIN. REV. 64 (2005) (assessing the state of affairs of local government adoption of e-government); Ho, supra note 51 (making the same assessment). See generally DARRELL M. WEST, DIGITAL GOVERNMENT: TECHNOLOGY AND PUBLIC SECTOR PERFORMANCE (2005) (relying on comprehensive empirical data to discuss how digital technology altered governmental performance).

⁵ Ho, *supra* note 51, at 434.

⁵⁶ The Act is intended to "to improve the methods by which Government information, including information on the Internet, is organized, preserved, and made accessible to the public." E-Government Act, *supra* note 52, § 207(a). The Act requires federal agencies to enhance the volume of public records available online and adopt standards to enable the organization and categorization of government information. It specifies the information that should appear on agencies' websites and sets "minimum agency goals to assist public users to navigate agency websites." *Id.* at § 207(f)(B).

For an account of the adoption of e-government in American states, see Caroline J. Tolbert, Karen Mossberger & Ramona McNeal, *Institutions, Policy Innovation, and E-Government in the American States*, 68 PUB. ADMIN. REV. 549 (2008). For local governments, see *infra* Part III.A.

⁵⁷ Ho, *supra* note 51, at 436 (citation omitted).

questionnaires to help the municipality better assess the needs and desires of its residents.

The theoretical consumerist potential of these endeavors is indeed promising and the challenges of e-government are more practical than conceptual. Cities ought to make sure that all public information is provided on the website in a clear, user-friendly and structured manner; that navigation on the local website does not require sophisticated digital skills; and that citizens are provided with effective communication channels with public officials. Multiple municipalities have indeed managed to overcome these obstacles and e-government is currently broadly implemented and embraced in the United States.⁵⁸

B. E-Participation

The addition of digital technologies to the local participatory equation has followed a more dramatic trajectory, from early aspirations that digital technologies would bring to life the ideal of a participatory city to mixed results on the ground and unsatisfactory rates of participation.

In theory, digital technologies can trump classic participatory mechanisms in multiple respects. First, eparticipation provides unprecedented flexibility, allowing citizens to participate in local decision making from any place and at any time. Online participatory platforms also benefit from a substantial scalability advantage, since they can accommodate many more participants than any other public forum and their operation and management costs tend to be considerably lower. While citizens are frequently reluctant about participatory initiatives due to the serious time commitment that is necessary for face-to-face interactions, online platforms allow "granular" participation that suits the participants' interests and possibilities—from a quick vote for or against an idea that was brought up by others, to a demanding collaborative development of policy suggestions.⁵⁹ Moreover, the dynamic of physical citizen assemblies often

⁵⁸ Sharon S. Dawes, The Evolution and Continuing Challenges of E-Governance, 68 PUB. ADMIN. REV. 86, 87 (2008); James K. Scott, "E" the People: Do Municipal Government Web Sites Support Public Involvement?, 66 PUB. ADMIN. REV. 341, 346 (2006); Karen Mossberger, Yonghong Wu & Benedict Jimenez, Can E-Government Promote Informed Citizenship and Civic Engagement? A Study of Local Government Websites in the U.S. (Inst. for Policy & Civic Engagement, Univ. of Ill. at Chi., Working Paper, May 2010), available at http://www.psa.ac.uk/journals/pdf/5/2010/614_546.pdf.

⁵⁹ BENKLER, *supra* note 15, at 212-72.

leads socioeconomic elites to dominate the discussion, while other participants are reluctant to voice their opinions.⁶⁰ An appropriate design of online forums and nuanced professional moderation may alleviate these difficulties by balancing and equalizing discussions.⁶¹ Online platforms may also improve the quality of the discussion, as the asynchronous character of online postings enables participants to better consider and weigh their positions. Finally, properly designed platforms may allow participants to publicize matters, problems, and concerns that are otherwise unnoticed by the public due to various practical constraints.⁶²

Despite the substantial advantages of e-participation, the picture loses much of its appeal when it descends from theory to reality. While insufficient internet access and lack of adequate digital skills are definitely worrisome in this context, the problem is even deeper. The major hurdles faced by e-participatory initiatives are poor rates of participation and lack of efficacy participants' inability to actually affect policymaking. Several underlying factors are in play here.

First, citizens' experience with local government is often marked by apathy, inherent mistrust, and disbelief in the possibility of changing the status quo.⁶³ These deeply embedded perceptions often lead citizens to avoid participation in any political processes whatsoever, either offline or online. In order to change this state of affairs, it is not sufficient simply to introduce another participatory mechanism.

Second, the legitimating attribute of e-participation entails a severe peril. An easy way to manipulate the process would be to create a toothless participatory structure, which serves as a fig leaf and legitimates controversial decisions by public officials without actually sharing power. Manipulation may take many forms in this respect. The agenda for the discussion may be restrictive and only include options that are all favorable to the government. Participatory initiatives may revolve around marginal issues and divert public attention from more important questions that are meanwhile decided by public officials behind closed doors. Hence, instead of motivating more citizens to overcome their mistrust and take

⁶⁰ See, e.g., Sanders, supra note 49, at 349; Sunstein, supra note 49, at 105.

⁶¹ See, e.g., FISHKIN, *supra* note 53, at 169-75.

⁶² BENKLER, *supra* note 15, at 100-02.

 $^{^{\}rm 63}~$ See, e.g., PETERSON, supra note 13, at 119-20; Fung & Wright, supra note 13, at 37-38.

part in the process, such initiatives are in fact more likely to alienate potential participants. These manipulative structures possess a grave potential of abusing public trust in government and corrupting local democracy. Naturally, they also contribute to poor rates of participation.

A third factor is the concern that the public is ignorant, parochial, and selfish.⁶⁴ Too often, online discussions are of a low quality, and participants are "talking without listening."65 The disguise of anonymity and the absence of personal stakes in virtual conversations may discourage participants from investing their time and efforts in considerate and thoughtful arguments on the one hand, and encourage meaningless participation on the other hand. These problems are often coupled with the worry that lobbyists and interest groups may easily capture online discussions and distort their results for their own benefit. As a result, instead of exposing citizens to a wide range of political positions and diverse values, online discussions may lead to group polarization, fragmentation, and biased decision making in the worst case and aimless babbling in the best.⁶⁶ These problems are well known to public officials, who are accordingly reluctant to provide participants with substantial opportunities to affect political decision making.

This dynamic may result in a vicious circle. First, the public is called on to take part in online forums, discuss a variety of political issues, criticize existing policies, brainstorm, and suggest ideas for improvement. Then, under one scenario, the public does not believe that participation will have any impact and simply ignores the call. Even if citizens do show up online, public officials may not be interested in the results of the discussion (even if it is thoughtful and balanced), since the whole process is part of a legitimation game. Alternatively, the results of the discussion of those who did choose to contribute are unsatisfying in terms of their quality and balance. Either way, the consequence is that public officials are not interested in

⁶⁴ A notable example of such behavior is the NIMBY ("Not in My Backyard") syndrome. For a general discussion of NIMBY, see, for example, Barak D. Richman & Christopher Boerner, A Transaction Cost Economizing Approach to Regulation: Understanding the NIMBY Problem and Improving Regulatory Responses, 23 YALE J. ON REG. 29, 29-50 (2006). For an observation that citizens lack sufficient education to engage in meaningful deliberations on public policies, see Stephen Coleman, Can the New Media Invigorate Democracy?, 70 POL. Q. 16 (1999).

⁶⁵ Benjamin Barber, *The Discourse of Civility, in* CITIZEN COMPETENCE AND DEMOCRATIC INSTITUTIONS 39, 40 (Stephen L. Elkin & Karol Edward Soltan eds., 1999).

CASS R. SUNSTEIN, REPUBLIC.COM 2.0, at 46-96 (2006).

granting participants genuine decision-making authority or any other formal functions. The lack of impact reduces both participation rates and the quality of discussions even further, as there are no good reasons for participants to invest their time and efforts in futile exercises. Low quality discussions further strengthen the premise that online participatory initiatives are not eligible for a meaningful formal status. This process is likely to repeat itself and dismantle the benefits of e-participation.

C. Evaluative Criteria

Do these challenges make the promise of e-participation idle? Is the potential of digital technology in local government limited to cost-efficient and consumer-centered e-government? Should cities and citizens give up the participatory axis in the context of digital technologies and nurture only the consumerist one? The answer depends on the *institutional design* of digital platforms: the opportunities given to citizens to benefit from digital technologies and the measures taken to reduce their negative effects. Ineffective e-governmental platforms are not necessarily caused by flawed technology, but they may rather reflect incompetent municipal policies. The vicious circle of faulty e-participation described above is not an unavoidable reality, but rather the consequence of a discouraging political and legal culture, coupled with the poor design of participatory platforms.

In this context, institutional design is dubbed "discourse architecture": the practice of "designing networked environments to support conversation, discussion and exchange among people," or "the means to shape the conversation that takes place within a given system."⁶⁷ The consumerist or participatory possibilities opened up (or closed off) by digital platforms are therefore not only a product of technology as such, but rather of explicit or implicit political choices that underlie the design of the platforms. By preferring one

⁶⁷ Scott Wright & John Street, Democracy, Deliberation and Design: The Case of Online Discussion Forums, 9 NEW MEDIA & SOC'Y 849, 854 (2007); see also Quentin Jones & Sheizaf Rafaeli, Time to Split, Virtually: 'Discourse Architecture' and 'Community Building' Create Vibrant Virtual Publics, 10 ELECTRONIC MARKETS 214 (2000); John Morison & David R. Newman, On-line Citizenship: Consultation and Participation in New Labour's Britain and Beyond, 15 INT'L REV. L., COMPUTERS & TECH. 171, 185 (2001); Warren Sack, Discourse Architecture and Very Large-scale Conversation, in DIGITAL FORMATIONS: IT AND NEW ARCHITECTURES IN THE GLOBAL REALM 242 (Robert Latham & Saskia Sassen eds., 2005).

technological structure over another, these political choices and the resulting design affect (or even determine) the course and the outcomes of an online experience.⁶⁸

Hence, in the e-participation context, capture and conversations of low quality may occur because designers of participatory platforms do not take the necessary measures to better their quality.⁶⁹ Group polarization and fragmentation are often due to a lack of effort to diversify the range of participants or the represented points of view.⁷⁰ Distrust and reluctance to participate may result from the absence of clear and transparent rules as to the formal status of the participatory initiative and a dearth of delegated decisionmaking powers. Likewise, in the e-government context, lack of structured information or overflow of confusing data are often the result of a malfunctioning transparency policy; online services that only fulfill the needs of those who possess highspeed internet connections or require sophisticated digital skills may reflect a municipal policy of exclusion; and lack of effective channels for interaction with municipal authorities is a signal of municipal inattentiveness to citizens' needs or concerns. In sum, while the difficulties associated with successful implementation of digital technologies in municipal affairs cannot be avoided altogether, an institutional design that mitigates them is possible. Such design should rely on a set of predetermined criteria that aim to amplify the bright sides of digital initiatives and curtail the dark ones.

The set of criteria suggested below—inclusiveness, transparency, communication/deliberation, impact, and costeffectiveness—offers tools for the evaluation of e-governmental and e-participatory initiatives.⁷¹ These tools can help to assess

⁶⁸ Scott Wright, *Design Matters: The Political Efficacy of Government-Run Discussion Boards*, *in* THE INTERNET AND POLITICS: CITIZENS, VOTERS, AND ACTIVISTS 72 (Sarah Oates, Diana M. Owen & Rachel K. Gibson eds., 2005). *See generally* LAWRENCE LESSIG, CODE 2.0, at 31-37 (2006).

⁶⁹ For examples of online initiatives with quality discussions, see *infra* Parts IV.A.3 (participatory budgeting in Freiburg), IV.B (urban planning in Hamburg), and IV.C.1 (family policy consultation in Munich).

⁷⁰ According to Sunstein, group polarization is often the result of deliberation among a homogeneous group of participants. Deliberation among heterogeneous participants, who represent a diversity of perspectives, tends to generate a more balanced dynamic. Sunstein, *supra* note 49, at 80-83.

⁷¹ These criteria draw on the theory of participatory democracy and apply it to the context of digital technologies. *See* GRAHAM SMITH, DEMOCRATIC INNOVATIONS 8-29 (2009); Archon Fung, *Minipublics: Deliberative Designs and Their Consequences, in* DELIBERATION, PARTICIPATION AND DEMOCRACY: CAN THE PEOPLE GOVERN? 159, 162 (Shawn W. Rosenberg ed., 2007).

the institutional design of existing online platforms, compare them, and facilitate the construction of improved platforms. While the achievement of a high score on both consumerism and participation axes should be the long-term aspiration for local governments, the road is long and largely unpaved. In the meantime, while the field is still in its infancy, trade-offs between criteria and faulty choices of institutional design are perhaps unavoidable.

1. Inclusiveness

"Offline" political participation in the United States has largely been the domain of the wealthy, professional, and well educated citizens, who often happen to be white and male.⁷² This course of affairs has generated the "participatory distortion"—situations in which those who speak loudly send distorted messages "about the state of the public, its needs, and its preferences."⁷³ If stakes of participation are high and participants are given authentic opportunities to influence public policies, the danger of a distortion becomes self-evident. Instead of creating an alternative channel for voicing citizens' preferences and concerns, participatory initiatives may reproduce interest groups' and elites' politics.

Not surprisingly, the problem of participatory distortion is similarly prevalent on digital platforms. The first concern relates to the identity of participants, or the *digital divide*. Digital technology often serves to facilitate participation for those who are already knowledgeable, interested, and involved in politics, and is less likely to mobilize the disengaged and the apathetic.⁷⁴ Internet access is the primary cause for this. Citizens from low socioeconomic backgrounds are less likely to have broadband access or go online, let alone engage in online political activity.⁷⁵ But solving the access problem alone cannot

⁷² Kay Lehman Schlozman, Sidney Verba & Henry E. Brady, *Civic Participation and the Equality Problem, in* CIVIC ENGAGEMENT IN AMERICAN DEMOCRACY 427 (Theda Skocpol & Morris P. Fiorina eds., 1999).

⁷³ SIDNEY VERBA, KAY LEHMAN SCHLOZMAN & HENRY E. BRADY, VOICE AND EQUALITY 11 (1995); see also Tali Mendelberg & Christopher Karpowitz, *How People Deliberate About Justice: Groups, Gender, and Decision Rules, in* DELIBERATION, PARTICIPATION AND DEMOCRACY, *supra* note 71, at 101.

⁷⁴ PIPPA NORRIS, DIGITAL DIVIDE: CIVIC ENGAGEMENT, INFORMATION POVERTY, AND THE INTERNET WORLDWIDE 234-40 (2001).

⁷⁵ Aaron Smith et al., *The Internet and Civic Engagement*, PEW INTERNET & AM. LIFE PROJECT (Sept. 2009), http://www.pewinternet.org/Reports/2009/15--The-Internet-and-Civic-Engagement.aspx. As of June 2009, the estimate was that 74.1

guarantee the elimination of the digital divide. Beyond access, differential uses of digital technologies can also reflect and reinforce social inequalities.⁷⁶ For instance, lack of sufficient knowledge about how to find information online can severely affect users' online behavior, and hence internet usage skills are necessary.⁷⁷ Empirical evidence suggests that socioeconomic level is a significant proxy for usage skills, affecting the benefits that individuals derive from the internet.⁷⁸ Moreover, the socioeconomic level has an even stronger impact on political participation online (from signing petitions and organizing political actions, to discussing political issues on online forums).⁷⁹ Hence, these factors lead to the assumption that digital technology simply extends "politics as usual," reinforcing the influence of those who are already dominant and not contributing to the empowerment of disadvantaged social groups.⁸⁰

Given the strength of these arguments, inclusiveness is the first evaluative criterion for online political endeavors. The task is relatively straightforward in the consumerist dimension. Solving the problem of access and skills is a prerequisite for effective e-government. Comprehensive

⁷⁷ See generally Nicole Zillien & Eszter Hargittai, Digital Distinction: Status-Specific Types of Internet Usage, 90 Soc. ScI. Q. 274 (2009).

⁷⁸ See generally MOSSBERGER, TOLBERT & STANSBURY, supra note 76; Eszter Hargittai, Second-Level Digital Divide: Differences in People's Online Skills, 7 FIRST MONDAY (2002), available at http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/ article/view/942/864; Zillien & Hargittai, supra note 77; DiMaggio et al., supra note 76. Social status also exhibits a significant relationship to passive political participation (retrieving political information online), even if differences in age, gender, quality of technological equipment, digital experience, and political interest are all taken into account. See Zillien & Hargittai, supra note 77.

⁸⁰ For example, over 85 percent of the contributors to the Wikipedia are male. See Noam Cohen, Define Gender Gap? Look Up Wikipedia's Contributor List, N.Y. TIMES, Jan. 31, 2011, at A1. See also MICHAEL MARGOLIS & DAVID RESNICK, POLITICS AS USUAL: THE CYBERSPACE "REVOLUTION" 57 (2000) (arguing that "[n]otwithstanding the novelty and explosive growth of electioneering in cyberspace, the Internet in general, and the WWW in particular, it seems more likely to reinforce the existing structure of American politics than to change it.").

percent of the American population has Internet access. See United States of America: Internet Usage and Broadband Usage Report, INTERNET WORLD STATS (June 2010), http://www.internetworldstats.com/am/us.htm.

⁷⁶ See generally KAREN MOSSBERGER, CAROLINE J. TOLBERT & MARY STANSBURY, VIRTUAL INEQUALITY: BEYOND THE DIGITAL DIVIDE 120 (2003); MARK WARSCHAUER, TECHNOLOGY AND SOCIAL INCLUSION: RETHINKING THE DIGITAL DIVIDE (2004); Paul DiMaggio et al., Digital Inequality: From Unequal Access to Differentiated Use, in SOCIAL INEQUALITY 355 (Kathryn M. Neckerman ed., 2004); Eszter Hargittai, The Digital Reproduction of Inequality, in SOCIAL STRATIFICATION 936 (David B. Grusky ed., 2008).

⁷⁹ The Internet and Civic Engagement, supra note 75, at 17.

broadband policies⁸¹ along with targeted training and assistance should offer a solution. While this is by no means an easy mission, satisfying the inclusiveness criterion on the participation axis is even more challenging.

The major question is what constitutes inclusiveness for purposes of citizen participation. Self-selection (the most prevalent mechanism of participants' recruitment) usually fails to satisfy the inclusiveness criterion, as those who voluntarily take part in participatory initiatives are "typically better-offmore wealthy, educated, and professional-than the population from which they come."⁸² Hence, one approach is to perceive inclusiveness as representation of all possible points of view on the topics under discussion. Theoretically, this requirement can be satisfied even if the group itself is not representative of the population, as long as all the existing arguments are explicated to participants. One major problem with this approach is the decision about which points of view are legitimate, relevant, and should be included. Architects and moderators of participatory platforms are usually those who decide what information counts as balanced and which points of view (if any) should be excluded. If the stakes of participatory processes are high, this discretion becomes perilous and some checks should be introduced (e.g., allowing participants to dispute decisions as to the validity of certain arguments, restricting the discretion to ban arguments to rare and clear-cut cases). Another difficulty is that even if all possible arguments are on the table, the identity of participants and their inherent biases or preconceptions may preclude them from a thorough and open-minded consideration of the differing positions.

Several methods may help overcome these problems. First, designers of digital platforms can structure participatory initiatives around a randomly selected group of citizens (who reflect the demographics of a neighborhood, city, state, or the whole nation) and ensure that full and balanced information is provided.⁸³ A different, less "scientific" method is active

⁸¹ See The National Broadband Plan, BROADBAND.GOV (2010) http://www. broadband.gov/plan. For an overview and analysis of broadband policies around the world, see Next Generation Connectivity, BERKMAN CTR. FOR INTERNET & SOC'Y AT HARVARD UNIV. (July 14, 2009), http://cyber.law.harvard.edu/pubrelease/broadband. For a critique of the national broadband plan, see Yochai Benkler, Ending the Internet's Trench Warfare, N.Y. TIMES, Mar. 21, 2010, at WK12.

⁸² Fung, *supra* note 71, at 162.

⁸³ This method produced illuminating results in the context of "deliberative polls," designed and organized by James Fishkin and the "citizen juries" project,

outreach. Organizers of participatory initiatives may target underrepresented audiences and encourage them to take part in the process in order to supplement and balance self-selected participants.⁸⁴ A related approach is to provide underrepresented groups with "structural incentives," by directing participatory initiatives at issues that mostly concern poor citizens (e.g., public schools or basic infrastructure),⁸⁵ or even provide them with monetary incentives. Most of these methods have been utilized in offline contexts with varying degrees of success, and they can be equally valid for the online realm.⁸⁶

2. Transparency

As James Madison noted, "a popular government without popular information or the means of acquiring it, is but a Prologue to a Farce or a Tragedy or perhaps both."⁸⁷ Transparent and comprehensive popular information is indeed necessary both for e-government and e-participation in local government. However, the question of *how* to bring popular information to the people is far from easy to answer.

Both e-government and e-participation are meaningless if citizens are not provided with full, accurate and intelligible information, which allows them to better understand municipal affairs and problems. However, providing access to massive datasets does not a guarantee that this information will be sensibly apprehended.⁸⁸ Rather, it may generate confusion, distort conclusions, or simply go unnoticed. In this sense, more information does not always produce better knowledge or understanding. Comprehension of information is inseparable from the interests, resources, cognitive capacities, cultural background, and social contexts of the individuals who

managed by the Jefferson Center. *See* FISHKIN, *supra* note 53, at 159-96; Fung, *supra* note 71, at 161.

⁸⁴ Fung, *supra* note 71, at 162.

⁸⁵ FUNG, *supra* note 41, at 89-91.

⁸⁶ For an experiment with online deliberative polls, see FISHKIN, *supra* note 53, at 169-75; Robert C. Luskin, James S. Fishkin & Shanto Iyengar, *Considered Opinions on U.S. Foreign Policy: Face-to-Face Versus Online Deliberative Polling*, at 27 (2004), *available at* http://cdd.stanford.edu/research/papers/2006/foreign-policy.pdf (demonstrating that "online and face-to-face results are broadly similar").

⁸⁷ James Madison, Letter to W. T. Barry (August 4, 1822), *in* 9 THE WRITINGS OF JAMES MADISON 103 (Gaillard Hunt ed., 1910).

⁸⁸ ARCHON FUNG, MARY GRAHAM & DAVID WEIL, FULL DISCLOSURE: THE PERILS AND PROMISE OF TRANSPARENCY 53 (2007); Lawrence Lessig, Against Transparency: The Perils of Openness in Government, NEW REPUBLIC, Oct. 9, 2009, at 4, http://www.tnr.com/article/books-and-arts/against-transparency.

consume it.⁸⁹ People may therefore ignore, misunderstand, or misuse certain aspects of the data provided to them, depending on their unique and complex "chains of comprehension, action, and response."⁹⁰ Moreover, the overwhelming amounts of information available online may create "attention spans," which prevent individuals from going into the depth of all the data available to them and rather lead them to focus on specific and often out-of-context details. The result, as Lawrence Lessig suggests, is a "systemic misunderstanding."⁹¹

A possible solution to these pitfalls, both for egovernment and e-participation, is to ensure that transparency is "targeted"-to convey information in standardized and usercentric ways that allow individuals to readily grasp, compare, and disaggregate it.⁹² While this task is not easy in practical terms, it is certainly possible for most types of information.⁹³ However, a deeper problem is that there are multiple incentives to provide incomplete or even distorted information. This is particularly so when stakes are high and the manner in which information is presented and framed may influence the public understanding of municipal affairs and the course of online discussions.⁹⁴ There are surely no easy or full solutions to this challenge. However, reliance on digital technologies may be beneficial in this respect as well. The networked structure of the internet allows private organizations and citizens to monitor the information provided on official websites and, if draw public attention to specific aspects, necessary, disseminate omitted data and sources, etc.⁹⁵ Hence, for purposes of e-government and e-participation alike, an important part of the transparency requirement is not only to convey information to participants in an accessible and graspable manner, but also to let them play a more active role and supplement or dispute the official information with their own reliable sources.

In the context of e-participation, an additional requirement is that participatory rules and procedures are transparent and familiar to all participants in advance. The

⁸⁹ FUNG, GRAHAM & WEIL, *supra* note 88, at 53.

 $^{^{90}}$ *Id*.

⁹¹ Lessig, *supra* note 88.

⁹² FUNG, GRAHAM & WEIL, *supra* note 88, at 37-38.

⁹³ For policy suggestions, see *id*. at 170-82.

⁹⁴ On framing effects, see sources cited *infra* note 196.

⁹⁵ BENKLER, *supra* note 15, at 212-62.

code of conduct and the consequences of violations, the goals of participation and its possible outcomes should all be public and clear. Compared to inclusiveness, for instance, this requirement is substantially easier to implement. Public officials and designers of participatory platforms should be explicit about the procedures ex-ante and adhere to them expost. Even if the rules grant participants only the most minimal powers, a misrepresentation of the process can deepen the levels of mistrust between citizens and government and alienate potential participants from future participatory endeavors.

3. Communication/Deliberation

In the context of communication and deliberation, egovernment and e-participation presuppose two distinct sorts of city-citizen interactions. From a consumerist perspective, the primary role of the city is to satisfy the needs and adjust to the preferences of its residents. No doubt, this task requires a high degree of attentiveness on the part of the municipality and a constant flow of relevant information from citizens to the municipal authorities. E-governmental platforms can therefore perform an invaluable function in city-citizen relations by offering both parties effective channels to interact with each other.

The case is entirely different from a participatory perspective. "Deliberation on the pressing issues of concern to those affected" is often regarded as "a basic cornerstone of democratic government."⁹⁶ An authentic deliberative experience requires individuals to "sincerely weigh the merits of competing arguments in discussions together,"⁹⁷ and to be "willing to revise preferences in light of discussion, new information, and claims made by fellow participants."⁹⁸ Severe doubts are frequently cast on the ability of online discussions to fulfill this ideal. Critics argue that the public lacks sufficient civic education and knowledge for meaningful deliberation, and that it is primarily motivated by parochial interests.⁹⁹ Online comments frequently evolve into a noisy cacophony, which

 $^{^{96}\,}$ Frank Fischer, Democracy and Expertise: Reorienting Policy Inquiry 48 (2009).

⁹⁷ FISHKIN, *supra* note 53, at 33.

⁹⁸ Simone Chambers, *Deliberative Democratic Theory*, 6 ANN. REV. POL. SCI. 307, 309 (2003).

⁹⁹ See sources cited supra note 64.

distracts other participants from the major questions on the public agenda and hides valuable contributions from the public eye. Moreover, online discussions can be captured by dominant participants or lead to deeply polarizing results.

Although these problems can considerably undermine the utility and attractiveness of e-participatory initiatives, they are not inevitable. In fact, they can be mitigated by introducing appropriate design mechanisms.¹⁰⁰ First, an online platform should not be left on its own. Avoidance of deliberative traps is a major task that can be assigned to moderators of online discussions. Such moderators should be professionally trained, neutral, and independent of the government. At their best, they should perform the role of "democratic intermediaries," who contribute to the quality, openness, and accessibility of discussions.¹⁰¹ Various mechanisms can be implemented to achieve these ends. For instance, moderators can stir public officials or participants to react to certain contributions or encourage participants to bring up certain topics. Instead of automatically adopting a discussion agenda promoted by public officials, moderators may allow participants to challenge and open it for questions. Moderators can also highlight contributions of participants who express uncommon or challenging arguments and thus alleviate the dominance of certain participants or arguments, and protect "minority views." In order to further protect discussions from dominance and lower the entry barriers for participation, moderators can prepare summaries or graphic trees that represent the course of the conversation in a balanced and readily graspable manner.¹⁰²

Obviously, while such functions may enhance the quality of online discussions, they also grant moderators a (sometimes substantial) decision-making authority, which can be abused to the detriment of all the involved parties. Although magic solutions are not likely in this respect, transparency should be the key for any active moderation. Decisions taken by

¹⁰⁰ See, e.g., Froomkin, supra note 15.

¹⁰¹ See Arthur R. Edwards, The Moderator as an Emerging Democratic Intermediary: The Role of the Moderator in Internet Discussions About Public Issues, 7 INFO. POLICY 3 (2002); Scott Wright, Government-run Online Discussion Fora: Moderation, Censorship and the Shadow of Control, 8 BRIT. J. POL. & INT'L REL. 550 (2006). For the importance of moderation or facilitation in face-to-face contexts, see, for example, Archon Fung, Deliberative Democracy, Chicago Style: Grassroots Participation and Municipal Reform in Policing and Public Education, in DEEPENING DEMOCRACY: INSTITUTIONAL INNOVATIONS IN EMPOWERED PARTICIPATORY GOVERNANCE 111, 135-37 (Archon Fung & Erik Olin Wright eds., 2003).

¹⁰² For examples of summaries, see *infra* Parts IV.B and IV.C.1.

the moderator and their reasoning should be available to participants and disputable by them. Though transparency is not necessarily a proper cure for all malaises, observing the neutrality and independence of moderators, and ensuring that solid mechanisms of oversight are in place should accomplish a substantial part of the mission.

4. Impact

The impact criterion refers to the concrete effects of egovernmental platforms on municipal services and the effects of e-participatory initiatives on municipal policies. For consumerist purposes, adjustment of local public services to citizens' needs can satisfy the criterion. Although this task is not easy, municipalities usually possess the tools that allow them to assess and measure citizens' needs and preferences.

The case is tougher from a participatory perspective. In "City Limits," Paul Peterson noted that "there is no sense getting involved in something you can't do anything about."¹⁰³ Indeed, an essential prerequisite for any participatory endeavor is the ability to guarantee citizens an actual possibility to influence public affairs—be it in the long or the short term.¹⁰⁴ However, too often, the outcomes of participatory initiatives (either online or face-to-face) are not formally binding and their implementation (or even thoughtful consideration) depends on the good will of the government. Such discretion allows public officials to take advantage of some outcomes while ignoring others.¹⁰⁵ Naturally, this does not encourage citizens to seriously consider the participatory opportunities that are offered to them.¹⁰⁶ In fact, it may even deepen citizens' distrust and alienate them from political activity.¹⁰⁷

¹⁰³ PETERSON, *supra* note 13, at 120.

 $^{^{104}\,\,}$ Stephen Macedo et al., Democracy at Risk: How Political Choices Undermine Citizen Participation, and What We Can Do About It 96 (2005).

¹⁰⁵ Andrew Chadwick & Christopher May, Interaction Between States and Citizens in the Age of the Internet: "E-Government" in the United States, Britain, and the European Union, 16 GOVERNANCE 271, 271 (2003); Morison & Newman, supra note 67, at 185.

¹⁰⁶ See, e.g., Stuart Minor Benjamin, Evaluating E-Rulemaking: Public Participation and Political Institutions, 55 DUKE L.J. 893, 908 (2006).

¹⁰⁷ See, e.g., Igor Mayer, Jurian Edelenbos & René Monnikhof, Interactive Policy Development: Undermining or Sustaining Democracy?, 83 PUB. ADMIN. 179, 181 (2005) (contending that "[o]n some occasions, these experiments seem to have reinforced rather than to have reduced the mutual mistrust between citizens and administrators").

Impact on municipal policies can be exercised in several manners. The most straightforward way is a formal ex-ante delegation of decision-making authority to participants. Such cases. particularly online, are rare.¹⁰⁸ More commonly, participatory initiatives serve to inform public debates, legitimate policies, or provide nonbinding recommendations, sometimes as part of a larger decision-making process.¹⁰⁹ At times, even without formal authority, the persuasive force of participatory initiatives is strong enough to cause public officials to adhere to the participants' preferences. However, in order to make e-participation a worthwhile and appealing time investment for citizens, cities ought to provide more than an opportunity to persuade. Governmental commitment to concrete results and effects (even if not large in scope) may break the "vicious circle" of e-participation described above, draw serious participants into online initiatives, and considerably improve the quality of the process. Such commitment does not compel a blanket approval for everything decided on the online platform. But it does require a formal guarantee of thorough consideration, serious response and, if possible, implementation of citizens' suggestions. The existence of a legal commitment of this sort can considerably strengthen the appeal and importance of e-participation.

5. Cost-effectiveness

Sustainable policies of e-government and e-participation require a major investment of efforts, resources and time on the part of municipal authorities, citizens, private contractors who are responsible for the development and maintenance of the platform, and others. Before seriously committing to this

¹⁰⁸ Robert E. Goodin & John S. Dryzek, *Deliberative Impacts: The Macro-Political Uptake of Mini-Publics*, 34 POL. & SOC'Y 219, 225 (2006). An example of formal impact mechanisms can be found in the case of Citizens' Assembly on Electoral Reform in British Columbia. The assembly, consisting of 160 randomly selected citizens, was requested to recommend a new electoral system for British Columbia. The government committed to hold a referendum over any proposal made by the assembly and implement the referendum results. The assembly's recommendations were eventually brought for a referendum twice and rejected both times. *See generally* DESIGNING DELIBERATIVE DEMOCRACY: THE BRITISH COLUMBIA CITIZENS' ASSEMBLY (Mark Warren & Hillary Pearse eds., 2008); Amy Lang, *But Is It for Real? The British Columbia Citizens' Assembly as a Model of State-Sponsored Citizen Empowerment*, 35 POL. & SOC'Y 35 (2007).

 $^{^{109}}$ Goodin & Dryzek, *supra* note 108, at 225-26. For examples of participatory initiatives that do not offer citizens opportunities to meaningfully affect public policies, see *infra* Part III.B.

journey, it is crucial to determine the actual value of digital platforms in terms of wasted, saved, or increased public and private resources. The question of how to measure the costeffectiveness of a regulatory project is heavily debated in the literature.¹¹⁰ For the purposes of the discussion here, costeffectiveness is assessed according to the common practice of comparing the estimated costs of a project to its expected benefits and social consequences.¹¹¹

* * *

The purpose of the five criteria discussed above is to evaluate the extent to which e-governmental and eparticipatory platforms promote and strengthen the consumerist and participatory values in city-citizens relations. These criteria reflect the performance of online municipal initiatives on both consumerism and participation axes. The assumption is that the stronger a digital platform performs under each criterion, the more successful it is, either on consumerist or participatory grounds.

The performance evaluation is qualitative, not quantitative—there are no absolute values. Moreover, one criterion can operate at the expense of others, depending on the political goals and values that the designers of the specific platform attempt to accomplish. However, as e-governmental and e-participatory initiatives may be context dependent and different from each other, the goal of the criteria is to "flatten" these initiatives into several decisive components, make them comparable, and situate them along the consumerismparticipation axes. The next Part relies on the proposed criteria to assess the current usage of digital technology—both egovernment and e-participation—in American cities.

¹¹⁰ See, e.g., MATTHEW D. ADLER & ERIC A. POSNER, NEW FOUNDATIONS OF COST-BENEFIT ANALYSIS (2006); Frank Ackerman & Lisa Heinzerling, Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection, 150 U. PA. L. REV. 1553 (2002); Richard H. Pildes & Cass R. Sunstein, Reinventing the Regulatory State, 62 U. CHI. L. REV. 1 (1995); Cass R. Sunstein, Paradoxes of the Regulatory State, 57 U. CHI. L. REV. 407 (1990).

¹¹¹ Pildes & Sunstein, *supra* note 110. For an example of cost-effectiveness evaluation in the context of e-government, see, for example, Mary Maureen Brown, *Governments Understanding E-Government Benefits: An Examination of Leading-Edge Local Governments*, 37 AM. REV. PUB. ADMIN. 178, 187 (2007); M. Jae Moon, *The Evolution of E-Government Among Municipalities: Rhetoric of Reality?*, 62 PUB. ADMIN. REV. 424 (2002); Norris & Moon, *supra* note 54.

III. DIGITAL TECHNOLOGY IN AMERICAN CITIES

As President Obama declared in the Open Government Memorandum, "*knowledge* is widely dispersed in society" and "[e]xecutive departments . . . should offer Americans increased opportunities . . . to provide their Government with the benefits of their collective *expertise and information*."¹¹² More than a normative call, this statement provides an accurate account of how digital technologies are employed in American cities.

Digital endeavors in American municipalities are consumerism oriented and can be largely divided into two categories. The first category contains digital platforms that provide services and information to citizens, and platforms that collect publicly useful information from citizens. The role of local authorities using these platforms is to inform and satisfy their "consumers," who are in turn encouraged to signal their preferences and provide the authorities with information that can improve service provision (e.g., report broken lights on a certain street). This category of local platforms closely adheres to the consumerist dimension of city-citizen relations and represents an upgraded version of e-government: citizens do not passively consume services, but also facilitate their provision. The second category is more unique and tricky. It embodies digital initiatives of "governmental crowdsourcing"the process of outsourcing certain governmental functions to the broad public, and soliciting back services, suggestions, solutions, and ideas. As explained by a White House official, this approach seeks "to make government more relevant to people's lives" by providing more information, creating "opportunities for people to share their expertise," or suggesting ideas for innovation.¹¹³ Digital platforms contained in this category in fact pursue consumerist goals, but misleadingly present themselves as participatory practices.

These two categories, and examples of them, are examined below in further detail. Based on the rhetoric of the Open Government Directive, these patterns not only reflect the current state of affairs of digital municipal platforms, but are

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 $^{^{\}rm 112}$ Transparency and Open Government Memorandum, supra note 2 (emphases added).

¹¹³ Jed Miller, *Believable Change: A Reality Check on Online Participation, in* INTERGOVERNMENTAL SOLUTIONS NEWSLETTER: ENGAGING CITIZENS IN GOVERNMENT 9, 9 (2009) (quoting Beth Noveck, White House Deputy Chief Technology Officer for Open Government).

also indicative of the future development of the field. It is therefore particularly important to correctly assess the meaning and implications of these platforms. Hence, relying on the evaluative criteria suggested above, the following subsections conceptualize the digital initiatives of American cities and locate them on the consumerist-participatory scale. They demonstrate that while American cities perform well on the consumerist axis, they fail to achieve participatory goals and generate a distorted picture of participatory democracy. Further, they explain what lies in the basis of this distortion and why American digital initiatives fail on the participatory axis.

A. Provision and Collection of Information

1. Provision of Information

American public authorities chiefly regard the internet as a "one way publishing and distribution network rather than as a many-to-many medium."¹¹⁴ While early theorists contemplated that improved information and service provision was only the first step on a transformative route toward an "egovernment nirvana" (fully integrated, interactive, and even participatory municipal forums), their predictions have proved wrong.¹¹⁵ Empirical assessments of municipal websites demonstrate that "local e-government is mainly informational, with a few transactions but virtually no indication of the [predicted] high-level function."¹¹⁶ In fact, almost two decades after the introduction of e-government in the United States, dissemination of public information and provision of basic services remain the most popular and widespread use of digital technology in local governments.¹¹⁷

¹¹⁴ Sack, *supra* note 67, at 266.

¹¹⁵ David Coursey & Donald F. Norris, *Models of E-Government: Are They Correct? An Empirical Assessment*, 68 PUB. ADMIN. REV. 523, 524-25 (2008).

 $^{^{116}}$ Id.

¹¹⁷ Mossberger, Wu & Jimenez, *supra* note 58 (relying on a study from 2009); Ho, *supra* note 51, at 441 (relying on data from 2000); Scott, *supra* note 58 (relying on information from 2004); Darrell M. West, *Urban E-Government Report, 2004*, INSIDEPOLITICS.ORG (Sept. 2004), http://www.insidepolitics.org/egovt04city.html (citing data from 2004).

See also Donald F. Norris, *E-Government Among American Local Governments: Adoption, Impacts, Barriers and Lessons Learned* (Working Paper, 2009), http://ipac.kacst.edu.sa/eDoc/2009/182457_1.pdf (arguing that "E-government is mainly informational, provides a few services, fewer transactions and interactions and has not evolved into e-democracy or e-transformation").

A recent study of websites operated by the seventy-five largest American cities demonstrated that the majority of them indeed provides citizens with ample public information:¹¹⁸ contact details for public officials (e.g., email addresses or phone numbers); organizational information (e.g., details on the duties and functions of elected officials or description of the activities of municipal departments); online council agenda minutes;¹¹⁹ publication of legal information; employment information; and downloadable forms.¹²⁰ While the provision of these details is surely helpful and positive, municipal websites rarely contain much more than such "billboard" information.¹²¹

From a consumerist perspective, the value of these digital practices according to the criteria discussed earlier varies from case to case. The best performing criterion is, without doubt, *transparency*. The scope and sophistication of the information and services contained on official municipal websites continue to increase year after year.¹²² A growing

¹¹⁸ Mossberger, Wu & Jimenez, *supra* note 58. For a study of the 100 largest cities in 2004 with similar results, see Scott, *supra* note 58, at 349; *see also* Dawes, *supra* note 58.

¹¹⁹ This category contains numerous examples and practices. For instance, Madison (WI), Seattle (WA) and Berkeley (CA) offer on their websites the option of streaming live or archived video of various legislative sessions of subcommittee meetings of the city council. See Madison City Channel, CITYOFMADISON.COM, http://www.cityofmadison.com/mcc12/streaming.html#streammeeting (last visited Feb. 6, 2011); SEATTLE CHANNEL, http://www.seattlechannel.org (last visited Feb. 6, 2011); City of Berkeley Live Webcasts, CI.BERKELEY.CA.US, http://www.ci.berkeley.ca.us/ CalendarEventWebcastMain.aspx (last visited Feb. 6, 2011). Alexandria (VA) also provides an RSS syndication that allows citizens to get updates when new items are posted on the website. Mayor & City Council: Dockets, Webcasts & Podcasts, ALEXANDRIAVA.GOV, http://alexandria.granicus.com/ViewPublisher.php?view_id=2 (last visited Feb. 6, 2011). Montgomery County (MD) operates an "On Demand" program, which enables citizens to access meeting recordings on YouTube or download them from iTunes. Montgomery on Demand, MONTGOMERYCOUNTYMD.GOV, http://www.montgomerycountymd.gov/ mcgtmpl.asp?url=/content/pio/ondemand.asp (last visited Feb. 6, 2011). Fairfax County (VA) offers summaries of every meeting of the board of supervisors with links to videos and presentations. 2009 Board of Supervisors Meetings, FAIRFAXCOUNTY.GOV, http://www.fairfaxcounty.gov/government/ board/meetings/2009 (last visited Feb. 6, 2011).

¹²⁰ Brown, *supra* note 111, at 187; *see also* Mossberger, Wu & Jimenez, *supra* note 58, for largely similar results in a study conducted in May 2009.

¹²¹ Dawes, supra note 58; see also Coursey & Norris, supra note 115 (explaining that e-government models which were suggested in the past fail to predict the development of online practices among American local governments); Donald F. Norris, Electronic Democracy at the American Grassroots, 1(3) INT'L J. ELECTRONIC GOV'T RES. 11 (2005) (stating that "[e]vidence from focus groups clearly shows that Web sites and other local e-government efforts among the participating 37 U.S. local governments were adopted and operate principally to deliver governmental information and services and to provide citizens greater access to governmental officials."); Scott, supra note 58; see also Yun-Che Chen & Kurt Thurmaier, Advancing E-Government: Financing Challenges and Opportunities, 68 PUB. ADMIN. REV. 537 (2008).

¹²² Dawes, *supra* note 58.

number of municipalities does not only expose citizens to vast amounts of data, but also "customize information," offering citizens e-mail alerts, online newsletters and updates on issues of their interest, and uploading videos of city council meetings in convenient formats. Further, the *cost-effectiveness* of these platforms is largely positive. Reportedly, citizen satisfaction with egovernment has led to higher levels of trust in government,¹²³ and, particularly on the local level, improved citizens' perception of governmental transparency, accountability and, responsiveness.¹²⁴ The costs of obtaining information have been substantially reduced as well.¹²⁵ Public officials report that e-government improved customer service, even if it has not led to a decrease of costs and manpower in local government.¹²⁶

Digital platforms for information provision seem less impressive under the remaining evaluative criteria. *Inclusiveness* is hardly promoted, as municipal websites only place information online and usually do not attempt to facilitate access to it. Hence, existing digital gaps are further exacerbated, as only those who have internet access benefit from online information and services. The performance of these platforms under the *communication* criterion is doubtful as well. In cases of responsive and attentive officials, the provision of emails or phone numbers may be enough. However, in other instances, more structured channels of interaction are required. The lack of communication channels also has a negative effect on the potential *impact* on service provision. As municipal websites explicitly opt for a one-way delivery of

¹²³ See generally Eric Welch, Charles C. Hinnant & M. Jae Moon, Linking Citizen Satisfaction with E-Government and Trust in Government, 15 J. PUB. ADMIN. RES. & THEORY 371 (2005).

¹²⁴ Caroline J. Tolbert & Karen Mossberger, *The Effects of E-Government on Trust and Confidence in Government*, 66 PUB. ADMIN. REV. 354, 366 (2006) (noting that "[p]erhaps it is the nature of local government and its proximity to citizens that leads them to place greater value on improved interactions with local government.").

¹²⁵ Scott, *supra* note 58, at 346.

¹²⁶ In a survey conducted in 2004 to evaluate the impact of e-government, only 2.6 percent of the participating public officials reported reducing staff; 10.9 percent reported reducing administrative costs; 25 percent reported fewer demands on staff, while 27.6 percent reported increased demands; only 23.5 percent indicated that business process became more efficient; and finally, only one-third, 35.8 percent, reported increased contact between citizens and local officials. *See* Coursey & Norris, *supra* note 115, at 528. However, 59.6 percent reported that e-government improved "communication to public" and 52.8 percent observed "improved customer service." *See id.* at 528, 532 (arguing that "few governments reported any changes that are attributable to e-government, especially changes involving cost impacts"); Norris & Moon, *supra* note 54, at 71; *see also* Kelly D. Edmiston, *State and Local E-Government: Prospects and Challenges*, 33 AM. REV. PUB. ADMIN. 20 (2003).

information from government to citizens,¹²⁷ they provide limited ability for citizens to express their needs or preferences as to service provision.

2. Collection of Information

While the majority of municipal websites serve as a oneway communication channel from the government to the public, a different and novel type of municipal initiative works in the opposite direction—collection of information from the public.

One of the first (and probably most celebrated) initiatives of this kind is the British online platform FixMyStreet,¹²⁸ which was later adopted by multiple municipalities around the world. The aim of FixMyStreet is "to transform the act of reporting faults-turning it from a private one-to-one process into a public experience where anyone can see what has been reported."129 The platform allows citizens to lodge complaints about broken infrastructure and other problems in their vicinity (graffiti, dumps of waste, broken paving slabs, malfunctioning street lighting, etc.). Complaints are posted on the website using a mapping tool, and then transferred to the appropriate local councils that are supposed to take care of the repairs.¹³⁰ The online platform enables citizens to scrutinize new and archived complaints, follow and discuss their status, and monitor the response rate of local authorities. Officials are encouraged to participate on the platform as well, by leaving comments and updates on the reported issues. The success of FixMyStreet inspired the creation of numerous platforms of this sort around the world, including the SeeClickFix website that operates in multiple municipalities in the United States.¹³¹

¹²⁷ Mossberger, Wu & Jimenez, *supra* note 58.

¹²⁸ FIXMYSTREET, http://www.fixmystreet.com (last visited Jan. 25, 2011). The platform is operated by the non-for-profit organization MySociety. *See* MYSOCIETY, http://www.mysociety.org/projects/fixmystreet (last visited Jan. 25, 2011).

¹²⁹ *FixMyStreet*, YOUNG FOUNDATION, http://www.youngfoundation.org/ourwork/local-innovation/strands/neighbourhoods/fixmystreet/fixmystreet (last visited Jan. 25, 2011).

¹³⁰ As of March 5, 2011, FixMyStreet declared that 1945 new reports were received in the system in the prior week, 3383 reports had been fixed in the prior month, and a total of 128,772 updates on reports were posted. *See* FIXMYSTREET, http://www.fixmystreet.com (last visited Mar. 5, 2011). The state of all reports can be viewed on the website. *See Summary Reports*, FIXMYSTREET, http://www.fixmystreet.com/reports (last visited Mar. 5, 2011).

¹³¹ SEECLICKFIX, http://www.seeclickfix.com/citizens (last visited Mar. 5, 2011). As of March 2011, top performing cities are Omaha, NE; Elk Grove, CA; and

A similar course of action has been taken in San Francisco, CA, where citizens are invited to report to the city 311 Twitter account infrastructure problems (e.g., potholes) and request various non-emergency city services (e.g., street cleaning).¹³² The municipal authorities respond to each "tweet" and report what progress has been done to fix the problem. An analogous initiative has been launched in Boston, where citizens can download a free application, "Citizen Connect," to their iPhones and notify the municipality of problems with potholes, graffiti, streetlights, piles of snow, and more.¹³³

In accordance with the consumerist vision of cities, the clear purpose of these initiatives is to enhance the quality of basic services provided to citizens. In fact, from a costeffectiveness perspective, such projects benefit both parties of city-citizens relations. Public officials gain as these platforms allow them to cut administrative costs and more cheaply satisfy citizens' demands. Citizens gain as their nearly costless reports help improve the municipal services provided in their immediate environment. The primary goal of these platforms is to establish improved channels for interaction between citizens and municipal authorities and to strengthen monitoring. If local authorities indeed respond to citizens' reports, the *communication* criterion is therefore impressively satisfied. Further, online platforms for information collection usually provide tools to monitor the fulfillment of citizens' requests, and hence there is some degree of *transparency* in the process. Even if neither timely responses nor full public accountability for failures are guaranteed, the online exposure of the reports

Plano, Texas. See Recent Place States, SEECLICKFIX, http://www.seeclickfix.com/ recent_place_stats (last visited Mar. 5, 2011). Similarly to its British equivalent, the platform allows citizens to report and flag infrastructure issues in their vicinity on a map. See John Tozzi, Gov 2.0: The Next Internet Boom, BUSINESSWEEK, May 27, 2010, http://www.businessweek.com/smallbiz/content/may2010/sb20100526_721134.htm. Other projects based on the FixMyStreet model include versions from Canada (http://www.fixmystreet.ca): the Netherlands (http://www.verbeterdebuurt.nl): New

⁽http://www.fixmystreet.ca); the Netherlands (http://www.verbeterdebuurt.nl); New Zealand (http://www.fixmystreet.org.nz); and more.

¹³² SF 311, http://twitter.com/sf311 (last visited Jan. 25, 2011). For a description of the project, see Matt Thomas, *San Francisco's 311 on Twitter*, COLLABORATION PROJECT, Sept. 30, 2009, http://www.collaborationproject.org/display/case/San+Francisco%27s+311+on+Twitter. For a similar initiative in New York City, visit http://www.nyc.gov/apps/311.

¹³³ Chad Vander Veen, New York City, Boston Add Web 2.0 to Customer Relationship Management, DIGITAL COMMUNITY, Nov. 17, 2009, http://www.digitalcommunities.com/articles/ New-York-City-Boston-Add-Web.html. A similar service has been recently offered by the Thirteenth District of Los Angeles. See Karen Wilkinson, Los Angeles City Councilman Launches 311 iPhone App, GOV'T TECH., Apr. 20, 2010, http://www.govtech.com/e-government/ Los-Angeles-City-Councilman-Launches-311.html.

launches a "naming and shaming" mechanism that may impel officials to act. As a result, even if only microservices are on the agenda, these initiatives are likely to improve the municipal performance on the consumerist axis.

The less positive face of these platforms is their degree of inclusiveness. As only those who possess the necessary technological devices and skills can benefit from the platforms, the initiatives' score under the inclusiveness criterion is poor. Digital skills (and not only access) can be largely predicted by socioeconomic level,¹³⁴ and thus the platforms are likely to improve services in well-off neighborhoods while leaving the worse-off communities behind. Lastly, digital "collection of information" initiatives explicitly limit their scope to governmental "nonemergency" services (311), and hence their participatory qualities are inherently limited.

In sum, the combination of digital platforms that provide information to citizens with digital initiatives that solicit information from reveals a promising consumerist structure. In both cases, municipalities ought to invest more efforts in the inclusiveness criterion (i.e., ensure that problems of access and digital skills are not an obstacle for citizens' use e-government). Otherwise, the present path seems of satisfactory from a consumerist vision and it should be taken by more American cities.

B. Governmental Crowdsourcing

Friedrich Hayek famously argued that "utilization of knowledge not given to anyone in its totality" is "the economic problem of society."¹³⁵ Hayek distinguishes between two types of knowledge: a scientific one, possessed by experts, and "the knowledge of the particular circumstances of time and place."136 The latter type stems from the intuition that "practically every individual has some advantage over all others in that he possesses unique information of which beneficial use might be made."¹³⁷ This presumption is the pillar of the *crowdsourcing* enterprise-the second category of digital endeavors in the

¹³⁴ Karen Mossberger, Caroline J. Tolbert & Michele A. Gilbert, *Race, Place*, and Information Technology, 41 URB. AFF. REV. 583, 584 (2006).

¹³⁵ F.A. Hayek, The Use of Knowledge in Society, 35 AM. ECON. REV. 519, 519-20 (1945). 136 Id. at 521.

¹³⁷ Id.

United States and the most fashionable digital practice in local governments.

Crowdsourcing-a model of distributed production and problem solving—prescribes the following course of affairs:¹³⁸ an organization distributes across a large online network a request to help with a certain (usually large) task. There is no limit on the number of potential contributors and the work is granular, i.e., broken into small and discrete tasks. "[P]articipants are not primarily motivated by money" and they contribute to the cause in their leisure time.¹³⁹ The crowdsourcing model was first championed as an effective strategy for open-source economic production.¹⁴⁰ Reflecting Havek's theory, it has also been applied to citizen participation in democratic institutions: "collaborative democracy is a new approach for using technology to improve outcomes by soliciting expertise (in which expertise is defined broadly to include both scientific knowledge and popular experience) from self-selected peers working together in groups in open networks."141 This perception of democracy and citizen participation substantially affected the nature of online initiatives on all levels of government in the United States, jumbling consumerist practices with participatory rhetoric. It resulted in two major patterns: crowdsourcing professional skills and crowdsourcing ideas for innovation.

1. Professional Skills

In 2008, the first and most notable initiative of governmental crowdsourcing was implemented in Washington, D.C. The idea was attractive in its simplicity. The Chief Technology Officer (CTO) of the District of Columbia placed online 462 datasets containing extensive information on governmental contracts, crime incidents and statistics, details on construction projects, vacant properties, information on

¹³⁸ See Jeff Howe, The Rise of Crowdsourcing, WIRED, June, 2006, http:// www.wired.com/wired/archive/14.06/crowds_pr.html.

 $^{^{139}\,}$ See Jeff Howe, Crowdsourcing: Why the Power of the Crowd Is Driving the Future of Business 28-29, 62-63 (2008).

¹⁴⁰ The subtitle of the article that defined the crowdsourcing model was straightforward: "Remember outsourcing? Sending jobs to India and China is so 2003. The new pool of cheap labor: everyday people using their spare cycles to create content, solve problems, even do corporate R & D." Howe, *supra* note 138; *see also* HOWE, *supra* note 139, at 29.

¹⁴¹ BETH NOVECK, WIKI GOVERNMENT: HOW TECHNOLOGY CAN MAKE GOVERNMENT BETTER, DEMOCRACY STRONGER, AND CITIZENS MORE POWERFUL 17 (2009).

businesses, and more.¹⁴² The second step was to "democratize" the data. As explained by Mr. Vivek Kundra, the former CTO and architect of the initiative, "[i]ndividuals and organizations are not only viewing our government data, but are actually improving upon our work by analyzing and repurposing the information in useful ways."¹⁴³ Hence, the District of Columbia sponsored a contest, "Apps for Democracy," which encouraged citizens to create and share open-source applications that integrate and visualize governmental data for various public purposes.¹⁴⁴

Citizens submitted forty-seven applications in thirty days. Forty-five of these applications dealt with topics of safety and quality of life: twelve applications offered various alternatives for mapping criminal incidents and alerts; at least five created traffic and parking maps or alerts; seven tackled issues related to construction projects; fifteen applications were designed for iPhones and provided helpful geographic information (locations of nearby hotels, post offices, gas stations, libraries, banks, places of worship, and more). Other applications dealt with bike routes, historic places, demographic data on schools and local news.¹⁴⁵ Only two applications addressed issues of transparency and public accountability. Citizens were requested to vote for the best applications, and their votes were taken into account to determine the winners of the competition.

The District of Columbia's public officials greeted Apps for Democracy with sheer enthusiasm. Chris Willey, the interim CTO, declared that "[w]ith the help of these homegrown innovators, we're engaging the community in government and building a digital democracy model for

 $^{^{142}~}Data~Catalog,$ D.C. OFF. OF THE CHIEF TECH. OFFICER, http://data.octo.dc.gov (last visited Jan. 28, 2011).

¹⁴³ Vivek Kundra, *Building the Digital Public Square*, APPS FOR DEMOCRACY (Oct. 15, 2008), http://www.appsfordemocracy.org/building-the-digital-public-square.

¹⁴⁴ See *id.*; APPS FOR DEMOCRACY, http://www.appsfordemocracy.org (last visited Feb. 6, 2011).

¹⁴⁵ See Applications Directory, APPS FOR DEMOCRACY, http://www.appsfordemocracy. org/application-directory (last visited Jan. 28, 2011). The contest's "agency gold" medal went to the creator of "D.C. Historic Tours" (http://www.dchistorictours.com), an application that relies on Google Maps, Flickr and Wikipedia to offer a variety of historic tours in Washington, D.C. See id. The application suggests a range of popular tours and also provides visitors with the tools to create their own personalized tours. See id. The "indie gold" medal went to the application "iLive.at" (http://www.ilive.at), an information-aggregation tool for individuals who live—or are considering living—in Washington, D.C. See id. Users can enter an address and receive local information, such as distances to the nearest shopping center and post office, crime data, and demographic data for the neighborhood. See id.

governments everywhere."¹⁴⁶ Mr. Kundra, the architect of the project who later became the first U.S. Chief Information Officer, stated that "[b]y ensuring that every citizen has a front row seat in the digital public square, we'll continue to return government into the hands of 'we, the people.""147 More than simply advertising an appealing city initiative, these declarations indicated a new direction for digital endeavors in American cities. Projects similar to Apps for Democracy were launched within a year in San Francisco,¹⁴⁸ New York City,¹⁴⁹ and Portland.¹⁵⁰ Even more significantly, the concept of Apps for Democracy has been adopted as a model on a considerably larger scale as part of the Open Government Directive issued in December 2009.¹⁵¹ As a result, the internet has been swept by diverse initiatives based on the Apps concept, including Apps for America,¹⁵² Apps for Healthy Kids,¹⁵³ Apps for the Army,¹⁵⁴ Apps for Inclusion,¹⁵⁵ and even Apps <4> Africa,¹⁵⁶ to name just a few.

Apps for Democracy was therefore a turning point in digital initiatives in local governments in the United States. However, its desirability is still uncertain. How do applications that better visualize and represent public data return "government into the hands of 'we, the people" and ensure that "every citizen has a front row seat in the digital public square"? True, these applications may enhance the comfort of life in Washington, D.C. and make daily errands more pleasant. But, despite being dubbed Apps for Democracy and attempting to create "digital democracy model а for governments

¹⁴⁶ DC Awards \$10,000 Final Prize to iPhone + Facebook App Combo, APPS FOR DEMOCRACY (Sept. 4, 2009), http://www.appsfordemocracy.org/dc-awards-10000final-prize-to-iphone-facebook-app-combo.

¹⁴⁷ See Kundra, supra note 143.

¹⁴⁸ DATA SF, http://www.datasf.org (last visited Jan. 28, 2011).

¹⁴⁹ NYC BIG APPS, http://www.nycbigapps.com (last visited Jan. 28, 2011).

¹⁵⁰ CIVIC APPS FOR GREATER PORTLAND, http://www.civicapps.org (last visited Jan. 28, 2011).

¹⁵¹ The Open Government Directive guided the Office of Management and Budget to issue "a framework for how agencies can use challenges, prizes, and other incentive-backed strategies to find innovative or cost-effective solutions to improving open government." See Open Government Directive Memorandum, *supra* note 6.

¹⁵² APPS FOR AMERICA, http://sunlightlabs.com/contests/appsforamerica (last visited Jan. 28, 2011).

¹⁵³ APPS FOR HEALTHY KIDS, http://www.appsforhealthykids.com (last visited Jan. 28, 2011).

¹⁵⁴ APPS FOR THE ARMY, http://armylive.dodlive.mil/index.php/2010/03/apps-for-the-army-challenge-is-here (last visited Jan. 28, 2011).

¹⁵⁵ The National Broadband Plan: Apps for Inclusion, BROADBAND.GOV, http://www.broadband.gov/plan/apps_for_inclusion.html (last visited Jan. 28, 2011).

¹⁵⁶ APPS FOR AFRICA, http://apps4africa.org (last visited Jan. 28, 2011).

everywhere," the democratic value of the initiative is precarious. Crowdsourcing projects do not empower disadvantaged citizens, do not reach out to underrepresented groups, and do not help to overcome digital gaps of access and skills. They mostly tap a specific form of expertise that is possessed by a narrow group of individuals-programming skills. Hence, inclusiveness, either consumerist or participatory, is weak.¹⁵⁷ Further, although the contest seemingly provides a *communication* channel, it can only be used by a selected and unrepresentative group of experts. *Deliberation* is irrelevant, as citizens are invited only to help with better representations and visualizations of public information, and public voting for the best "app" hardly satisfies any deliberative requirement. For the same reason, the opportunities to *impact* political decision making through crowdsourcing are vague. Exposing more information to the public may of course lead to political actions that would not be pursued otherwise. For instance, a clear visualization of unequal distribution of resources across neighborhoods can strengthen public demands to change certain policies. However, there is no evidence of such effects, and their probability is distant, vague, and indirect.

The strongest performance of these initiatives seems to be in the consumerist transparency and cost-effectiveness areas. However, while *transparency* is definitely strong in theory, it may be weak in practice. Only a small number of citizens can make a meaningful and productive use of the 462 public datasets that were placed online in Washington. Moreover, individuals who possess the proper professional skills and are able to take advantage of these data do not seem to be interested in the project's democratic or political potential.¹⁵⁸ As mentioned above, only two of the forty-seven applications that were submitted to the Apps for Democracy contest attempted to tackle issues of public accountability. These applications were not highlighted by the organizers of the competition and largely went unnoticed. The "Big Apps"

¹⁵⁷ One might argue that public interest organizations can make use of available data to benefit various disadvantaged groups. However, there has been no indication for such a course of action in crowdsourcing projects.

¹⁵⁸ The technical developers of Apps for Democracy confirmed that the focus of the applications was on service provision, but stated that this was in fact in accordance with the preferences of Washington, D.C. residents. Interview with David Strigel, Program Manager, D.C. Citywide Data Warehouse, and Dr. Julia Bezgacheva, Data Team Lead, in Cambridge, Mass. (Apr. 15, 2010) [hereinafter Strigel & Bezgacheva Interview].

contest that replicated Washington's experience in New York City was similar in this respect.¹⁵⁹ The prizes went to applications that offered directions to subway stations,¹⁶⁰ possibilities to comment online on NYC taxi drivers,¹⁶¹ and a helpful online guide to NYC schools.¹⁶² Only one out of eightyfive submitted applications dealt with the city's financial management.¹⁶³ The DataSF Contest, held in San Francisco, produced similar results.¹⁶⁴

Despite the poor performance on both consumerist and participatory dimensions, the "apps" concept is supposed to triumph on cost-effectiveness. Indeed, similarly to its success in and research settings,¹⁶⁵ crowdsourcing commercial of governmental functions is supposed to bring more efficiency into the system. The first attempt of Apps for Democracy reportedly brought an estimated value of \$2,300,000 (the sum that would arguably have to be paid to private contractors for designing similar applications), requiring only \$50,000 in expenditures (the contest prizes). As the U.S. Chief Information Officer noted, "Apps for Democracy produced more savings for the D.C. government than any other initiative."¹⁶⁶ If the value is real, the ratio of course speaks for itself. However, it is unclear what makes these applications financially beneficial. Labeling the applications as "savings" assumes their worthiness to the residents and public officials of Washington, D.C., a questionable assumption that currently lacks evidence. In fact, a review of the winning applications that was held a year and a half after the completion of the competition demonstrated that the majority of these applications were not

¹⁵⁹ In New York City, most winners were determined by judges and not by public voting. The criteria were usefulness, inventiveness, visual appeal, effectiveness, and commercial viability. See NYC BIG APPS, http://www.nycbigapps.com (last visited Jan. 28, 2011).

¹⁶⁰ WAYFINDER MOBILE, http://www.WayFinderMobile.com (last visited Jan. 27, 2011).

¹⁶¹ TAXI HACK, http://www.TaxiHack.com (last visited Jan. 27, 2011).

¹⁶² BIG APPLE ED, http://www.BigAppleED.com (last visited Jan. 27, 2011).

¹⁶³ This one application is CF CREW, http://www.CFCrew.com/omb (last visited Jan. 27, 2011). The application relies on the "Financial Plan Statements" dataset and visualizes expenses, revenues and capital commitments from the Office of Management and Budget. ¹⁶⁴ DATASF APP SHOWCASE, http://datasf.org/showcase (last visited Jan. 27, 2011).

 $^{^{^{165}}}$ $\,$ For examples, see HOWE, supra note 139.

¹⁶⁶ APPS FOR DEMOCRACY, http://www.appsfordemocracy.org (last visited Feb. 6, 2011).

sustainable and no longer functioned.¹⁶⁷ Hence, while it might appear "hard to dismiss an estimated 4,000 percent return on investment in one month's time,"¹⁶⁸ this investment may be better defined as a waste of public money. In fact, the initiator of the trend—the CTO office in Washington, D.C.—announced in July 2010 that "the District will discontinue its annual Apps for Democracy competition . . . [due to] concerns over sustainability and value of apps produced through the contest."¹⁶⁹

While the purpose of governmental crowdsourcing is in fact consumerist-to improve service provision by relying on unique skills possessed by a specific group in the population—its framing and rhetoric are participatory. This mixture produces poor results on all grounds. It fails on the participatory dimension because meaningful e-participation is not part of the scheme. It equally founders on the consumerist dimension, as it does not aim to understand or satisfy the genuine preferences and needs of citizens at large. It rather offers tech-savvy professionals an opportunity to show off their coding skills. In sum, calling on individuals to code applications and "win some cash and tons of street cred"170 and simultaneously declaring that the contest ensures that "every citizen has a front row seat in digital public square" acutely misrepresents the what democracy, participation, and service provision stand for.

2. Innovative Ideas

The governmental satisfaction with Apps for Democracy has led to further experimentation with crowdsourced online initiatives.¹⁷¹ A notable example of these initiatives is the "Ideas for Seattle" platform launched in Seattle in February 2010.

¹⁶⁷ Russell Nichols, Do Apps for Democracy and Other Contests Create Sustainable Applications?, GOV'T TECH. (July 11, 2010), http://www.govtech.com/gt/ articles/765522?id=765522&full=1&story_pg=1.

 $^{^{168}}$ *Id*.

 $^{^{169}\,}$ Id. The CTO office did not attempt to collect further data on how Apps for Democracy applications were used, if at all. See Strigel & Bezgacheva Interview, supra note 158.

¹⁷⁰ The slogan on the top of the homepage of Apps for Democracy was: "Got what it takes to mash-up DC's data to win some cash and tons of street cred? Then sign-up for Apps for Democracy and start coding here!" *See* APPS FOR DEMOCRACY, http://www.appsfordemocracy.org (last visited Feb. 6, 2011). Besides monetary prizes, contestants' names appeared on the popular website of Apps for Democracy, and honorary mentions were awarded. *Id*.

¹⁷¹ Citizen Insights Summary, APPS FOR DEMOCRACY, http://www. appsfordemocracy.org/apps-for-democracy-citizen-insights-summary (last visited Jan. 27, 2011).

There, citizens are called to "contribute your ideas for the future of our city" and vote "on existing ideas submitted by your fellow citizens."¹⁷² As of March 2011, over 1130 ideas were submitted and sorted into nineteen categories (e.g., housing, education, budget, parks and recreation, public safety, race and social justice). "Transportation" turned out to be the largest category.¹⁷³ Next in popularity were "public safety"¹⁷⁴ and "parks and recreation."¹⁷⁵ The idea that received the highest overall amount of votes (over 4,700) advocated marijuana legalization.¹⁷⁶

The design of the platform allowed participants not only to suggest new ideas and vote for existing ones but also, afterward, to view "accepted" and "completed" ideas. The list of these ideas is telling. After a year of activity, four ideas were tagged as accepted (e.g., more police downtown and upgraded internet infrastructure were announced as "planned"). Seven were completed, but six of these addressed technical matters regarding the platform itself (e.g., combining duplicate ideas or adding a specific category).¹⁷⁷ In all cases, suggestions that were chosen for implementation received only a handful of votes. No reasons for the choice of these specific ideas have been provided.

One may argue that while platforms such as Apps for Democracy crowdsource professional skills only to generate consumerist practices wrapped in misleading participatory rhetoric, platforms like Ideas for Seattle better embody participatory ideals. They invite citizens to take an active part in local agenda-setting and governance processes. However, a closer look reveals a different, much grimmer, picture. In fact, Ideas for Seattle may be a perfect example of the e-participatory

¹⁷⁶ *City*, IDEAS FOR SEATTLE, http://www.IdeasforSeattle.org/forums/27772-city (last visited Jan. 27, 2011).

¹⁷² IDEAS FOR SEATTLE, http://www.IdeasforSeattle.org (last visited Mar. 5, 2011). Participants may vote for up to ten ideas. *Id*.

¹⁷³ Over 320 ideas were submitted in this field. The highest scoring ideas were to "[e]xpand as much light rail and subway as possible" and "[m]ake Seattle the most Bike Friendly City in the US." *Transportation*, IDEAS FOR SEATTLE, http://www.IdeasforSeattle.org/ forums/27772-city/category/45-transportation (last visited Jan. 27, 2011).

¹⁷⁴ Eighty-six ideas were submitted in this field. The highest-scoring idea proposed to "[l]egalize marijuana and tax it," while others requested to "[b]ring back community policing" or provide "Foot/Bike Patrols for South East Seattle." *Public Safety*, IDEAS FOR SEATTLE, http://www.IdeasforSeattle.org/forums/27772-city/category/ 41-public-safety (last visited Mar. 5, 2011).

¹⁷⁵ Sixty-seven ideas were submitted in this field. A leading suggestion requested to allow nude beaches in Seattle. *Parks and Recreation*, IDEAS FOR SEATTLE, http://www.IdeasforSeattle.org/forums/27772-city/category/55-parks-and-recreation (last visited Mar. 5, 2011).

¹⁷⁷ City (Filtered), IDEAS FOR SEATTLE, http://www.IdeasforSeattle.org/forums/ 27772-city/topics/27772-my-idea-is-/filter/completed (last visited Jan. 27, 2011).

vicious cycle discussed above—recognizing that e-participation might be worthy, launching a grandiose digital platform, but ruining its potential with a faulty institutional design.¹⁷⁸

First, as participation on the Ideas for Seattle platform is self-selected and no outreach efforts to underrepresented groups have been taken, the resulting ideas cannot be considered representative or reflective of the general needs and preferences of Seattle residents. The opportunity to use the platform for purposes of *inclusiveness* is therefore missed. the platform does not attempt to promote Second, governmental *transparency*. No background information is offered to participants on any of the categories under discussion. Rules for selection of ideas for implementation are not publicly available and actual selection seems arbitrary. There is also no monitoring mechanism that would indicate the precise stage of implementation. Third, *deliberation* is weak, as commenting on an idea posted by a previous user does not stimulate thoughtful discussion, let alone satisfy the requirements of a deliberative experience. Moreover, the platform is not moderated, and hence capture and first-mover advantages are both common phenomena.¹⁷⁹ The fact that the highest-scoring idea addresses the legalization of marijuana can serve as a notable example of such capture. In addition, the design of the platform, which primarily highlights the "topvoted" ideas, leads citizens to strengthen the already leading proposals.¹⁸⁰ In light of the performance under the previous criteria, it is no surprise that an initiative of the type of Ideas for Seattle lacks meaningful impact. Even the most good-willed

¹⁷⁸ See supra text accompanying notes 67-70.

¹⁷⁹ Similar results can be found on online platforms on the national level. One example is the Citizens' Briefing Book—an initiative of President Obama's Transition Team that allowed citizens to suggest policies that they were interested in. Participants could vote ideas up or down and comment on them. The suggestions were compiled into the "Briefing Book" and handed to President Obama on his inauguration day. Top-voted ideas included legalizing the use of marijuana and online poker. *See Citizen's Briefing Book to President Barack Obama from the American People*, http://www.WhiteHouse.gov/sites/default/files/microsites/Citizens_Briefing_Book_Final 2.pdf (last visited Feb. 6, 2011). This experience repeated itself when the government solicited citizens' ideas with regard to the Open Government Directive. Despite broad participation, a substantial percentage of suggestions dealt with the release of President Obama's "real" birth certificate or the assassination files of President John F. Kennedy. *Id*.

¹⁸⁰ See Matthew J. Salganik, Peter S. Dodds & Duncan J. Watts, *Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market*, 311 SCIENCE 854 (2006) (explaining the phenomenon in the context of ranking songs). A randomized list of ideas would be a better design choice in this context. This was implemented, for instance, at the Apps for Healthy Kids contest. See supra note 153.

public officials will not delegate genuine power to an unrepresentative platform that produces hollow results.

In fact, this is the catalyst of the e-participatory vicious cycle—inadequate institutional design of digital platforms leads to poor results in terms of the quantity and quality of e-participation; poor results compel lack of impact; lack of impact induces further mistrust in participatory mechanisms on the part of potential participants; mistrust grows into apathy and reluctance to participate, which lead, in turn, to poor performance of the e-participatory platforms. Apparently, what is left is a degree of cost-effectiveness: relatively inexpensive digital platforms that might, by accident, produce some original ideas.¹⁸¹

The next question is, then, what is the cause of such design choices. Was it a misunderstanding or lack of knowledge on the part of the developers? Is it a case of local government attempting to gain public approval and legitimation without sharing its powers? Is it an inherent disbelief in the possibility of authentic citizen participation and an attempt to benefit, from a consumerist perspective, from knowledge that is possessed by some citizens? While it is hardly possible to identify a single cause, I suggest that the following erroneous framework lies at the basis of governmental crowdsourcing.

3. Consumerist Deeds, Participatory Words

At a first glance, the current state of e-participation in American local government is puzzling. On the one hand, the initiatives discussed above demonstrate that the currently prevailing online patterns have little in common with participatory values. In the best case, these platforms only

¹⁸¹ For a similar model of e-participation and largely similar results, see the digital platform launched in Washington, D.C. in May 2009. The platform targeted the question "do you live in/visit DC and have an idea or problem that can be solved through technology?" For a digest of the process, see APPSFORDEMOCRACY, http://www.appsfordemocracy.org/ apps-for-democracy-citizen-insights-summary (last visited Feb. 1, 2011). See also a platform which encouraged participants to suggest ideas for the improvement of the St. Louis County Crime Incident Map. CRIME INCIDENT MAP FORUM, http://StLouisCo.UserVoice.com/forums/ 29842-crime-incident-map (last visited Feb. 1, 2011). An identical model for soliciting innovative ideas from citizens was adopted on a larger scale by numerous U.S. federal agencies. The e-participatory platform chosen by these agencies relies on the software "IdeaScale," which ambitiously declares that it "empowers communities to drive innovation." Similarly to the Seattle example, the platform allows citizens to post ideas, vote them up or down, and leave comments. As of December 2010, twenty-four agencies relied on IdeaScale to satisfy the requirements of the Open Government Directive. For the complete list, see HowTo.Gov, http://www.usa.gov/webcontent/open/engagementtool.shtml (last visited Feb. 1, 2011).

satisfy some consumerist functions. On the other hand, the architects of these initiatives frequently refer to their participatory values and their potential to give "Americans the chance to participate in government deliberations and decision-making in ways that were not possible only a few years ago."¹⁸²

The discrepancy between the democratic theory of participation, its implementation online, and the surrounding rhetoric is caused by the fact that the architects of digital platforms mistakenly apply the terminology of participatory democracy to an unrelated phenomenon. Instead of bringing to life the participatory vision of cities, as their rhetoric suggests, they in fact follow the consumerist model of city-citizen relations.

The traditional basis for the consumerist model relies on the assumption that services and public goods are best provided by local political units, and hence the primary function of a city is to provide services and public goods that satisfy the preferences of its residents. Crowdsourced digital platforms offer a unique twist to this conception. These initiatives rely on the logic of open-source economic production, according to which "users of products and services . . . are increasingly able to innovate for themselves. User-centered innovation processes offer great advantages over the manufacturer-centric innovation development systems that have been the mainstay of commerce for hundreds of years."183 Following Hayek's theory of unevenly distributed knowledge in society,¹⁸⁴ empirical studies suggest that in many industries consumers are indeed the originators of the most helpful innovations.¹⁸⁵ According to this approach, consumers are well positioned to produce innovations, as their needs and

¹⁸² The Plan for Science, Technology and Innovation for a New Generation, BARACKOBAMA.COM, http://www.barackobama.com/issues/technology/index_campaign.php (last visited Feb. 6, 2011) (as presented during Obama's presidential campaign). Similar patterns can be observed in the *Road Map for the Digital City* that was introduced by the city of New York in spring 2011. N.Y.C., ROAD MAP FOR THE DIGITAL CITY: ACHIEVING NEW YORK CITY'S DIGITAL FUTURE (Spring 2011), *available at* http://www.nyc.gov/html/media/ media/PDF/90dayreport.pdf. The Road Map focuses on digital tools for better service provision, information collection from citizens, and governmental crowdsourcing that resembles the Apps for Democracy initiative. However, its rhetoric is participatory: it states that its mission is to "create a healthier civil society and stronger democracy" and "enable citizen-centric, collaborative government" in New York City. *Id.* at 5, 34.

¹⁸³ ERIC VON HIPPEL, DEMOCRATIZING INNOVATION 1 (2005); see also BENKLER, supra note 15, at 91-132; Yochai Benkler, Coase's Penguin, or Linux and the Nature of the Firm, 112 YALE L.J. 369 (2002); Karim R. Lakhani & Jill A. Panetta, The Principles of Distributed Innovation, 2 INNOVATIONS: TECH., GOVERNANCE, GLOBALIZATION 97 (2007).

¹⁸⁴ See supra text accompanying notes 135-36.

¹⁸⁵ VON HIPPEL, *supra* note 183, at 1.

preferences change well before manufacturers realize it. This process of innovation has been dubbed "democratizing," as "[u]sers that innovate can develop exactly what they want, rather than relying on manufacturers to act as their (often very imperfect) agents. Moreover, individual users do not have to develop everything they need on their own: they can benefit from innovations developed and freely shared by others."¹⁸⁶

Inspired by this revolutionary perception of economic production, architects of digital platforms have applied it unchanged to the domain of government. This course of action can be nicely exemplified by Tim O'Reilly, a renowned open source activist, who suggests that we perceive government as a platform for innovation, or a bazaar "where the community itself exchanges goods and services."187 O'Reilly explains that as a platform provider, the goal of the government is to create "core applications that demonstrate the power of the platform and inspire outside developers to push the platform even further."188 In a similar vein, Beth Noveck, one of the architects of the Open Government Memorandum and Directive, explains that "[t]he bureaucrat in Washington often lacks access to the right information or to the expertise necessary to make sense of a welter of available information."189 Digital initiatives should therefore "help government do its job better by bringing better information to the institution."¹⁹⁰ Hence, following the open source production logic, architects of online platforms attempt to improve governmental performance by relying on citizens' ability "to innovate for themselves." Since "everyone has something to offer,"¹⁹¹ the goal of digital municipal initiatives is "to design programs and supporting infrastructure that enable

¹⁸⁶ Id. A fascinating question in this respect is what motivates users to take part in developing and sharing innovations without being paid. See BENKLER, supra note 15, at 92-99; Lakhani & Panetta, supra note 183; Karim R. Lakhani & Eric von Hippel, How Open Source Software Works: "Free" User-to-User Assistance, 32 RES. POL. 923 (2003); Josh Lerner & Jean Tirole, Some Simple Economics of Open Source, 50 J. INDUS. ECON. 197 (2002); Joel West & Karim R. Lakhani, Getting Clear About Communities in Open Innovation, 2 INDUSTRY & INNOVATION 223 (2008).

¹⁸⁷ Tim O'Reilly, *Government as a Platform, in* OPEN GOVERNMENT: COLLABORATION, TRANSPARENCY, AND PARTICIPATION IN PRACTICE 11, 13 (Daniel Lathrop & Laurel Ruma eds., 2010). The metaphor of the bazaar is borrowed from Eric Raymond's influential manifesto on open source programming. *See generally* ERIC S. RAYMOND, THE CATHEDRAL AND THE BAZAAR: MUSINGS ON LINUX AND OPEN SOURCE BY AN ACCIDENTAL REVOLUTIONARY (2001).

¹⁸⁸ O'Reilly, *supra* note 187, at 36.

¹⁸⁹ NOVECK, *supra* note 141, at 26.

¹⁹⁰ *Id.* at 33.

¹⁹¹ O'Reilly, *supra* note 187, at 27.

'we the people' to do most of the work."¹⁹² Thus, instead of paying large fees to private contractors or developing internal capacities, the government "crowdsources" some of its functions to the public (and sometimes even pays contributors small amounts of money). As the examples above suggested, these "functions" may be professional programming skills or simply ideas for innovation (which rely on common rather than professional knowledge).

This seems to be the precise point of mismatch between open source production and citizen participation. Digital municipal initiatives that have roots in the open source innovation concept treat citizens as "repositories" of professional skills, expertise, or common knowledge who can help government perform a certain task better. In most cases, citizens are not invited to take part in the formulation of the policy problem, but only in its effective implementation and realization on the ground (e.g., how to represent municipal data in the most accessible and helpful manner). In other cases, such as Ideas for Seattle, municipal authorities supposedly solicit policy suggestions, but in fact they do not encourage the production of balanced, thoughtful, and nuanced contributions. All that these platforms allow citizens to do is bring to the surface unsatisfactory matters that they encounter as part of their daily urban experience. In such circumstances, it is not surprising that sketchy and undeveloped ideas that are not representative of the general population and lack evidentiary basis do not produce any formal impact.

In fact, the architects of digital municipal platforms in the United States shifted the core of citizen participation from engaging in deliberation (and sometimes decision-making) over the substance of public policies to suggesting ideas for effective problem-solving and implementing predetermined policies and goals. As part of the "collaborative democracy" concept, Noveck argues that "when a policy problem is divided into smaller parts, so that it can be distributed and worked on by collaborative teams, the drive toward openness and innovation begins."¹⁹³ But what do innovative solutions to official policy problems have to do with citizen participation in a democracy? Noveck explains that the

¹⁹² *Id.* at 25.

¹⁹³ NOVECK, *supra* note 141.

practices of government are increasingly disconnected from technological innovation and the opportunity to realize greater citizen participation—and therefore more expert information—in government. At the very least, this means that government institutions are not working as well as they might, producing declining rates of trust in government.... At the very worst, there is a crisis of legitimacy.¹⁹⁴

However, citizen participation is not (or at least not only) about providing expert information to the government. Rather, it is about empowerment, self-expression, individual and community values, and a democratic pursuit of one's beliefs and goals. It therefore seems dubious that declining rates of trust in government can be redressed by soliciting expert information, professional skills, and innovative ideas from citizens, or relying on crowdsourcing for an effective implementation of governmental policies.

This current official approach to digital technology impels cities and citizens to take turns as providers and consumers of goods and services. At one point, the city provides services and information to citizens, who are supposed to consume them without questioning or taking part in decisions over policies that led to the adoption of these services. Then the roles shift, and the city becomes a consumer to whom citizens provide information and useful professional services. Leaving aside moral disagreements. conflicting values, and contradictory preferences, this approach flattens and reduces democratic participation to the need of "getting the job done." Indeed, when a governmental policy is finalized and publicly accepted, citizens' input into its realization can be valuable. But the aims of participatory democracy are larger than this: it seeks to empower citizens to engage in deliberations and decision making over the values, preferences, conflicts, and choices that shape their lives. Initiatives that rely on participatory rhetoric but skip over participatory needs and requirements are both ineffective and deceptive. Moreover, implementing the consumerist model in domains characterized by moral conflict and high personal stakes is likely to reinforce and exacerbate all the troubles associated with citizen participation in general and e-participation in particular.

A plausible response to this critique is that even if the current crowdsourcing practices fail the criteria for strong democratic participation, they surely improve and facilitate

¹⁹⁴ Id. at 34.

municipal provision of services and thus do no harm. However, the danger of these practices is in their political framing and the rhetoric that lies in their basis. The designers of these initiatives do not present them as one interactive channel among many. Envisioning government as a simple platform, O'Reilly also declares that "[p]articipation means true engagement with citizens in the business of government, and actual collaboration with citizens in the design of government programs."¹⁹⁵ Presenting crowdsourcing of professional skills or solicitation of innovative ideas as a "true engagement" of citizens in the design of policy is at the very least disturbing. This rhetoric—also used in the presidential Open Government Memorandum—creates social frames that may deeply affect citizens' perception of democracy. Such frames can "embed themselves in social behavior and material culture, [and] fundamentally alter people's perceptions of what is real in the world around them."¹⁹⁶ Hence, not only does crowdsourcing fail to educate citizens in the values of participatory democracy, but it conveys the message that there is no difference between innovative market production and participatory governance.

In sum, American digital initiatives are failing to enhance the most central aspect of democracy. Local governments should not ignore this fact, but endeavor to fare well on both consumerist and participatory axes. A possible response to this call for action is that participatory ideals simply cannot be realized online. Stemming from the perception that the internet recreates "politics as usual," this approach would maintain that we should expect nothing transformative from digital technologies. Crowdsourcing is therefore the best we can get. This position is certainly plausible, but it can be countered with successful counter-examples. Hence, the purpose of the

¹⁹⁵ O'Reilly, *supra* note 187, at 25.

 $^{^{196}\,}$ Sheila Jasanoff, Designs on Nature: Science and Democracy in Europe and the United States 24 (2007).

The effects of framing are widely recognized and explored in a variety of academic disciplines. The classic book in this area is Goffman's *Frame Analysis*. ERVING GOFFMAN, FRAME ANALYSIS: AN ESSAY ON THE ORGANIZATION OF THE EXPERIENCE (1974). For cognitive psychology, see, for example, Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCIENCE 453 (1981); for communication and media studies, see, for example, Dietram A. Scheufele, *Framings as a Theory of Media Effects*, 49 J. COMMUN. 103 (1999); Zhongdang Pan & Gerald M. Kosicki, *Framing Analysis: An Approach to News Discourse*, 10 POLIT. COMMUN. 55 (1993); for political science, see DONALD A. SCHON & MARTIN REIN, FRAME REFLECTION: TOWARD THE RESOLUTION OF INTRACTABLE POLICY CONTROVERSIES (1994).

next Part is to present some promising usages of digital technologies for genuinely participatory purposes.

IV. E-PARTICIPATION: FROM THEORY TO REALITY?

The ideal of e-participation envisions "horizontal" relations, in which municipal authorities share power with citizens, and citizens acquire authentic decision-making responsibilities in agenda setting, resource allocation, policy decisions, and collaborative problem solving. This model satisfies in full the evaluative criteria delineated above: inclusive and representative participation that allows weak social groups to be heard; transparent procedures of decision making coupled with accessible, graspable, and balanced information; thoughtful and meaningful deliberation; authentic and reliable opportunities to affect policies; and lastly, costeffectiveness. No doubt, this description creates an idyllic picture that can rarely be brought to life. Moreover, given that the vast majority of digital participatory platforms are still in their infancy, it would be unfair to evaluate their performance based on a demanding theoretical epitome. There are also practical difficulties associated with the evaluation of existing platforms: cumulative knowledge about what succeeds and what fails is not large enough, and hence outcomes are often inconclusive and mixed. However, several years into the beginning of e-participatory experiments, it is already possible to assess trends and directions.

In the American municipal context, as discussed above, digital patterns fare reasonably well on the consumerist axis, but perform poorly on the participatory one. Hence, in order to eliminate the "lack of alternatives" defense of crowdsourcing, it can be helpful to learn from successful digital practices in other countries. The following sections highlight three categories of eparticipatory initiatives—participatory budgeting, urban planning, and policy consultations—that are currently practiced in several German cities.¹⁹⁷ While these initiatives do not perfectly fulfill the evaluative criteria, they are progressing in a positive direction and may offer some illuminating insights

¹⁹⁷ The cities discussed below were chosen due to the promising features of their e-participatory platforms. These platforms do not represent the general state of e-participation or e-government in Germany, which is beyond the scope of this article. The discussion in these sections is based on in-depth interviews conducted by the author in Germany in December 2010.

for the institutional design of future e-participatory platforms in American cities.

A. Online Participatory Budgeting

The practice of engaging citizens in the design of a municipal budget enjoys considerable support in a growing number of cities across the world.¹⁹⁸ The municipal budget affects citizens' daily life and immediate environment in myriad ways and the participatory value of these endeavors is therefore conspicuous. This framework allows a close examination of the annual budget, encourages citizens to collaboratively develop and express their preferences, and opens up opportunities to affect the allocation of resources.

The institutional design of online participatory budgeting platforms differs from case to case, according to the political goals of the initiative's architects. While the ambitious projects may delegate to citizens substantial powers of resource allocation, the modest initiatives simply offer participants better opportunities to be heard by municipal authorities. The examples that are discussed below—Berlin-Lichtenberg, Cologne, and Freiburg represent three variations of online participatory budgeting, each emphasizing distinct participatory criteria.

1. Berlin-Lichtenberg

Berlin-Lichtenberg is a borough in eastern Berlin, consisting of thirteen districts and 251,000 residents. The online participatory budgeting project in the borough—the oldest of its kind in Europe—was the personal initiative of the mayor of Lichtenberg.¹⁹⁹ It was first introduced in late 2005

¹⁹⁸ Participatory budgeting originated in the Brazilian city of Porto Alegre. See GIANPAOLO BAIOCCHI, MILITANTS AND CITIZENS: THE POLITICS OF PARTICIPATORY DEMOCRACY IN PORTO ALEGRE, 2005; Boaventura de Sousa Santos, Participatory Budgeting in Porto Alegre: Toward a Redistributive Democracy, in DEMOCRATIZING DEMOCRACY: BEYOND THE LIBERAL DEMOCRATIC CANON 307 (Boaventura de Sousa Santos ed., 2005). On the state of "offline" participatory budgeting in Europe, see Yves Sintomer, Carsten Herzberg & Anja Röcke, Participatory Budgeting in Europe: Potentials and Challenges, 32 INT'L J. URBAN & REGIONAL RESEARCH 164 (2008). For an overview of "offline" participatory budgeting initiatives in developing countries, see PARTICIPATORY BUDGETING (Anwar Shah ed., 2007).

¹⁹⁹ See an interview with the mayor: Jörg Meyer, *Mit dem Bürgeretat durch die Lande* [*Participatory Budgeting in the Country*], NEUES DEUTSCHLAND [THE NEW GERMANY], Dec. 3rd, 2009, www.neues-deutschland.de/artikel/160457.mit-dem-buergeretatdurch-die-lande.html (hereinafter Interview with the Mayor). For the platform of the initiative for the participatory budget of 2012, see Bürgershaushalt Lichtenberg 2012 [Participatory Budgeting Lichtenberg 2012], http://www.buergerhaushalt-lichtenberg.de.

with the goal of promoting mutual agreement in policy decisions, achieving effective and fair budgeting, enhancing transparency, and educating citizens about financial matters.²⁰⁰ The online platform allows citizens to express and discuss their preferences with regard to budgetary fields that are under the discretion of the borough council (e.g., maintenance of parks and libraries, support for children and adolescents, cultural services, care of senior citizens, sports, and schools for continuing education).²⁰¹ For each discretionary field, the borough council prepares a brochure that explains the structure of the budget and the nature of the services provided by the borough in the field.²⁰²

Citizens are invited to take advantage of two major participatory channels, online and offline. First, an online platform that operates for several weeks allows citizens to discuss budgetary questions, develop their suggestions for matters that should be included in the budget, and then vote for the best proposals. The online platform for the budget of 2012 (operated in 2010) also contained a map of the borough, which allows participants to tag their suggestions to specific municipal bodies or services that are marked on the map.²⁰³ The platform features a detailed information section and a moderated discussion forum. Participation online is open to all and thus based on self-selection. Additionally, the borough council conducts thirteen face-to-face citizen assemblies (one in each district), held in the presence of borough council representatives,²⁰⁴ at which citizens discuss the general budget and its specific implications for their districts, develop budgetary suggestions and vote for them. At the end of the process ten ideas that receive the highest ranking online and

²⁰⁰ The initiative was stimulated by a regulation, passed in the Parliament of Berlin in 2005, requiring the boroughs of Berlin to consult with their residents on all matters concerning the borough (Fünftes Gesetz zur Änderung der Verfassung von Berlin, vom 28. Juni 2005 [the Fifth Amendment of the Constitution of Berlin] (GVBI. S. 346) [sec. 346]). While participatory budgeting was not an explicit part of the regulation, the existence of a conducive legal framework enabled the mayor to push her initiative forward; *see also* Interview with the Mayor, *supra* note 199.

²⁰¹ Discretionary expenses that are directly distributed by the borough council of Lichtenberg constitute 31 million euro. See Bezirksamt Lichtenberg von Berlin [The Borough Council of Berlin-Lichtenberg], Participatory Budget in Berlin Lichtenberg, 9-10, 16-34 (2008), http://www.buergerhaushalt-lichtenberg.de/site/pictures/broschuere_ bueha2010_english_version.pdf [hereinafter Lichtenberg Report].

²⁰² Lichtenberg Report, *supra* note 201, at 16-34.

 ²⁰³ See Participatory Budgeting Lichtenberg 2012, supra note 199.

²⁰⁴ Lichtenberg Report, *supra* note 201, at 12; *see also* Carsten Herzberg, *Participation and Modernisation: Participatory Budgeting in Germany: The Example of Berlin-Lichtenberg* (2010) (unpublished manuscript) (on file with author).

five suggestions that received the majority of votes in each of the district assemblies are chosen (overall, seventy-five suggestions).²⁰⁵

As both the online forum and citizen assemblies are based on largely unsolicited and self-selected participation, they cannot be considered fully representative.²⁰⁶ Hence, after the completion of the online phase and the assembly meetings the borough council carries out a large survey of 25,000 randomly selected residents (around ten percent of the borough population) to evaluate and rank the 75 suggestions.²⁰⁷ Then, nearly forty suggestions that received the majority of votes in the survey are brought to the borough council.²⁰⁸ The formal mandate of the council is to consider and include all "realizable and fundable" suggestions in the annual budget.²⁰⁹ Reportedly, over ninety percent of the vote-winning suggestions have been implemented over the years.²¹⁰ As part of the process, each suggestion that is discussed by the council receives an individual "tracking number," allowing citizens to closely monitor online the status of their contributions. Upon the conclusion of the yearly participatory budget, the borough publishes a detailed brochure with the outcomes of the process, listing proposals that have been accepted, explaining how and when they will be implemented, and providing a detailed reasoning for the rejected ones.²¹¹

²⁰⁵ Lichtenberg Report, *supra* note 201, at 15.

²⁰⁶ In 2005, around 4000citizens participate in the different formats of the projects. Participants online were mostly young and mid-aged male citizens of up to fifty years old, with a relatively high level of education. *See* Joanne Caddy, Tiago Peixoto & Mary McNeil, *Beyond Public Scrutiny: Stocktaking of Social Accountability in OECD Countries* 74 (World Bank Institute Working Papers, 2007), http://www.oecd.org/dataoecd/43/3/38983242.pdf.

¹⁷ Lichtenberg Report, *supra* note 201, at 15.

²⁰⁸ Id.

 $^{^{209}}$ *Id*.

²¹⁰ Among nearly 1400 suggestions that were made by citizens as part of the participatory budgeting process between 2007 and 2009, 113 suggestions were sent to the borough council and 105 of them were implemented. See Flyer Bürgerhaushalt 2012—Deutsch [The Participatory Budgeting Brochure 2012—German], (2010) http://www.buergerhaushalt-lichtenberg.de/site/pictures/bueha_flyer_deu2012.pdf (Ger.); Interview with the Mayor, supra note 199.

²¹¹ According to the Mayor, the most common cause for rejecting a suggestion is a negative previous experience with it. Interview with the Mayor, *supra* note 199. Some of the implemented suggestions for the 2008 participatory budget include: making the school for continuing education handicapped accessible; planting trees in several locations in the borough, appointing a coordinator for children's and adolescents' civic education; transferring most of the city youth recreational facilities to private non-for-profit organizations and hence cutting administrative costs; and providing libraries with literature in Vietnamese. *See* Lichtenberg Report, *supra* note 201, at 38-39.

The application of the evaluative participatory criteria to the Lichtenberg initiative reveals a hopeful participatory picture. The *transparency* and *impact* criteria constitute the most effective part of the project. The formal assignment of tracking numbers that allow citizens to monitor the decisionmaking process is a promising tool. The structured information and detailed brochures that are provided in the beginning and the end of the process score high on the transparency requirement as well. Moreover, the high rate of approved suggestions and the project's sustainability (it has been ongoing since 2005), are all positive factors that point both to the initiative's impact and also its cost-effectiveness. Inclusiveness is positive as well. As online forums are not necessarily representative, the borough organizes face-to-face citizen assemblies in each of its districts in an attempt to enhance equal participation. The list of top-voted online and assembly suggestions is narrowed down and ranked as part of a largescale survey before it is sent to the borough council. While this mechanism is impressive, it is still not perfect. The absence of proactive mechanisms to engage underprivileged groups in the discussion phase (and not only in ranking predefined suggestions) indicates that the resulting ideas might not be as inclusive and representative as they could be. Further, while online participation rate has been increasing over the years, it has not been exorbitant.²¹² Lastly, while the online discussion forum and citizen assemblies are lightly moderated, more could be done to enhance the *deliberative quality* of the online process (instead of simply allowing participants to make budgetary suggestions and others to comment on them).

²¹² In 2007, 485 citizens registered on the platform and posted forty-six proposals. In comparison, 595 citizens participated in face-to-face assemblies. See Bürgerhaushalt 2007, http://www.buergerhaushalt-lichtenberg.de/discoursemachine.php?page=viewcompiler&id_ view=180&menucontext=32&submenucontext=180). In 2008, the participation rate online increased to 1712 registered participants, who posted sixty-seven proposals; 502 citizens participated in face-to-face assemblies (see Bürgerhaushalt 2008, http://www.buergerhaushaltlichtenberg.de/discoursemachine.php?page=viewcompiler&id_view=138&menucontext=32&su bmenucontext=138). In 2009, 2093 registered participants posted sixty proposals; 786 participants attended one of the face-to-face assemblies. See Bürgerhaushalt 2009, http://www.buergerhaushalt-lichtenberg.de/discoursemachine.php?page=viewcompiler&id view=177&menucontext=32&submenucontext=177). In 2010, 2769 citizens registered and posted 103 proposals on the online platform (see Bürgerhaushalt 2010 http://www.buergerhaushalt-lichtenberg.de/discoursemachine.php?page=viewcompiler&id view=221&menucontext=32&submenucontext=221).

Another promising example of online participatory budgeting is Cologne, a city of 1 million residents. Cologne first experimented with online participatory platforms in 2007 (with regard to the city budget of 2008) and repeated the project in 2010 (for the budget of 2011). In 2007, the city council selected three fields to be discussed as part of the initiative: streets, paths, and open areas; green spaces; and sports.²¹³ More than 10,000 citizens participated and posted nearly 5000 four-week suggestions during а online discussion.214 Participants evaluated suggestions via "pro" and "con" comments or votes. In order to make suggestions in different areas more visible, a "tagging" system of topics classification was incorporated. The 100 top-voted proposals in each of the three fields (a total of 300 suggestions) were eventually presented to the city council and sent to various municipal agencies: all district councils of Cologne, financial committees, advisory committees, etc. The decisions of these bodies on each suggestion (approved, unanimously approved, or rejected) and their reasoning were posted on the online platform following the text of each suggestion and its accompanying comments.²¹⁵ The city council was in charge of the final decision. The following were among the approved and implemented proposals: reconstruction of an intersection that caused traffic jams in the city, repair of bike paths, optimization of night traffic lights, renewal of benches in parks, planting of new trees, improvement of lighting on running tracks, maintenance of indoor pools, and more.²¹⁶ In 2009, the city council of Cologne

²¹³ The budget for these fields was 311 million euros. The general budget of Cologne is 4 billion euros. See Dirk Blauhut, Cologne—The Particapatory [sic] Budget, EPRACTICE.EU, http://www.epractice.eu/en/cases/colognepb (last updated Oct. 2, 2009); Herzberg, supra note 204, at 9.

²¹⁴ Although the municipality offered several channels for participation online platform, call center, and regular mail and email, 85 percent of the budget suggestions were submitted via the online platform. Blauhut, *supra* note 213.

²¹⁵ See, for example, the proposal on redistribution of the proceeds of FC Köln's stadium (the local soccer team), in which different municipal bodies expressed diverging reasons for the rejection of the proposal. A. Rondorf, *FC-Millionen Kürzen [FC's Million Cut*], STADT KÖLN [CITY OF COLOGNE] (Feb. 11, 2007, 11:33 PM), https://buergerhaushalt.stadt-koeln.de/2008/discoursemachine.php?id_viewback=1&menucontext= &page=detail&id_item=4149&pagestart= (Feb. 11, 2007) (Ger.).

²¹⁶ For the full data on implementation of citizens' suggestions, see *Rechenschaft 2008-2009* [*Accountability 2008-2009*], STADT KÖLN [CITY OF COLOGNE], http://www.stadt-koeln.de/1/stadtfinanzen/buergerhaushalt/2008-2009/rechenschaft (Ger.) (last visited Mar. 2, 2011).

decided that the themes for the next online participatory budgeting would be "education" and "environment."²¹⁷

Similarly to the Berlin-Lichtenberg participatory budgeting experience, Cologne excels in the *transparency* and *impact* criteria. Transparency is particularly strong in Cologne due to the abundance of budgetary information and the publication of the positions of various municipal agencies on each suggestion. Impact is positive as a number of proposals were implemented. However, the major problem with Cologne's initiative is lack of *inclusiveness* and *deliberation*. Participation is self-selected and, when the discussed matters bear significant redistributive potential, the outcomes of the process may exacerbate existing inequalities and skew municipal decision making and resource allocation. If municipal resources are invested in one venue, it inevitably means that fewer funds are directed toward others. In such occasions, a high score on the impact criterion becomes problematic, since it provides an effective channel of influence to the better-off citizens of Cologne. This factor may be particularly pertinent for the themes of "education" and "environment" that are on the agenda for the 2010 participatory budgeting initiative. Lack of deliberation may further aggravate the problem, \mathbf{as} participants who attempt to promote specific causes are not actively challenged by exposure to alternative viewpoints.

3. Freiburg

A better fulfillment of the inclusiveness and deliberation criteria can be found in the online participatory budgeting project in the city of Freiburg. The city's performance is less notable in terms of the impact opportunities provided to participants though. In Freiburg, a city of 200,000 residents, the online participatory budgeting project was initiated by the city council against the backdrop of a deepening city debt. Its main purpose was to allow citizens to express their budgetary preferences and suggest in which fields spending can be cut

²¹⁷ Proposals have not yet been selected for implementation. See Kölner Bürgerhaushalt 2010 [Cologne's Participatory Budgeting 2010], STADT KÖLN [CITY OF COLOGNE] (2010), https://buergerhaushalt.stadt-koeln.de/2010/index.php (Ger.). Among leading proposals are calls to increase the number of youth centers in the city, improve the hygiene of restrooms in a specific elementary school, modernize the equipment of certain gyms or schools, stop the program to enhance the industrial zone in one of the districts, operate more night buses; and expand bike paths. *Id.* Nearly 11,000 participants took part in the initiative and posted more than 1250 proposals. *Id.*

down.²¹⁸ In order to ensure diverse and equal participation, the architects of the initiative engaged two groups of citizens: a group of self-selected participants, who wished to take part in the platform; and a group of 700 individuals, randomly selected to match the sociodemographic distribution of Freiburg and formally invited to participate in the online discourse.²¹⁹ In order to further equalize the participants' pool, specific measures were taken to attract female participation.²²⁰ The online channel was also complemented by a series of face-to-face events, which allowed additional groups to contribute to the debate.

Participants were provided with extensive materials regarding the budget and could discuss their concerns and ideas with public officials and experts who were available on the platform. As part of the moderated online forum, participants were encouraged to discuss and develop specific budgetary suggestions using collaborative wiki-style writing tools.²²¹ Citizens were also requested to create individual budgetary plans relying on an online "budget calculator" and explain their budgetary preferences and choices.²²²

The Freiburg online participatory budget impressively satisfied some of the evaluative criteria. It stressed

²¹⁸ See Interview with Rolf Luehrs, Manager, TuTech Innovation GmbH (a university-owned company that designed and managed the project), in Hamburg, Ger. (Dec. 7, 2010) [hereinafter Luehrs Interview]; see also Ergebnisbericht zur Online-Diskussion, Geschlechtersensibler Beteiligungshaushalt Freiburg 2009/2010 [Report of Online Discussions and Gender-Sensitive Participatory Budgeting in Freiburg, 2009/2010] (2010), http://www.beteiligungshaushalt.freiburg.de/site/pictures/cre_080818_Ergebnisbericht_web. pdf [hereinafter Freiburg Report] (Ger.) (the full report of the project); Freiburger Beteiligungshaushalt.freiburg's Participation Budget 2009/2010] (2010), http://www.beteiligungshaushalt.freiburg.de (Ger.) (the website of the project).

The e-participatory budget project, which lasted for four weeks, attracted 1863 registered participants, who made 757 posts on the online platform and created 1291 budgetary plans (914 of them were accompanied by comments or reasons). See Freiburg Report, *supra*, at 7-8.

²¹⁹ Rolf Luehrs, *Participatory Budgeting in the City of Freiburg*, EPRACTRICE.EU, http://www.epractice.eu/en/cases/epbfreiburg (last updated Dec. 11, 2008).

²²⁰ See Freiburg Report, supra note 218, at 18-24.

²²¹ See Freiburg Report, *supra* note 218, at 7. Sixteen wiki-suggestions were eventually developed. See *id.* at 45-74. The suggestions addressed issues such as street cleaning, public transportation, public financing of the city theater, improving city schools, improving opportunities for the disabled, and more. See *id.*

 $^{^{222}}$ Id. at. These discussions and personal budgets demonstrated, for example, that participants supported a reduction of up to 23 percent in the funds invested in tourism and economic development and a decrease of up to 19 percent in the budget for urban development and construction. Rather, they preferred an increase of 24 percent in resources invested in education and an increase of 13 percent in funds invested in public transportation. Id. at 16-17. Additionally, with regard to spending cuts, participants supported the privatization of certain publicly-managed city services, such as theaters, recreational facilities, and more. Id. at 56-57.

inclusiveness and representativeness of participants by including a large group of randomly selected participants and attempting to draw to the discussion underrepresented groups. It also provided participants with access to extensive and helpful information. Deliberative quality was an important achievement as well: the platform employed trained moderators who helped enhance the level of the discussion, produce eloquent proposals, lower the entry barriers, and ensure a balanced representation of opinions. However, the Achilles heel of the initiative, in contrast to the previous examples, was the lack of a trackable *impact* over the actual city budget. The fact that the city council did not provide participants with formal channels to affect political decisionmaking or even guarantee that their suggestions would be seriously considered was a major cause of disappointment for participants.²²³ Likewise, while the city council was reportedly pleased with the *cost-effectiveness* of the project, it is difficult to assess it without further information about the implementation of the suggestions (which was not provided).²²⁴

In sum, while the online participatory budgeting experience of Berlin-Lichtenberg, Cologne, and Freiburg is not flawless from a participatory perspective, these initiatives can surely provide helpful insights for future endeavors of this sort. For instance, online participatory budgeting projects can borrow from Freiburg the design elements that enhance inclusiveness and deliberation, but rely on the transparency and impact mechanisms that were implemented in Berlin-Lichtenberg or Cologne. As digital participatory initiatives are still in their infancy, there are vast opportunities for experimentation with a variety of design choices, some of which can be borrowed from the practices discussed above.

* * *

B. Online Urban Planning

Urban planning has been traditionally conceived as an appealing field for citizen participation. First, the effect of urban planning on citizens is often immediate and direct, and thus it is particularly important to ensure citizens' involvement

²²³ Luehrs Interview, *supra* note 218.

 $^{^{224}}$ Id.

in planning decisions. This factor enhances citizens' incentives to invest time and effort in participation, and also facilitates the implementation of the plan and strengthens its legitimacy.²²⁵ Further, citizens often possess valuable information and knowledge of the relevant geographic locations that may not be otherwise available to public officials.²²⁶ Citizen participation can also perform an important monitoring function in this context. In light of the ample financial opportunities often associated with planning and real estate, the possibility of private interests capturing public officials is notably worrisome, and citizens may guard against this danger. Lastly, reliance on digital technologies can be particularly advantageous in urban planning, since online visualization considerably simplifies the debate over complex architectural questions.²²⁷

The following example from Hamburg demonstrates how digital technology facilitates participatory planning initiatives. While this initiative does not fully satisfy the criteria for e-participation, it possesses promising participatory features that may be helpful for future e-participatory endeavors of this sort in the United States.

Hamburg²²⁸

The Domplatz (Cathedral Square) online discussion was initiated following years of political debate and continuing disagreement as to the fate of the historic site located in the heart of the city.²²⁹ In 2007, as a measure of last resort, the

²²⁵ See, e.g., Raymond J. Burby, Making Plans that Matter: Citizen Involvement and Government Action, 69 J. AM. PLAN. ASS'N 33 (2003).

²²⁶ See, e.g., Ann Van Herzele, Local Knowledge in Action: Valuing Nonprofessional Reasoning in the Planning Process, 24 J. PLAN. EDUC. & RES. 197 (2004); Jason Corburn, Bringing Local Knowledge into Environmental Decision Making: Improving Urban Planning for Communities at Risk, 22 J. PLAN. EDUC. & RES. 420 (2003).

²²⁷ Malgorzata Hanzl, Information Technology as a Tool for Public Participation in Urban Planning: A Review of Experiments and Potentials, 28 DESIGN STUD. 289 (2007).

²²⁸ The following description is based on *Bericht zur Hamburger Online-Diskussion "Neugestaltung des Hamburger Domplatzes"* [Report on the Hamburg Online Discussion: Redesign of the Cathedral Square in Hamburg], HAMBURG-DOMPLATZ.DE (2007), http://www.hamburg-domplatz.de (Ger.) [hereinafter Hamburg Report]; Luehrs Interview, supra note 218; and an Interview with Renate Mitterhuber, Head, E-Government Dep't, City of Hamburg, in Hamburg, Ger. (Dec. 7, 2010) [hereinafter Mitterhuber Interview].

²²⁹ The cathedral that occupied the Domplatz since the middle ages was demolished in the nineteenth century, and the site was taken for school buildings. These

Senate of Hamburg decided to engage Hamburg's residents in the Domplatz planning.

The Domplatz online discussion was carried out during three weeks and was structured around three phases.²³⁰ The first stage consisted of an open brainstorming of ideas on what should be the character of the site (mainly, should it be constructed or not). At the end of this stage, moderators created two sub-forums that focused on the major ideas that were brought up by participants—one subforum dealing with suggestions about open space and the other with construction ideas. At the second stage, participants were invited to discuss and collaboratively develop concrete design proposals under these two categories.²³¹ At the end of each day, professional moderators drafted a summary of the discussion.²³² Participants were provided with extensive cartographic materials (aerial photos, city maps, property boundaries, etc.) and could also take advantage of online Q&A sessions with politicians, public figures, and architects.²³³ Design suggestions were developed by participants (with \mathbf{the} help of moderators) using collaboratively-edited documents (wikis), which all had four fields: description, design, purpose, and implementation & financing. Participants were also encouraged to collaboratively create visual designs for the site, using the planning tools available on the platform.

By the end of the discussion, fifty-one visual designs and twenty-seven detailed wiki-suggestions were on the table. The

buildings were heavily damaged during World War II and had to be completely torn down. Since then, the Domplatz has been empty or used as a parking lot. Several attempts to rebuild the site have failed for various reasons. Most recently, city authorities held a competition to design on the site a mixed-use building which would contain a library, apartments, and offices. The winning design raised a considerable wave of criticism from the media, politicians, and architects, and was subsequently abandoned. See Hamburg Report, supra note 228, at 4-5; Hanno Rauterberg, Ein Nichts für 40 Millionen [Getting Nothing for 40 Million], ZEIT ONLINE [TIME ONLINE] (Ger.), Feb. 16, 2006, http://www.zeit.de/2006/08/Dom-Architektur; Gisela Schüte, Kleinster Nenner [Smallest Denominator], DIE WELT ONLINE [THE WORLD ONLINE] (Ger.), June 21, 2006, http://www.welt.de/print-welt/article224367/Kleinster_Nenner.html.

²³⁰ The discussion attracted 285 registered users who made nearly 1000 posts. See Hamburg Report, supra note 228, at 10.

 $^{^{231}}$ Under the sub-forum of "open space," wikis suggested establishing on the Domplatz site an archaeological park, specialties market, green oasis, pedestrian zone, info park for tourists, and more. Discussants of the "construction" sub-forum offered to erect on the site a Domforum, museum, culture hall, marketplace, central library, and more. *See id* at 11-12.

²³² For examples of such summaries, see Zusammenfassungen [Summaries], http://www.hamburg-domplatz.de/page194.html (Ger.) (last visited Apr. 20, 2011).

²³³ See Hamburg Report, supra note 228, at 10-12.

third stage was dedicated to evaluations and ranking of the wiki-proposals. The leading suggestion was to create on the site a "green oasis" that would commemorate the history of the city, followed by proposals to create a "skylink" or an exhibition site.²³⁴ The wiki-suggestions and their rankings were presented to the Hamburg Senate. Although implementation was not guaranteed ex-ante, the Senate adopted the participants' first choice and a green oasis can now be seen in the Domplatz.²³⁵

The main strength of this urban planning project was its deliberative quality-attentive moderation and design choices that induced participants to interact with public officials, deliberate with other participants, and collaborate in developing proposals. The persuasive force acquired by the initiative was due to the eloquence of participants' suggestions and designs. Transparency and impact were largely positive as well. Participants were provided with abundant information that was represented in an accessible manner, and had the opportunity to consult with experts and public officials. The rules and procedures of the process were clear from the outset, though the formal status of the initiative was not clearly defined. Likewise, while the outcomes of the online discussion eventually affected the decision-making process, and the Hamburg Senate adopted the participants' choice, ex-ante impact guarantees were not provided. Moreover, as the Senate approved the participants' preference and engaged in other online urban discussions following the Domplatz experience, it is plausible to conclude that the initiative proved *cost-effective*.²³⁶

The major weakness of the platform was its lack of *inclusiveness*. Although the moderators attempted to lower the entry barriers to the discussion, participation was self-selected

²³⁴ See id.

²³⁵ Following substantial construction works, the mayor of the city introduced a "green oasis in the heart of the city" on the Domplatz site in May 2007. See Behörde für Stadtentwicklung und Umwelt [Ministry of Urb. Dev. & Env't], Domplatz eröffnet: Grüner Ruhepol mitten in der Stadt [Cathedral Square Opened: Green Oasis in the Middle of the City], HAMBURG.DE (May 6, 2007), http://www.hamburg.de/pressearchiv-fhh/1426386/2009-05-06bsu-domplatz.html (Ger.); see also Thomas Hirschbiegel, Das Neue City-Paradies [The New City Paradise], HAMBURGER MORGENPOST [HAMBURG MORNING POST] (Ger.), Aug. 8, 2009, http://archiv.mopo.de/archiv/2009/20090807/hamburg/panorama/das_neue_city_paradies.html.

²³⁶ Luehrs Interview, supra note 218; Mitterhuber Interview, supra note 228; see also Planer Stellen Sich den Fragen der Hamburger [Planners Pay Attention to the Questions of Hamburg Residents], HAMBURGER ABENDBLATT (Ger.), Nov. 7, 2007, http://www.abendblatt.de/hamburg/article887750/Planer-stellen-sich-den-Fragen-der-Hamburger.html.

and unrepresentative, and participation rates were low.²³⁷ While this difficulty may reduce the attractiveness of the initiative, its other features may be helpful for future endeavors of online urban planning.

C. Online Social Policy Consultations

Policy consultations are a natural domain for online participatory initiatives and they may cover a wide variety of issues. Depending on their institutional design, online social policy consultations may call attention to topics that are under the public radar, offer participants opportunities to better understand and develop their preferences, and improve the living conditions in a city. However, consultations may also serve narrow and parochial political interests of public officials, certain dominant participants, or aggressive marginal groups that attempt to compel adoption of their preferences. Indeed, while consultations are the most widespread form of e-participation, most of them repeat the vicious cycle discussed earlier, serving public officials as tools of legitimation and replicating the aimless "talking without listening" pattern. The following examples demonstrate that this syndrome can be avoided, at least with regard to deliberative quality and transparency.

1. Munich

In an attempt to revitalize Munich and develop policies that would encourage young families to reside in the city, the city council initiated in 2006 a public discussion on the "family and children" policy.²³⁸ The goal of the discussion was to improve existing city policies and shape novel ones that would be more attuned to citizens' preferences. The city council organized several offline public hearings and "information

²³⁷ The topic mostly attracted Hamburgers from the age groups of 30-44 (thirtynine percent of participants) and 45-64 (thirty-seven percent of participants). Eighty percent of participants—a highly unrepresentative figure—declared that they completed or were pursuing a university degree. *See Hamburg Report*, *supra* note 228, at 8.

²³⁸ For an overview of the project, see *Bericht zur Online-Diskussion "München als Kinder- und Familienstadt"* [*Report on Online Discussion: Munich as a City for Children and Family*], MUENCHEN.DE (2006), http://www.muenchen.de/cms/prod1/mde/_de/rubriken/Rathaus/85_soz/00_aktuell/familie/dat/endbericht_onlinediskussion_familiemuenchen.pdf (Ger.) [hereinafter *Munich Report*]. See also München: Gute Aussichten für Familien [Munich: Good Prospects for Families], MÜNCHNER WOCHENANZEIGER [MUNICH WKLY. INDICATOR] (Ger.), Mar. 7, 2006, http://www.wochenanzeiger.de/article/57738.html.

days" throughout the year, where citizens could discuss the issue with officials and experts.²³⁹

The online part of the consultative process consisted of three stages.²⁴⁰ First, self-selected participants were encouraged to identify all essential aspects and priority areas related to family and children policies in Munich. At the end of this stage, professional moderators created four specific subforums according to the topics raised by participants: "support & education," "leisure & play," "housing," and "transport."241 Then, participants were invited to discuss in greater depth questions related to the chosen topics. The aim of the discussion was to develop concrete and well-rounded policy suggestions, which would take into consideration all relevant factors and provide an implementation strategy. To make the discussion more informed and up-to-date, several online consultations with experts and city council representatives were organized.²⁴² Toward the end of this stage, moderators compiled the ideas that were brought up in each subforum into collaborative documents (wikis), and invited participants to revise and expand them. Eventually, the process yielded thirty-six wikiproposals, each consisting of a description of the policy suggestion, implementation strategies, and obstacles.²⁴³ The third stage allowed participants to wrap up their ideas and rank the wiki-proposals according to their importance, urgency, and quality. The resulting high-ranked proposals addressed childcare facilities, reduction of dog waste in parks, and provision of healthy school food.²⁴⁴ Upon the completion of the public consultation stage, the city council of Munich introduced

²³⁹ Munich Report, supra note 238, at 6.

²⁴⁰ The online consultation lasted for three weeks in May 2006; 316 registered participants and over 7800 unique visitors took part in the online discussion, posted 1500 comments and developed thirty-six specific improvement suggestions. *Munich Report, supra* note 238, at 12.

⁴¹ See Munich Report, supra note 238, at 12-26.

 $^{^{242}}$ See *id*. at 12.

²⁴³ See id. at 29-82. Proposals dealt with issues as diverse as establishing centralized childcare services and day schools, promoting language skills and music lessons for children, improving vaccination facilities, family-friendly public transportation and safety, financial support for single parents, healthy school food and family-friendly restaurants, renovating playground facilities for children, methods to deal with dog waste, and more. See id. at 29-77. Interestingly, while thirty-five of the thirty-six wiki-proposals were consensual, the issue of child vaccination raised conflicting arguments for and against vaccination. The final wiki-document reflected the opposing arguments and contained suggestions and implementation strategies offered by both sides. See id. at 78-82.

See id. Over 600 individual votes were cast overall. Id. at 15.

the "Guidelines on Children and Family Policy," containing several programs that tackled concerns raised by participants in the online discussion. For instance, one of the "key projects" initiated by the city council was dedicated to childcare facilities, highlighted as the primary concern of online participants.²⁴⁵

Similarly to the Hamburg example, *deliberative quality* was the main strength of the initiative. The three stages of the online discussion seem to be an effective tool to strengthen a considerate and balanced development and expression of preferences. Moreover, the fact that participants had to discuss implementation strategies and obstacles as part of their suggestions induced them to deepen their contributions. Collaborative writing and summaries prepared by moderators were an important addition as well. The eloquence and comprehensiveness of the suggestions and their generalist orientation represented a positive feature that overcame the critique that online participants are "talking without listening" to each other. Transparency was largely served due to the abundance of the information provided and the availability of experts and consultants, but the platform rules and procedures and the formal status of the consultation were not clearly defined. Further, although the discussion surely carried a persuasive status (and the incorporation of some of the suggestions into the City Guidelines proves it), the city council retained full discretion as to the implementation of the recommendations. Citizens could not track their recommendations or monitor governmental actions with respect to the adoption and implementation of their suggestions, showing a lack of impact. Lastly, inclusiveness was weak as participation rates were far from impressive, and participants were self-selected and unrepresentative of the general population.²⁴⁶

See Landeshauptstadt München Sozialreferat [City Council of Munich, Soc. Servs.], Leitprojekt KinderTagesZentren KiTZ [Lead Project Child Day Care Centers: CDCC], MUENCHEN.DE (2007), http://www.muenchen.de/Rathaus/soz/aktuell/familie/ projekte/299960/kitz.html (Ger.). For the general guidelines, see Kinder- und Familienfreundliches München: Die Leitlinie [Child and Family Munich: The Guideline]. MUENCHEN.DE (2007), http://www.muenchen.de/cms/prod1/mde/_de/rubriken/Rathaus/ 85_soz/00_aktuell/familie/dat/leitlinie_familie_broschuere.pdf (Ger.). Consultations with regard to family-friendly policies were also undertaken in two other German cities-Hamburg (in 2005) and Berlin (in 2008). Similarly to Munich, the discussions were structured around three central phases-brainstorming, in-depth discussions, and consolidation. For further details about the projects, see Birgit Hohberg, Maren Lübcke & Rolf Lührs, Family Policies-A Promising Field of eParticipation, 7 EUR. J. EPRACTICE 1, 2-4 (2009). The design of these projects was similar to the design of the Munich consultation and, accordingly, their performance under the participatory criteria largely reflected Munich's experience. Id.

²⁴⁶ See Munich Report, supra note 238, at 8-9. As in many online endeavors, the education level of participants was relatively high—more than two-thirds had university-level education. However, a different participatory bias was reversed in this

2. Bürger Forum 2011

As the examples of Hamburg (urban planning) and Munich (welfare policies) demonstrate, the criterion of inclusiveness presents a tough challenge for digital participatory initiatives. Even if the criteria of transparency, deliberative quality, and impact are fulfilled, participants' lack of representativeness may lead to distorted outcomes and undermine their public legitimacy.

While this challenge is certainly difficult, appropriate design choices can help mitigate it. For instance, the Bürger Forum project, which was initiated by the former German President Horst Köhler and launched in the summer of 2010, is an example of online inclusiveness in practice. As part of the initiative, 400 citizens were randomly selected in twenty-five cities across Germany to discuss how to strengthen social cohesion and equal opportunities in a multicultural society. The selection process was performed with the help of a designated call center, which dialed randomly generated telephone numbers in each participating city. Once a person at the other end of the phone line agreed to participate in the forum, he or she was provided with all the necessary materials. The recruitment of participants continued until a statistically representative group was formed. Participants were then invited to take part in moderated online deliberations, divided into various subtopics, and develop their ideas over a period of eight weeks. Following the completion of the local phase, all participants (10,000 overall) are expected to engage in a nationwide online discussion, aiming to develop a coherent citizen agenda. The culmination of the initiative is planned for May 2011, when the citizen agenda will be presented to the German president.²⁴⁷ The project has only begun so it is impossible to analyze its performance. However, the idea of a

case. While in most participatory processes the percentage of male participants is substantially higher than female participants, significantly more women than men (seventy-seven percent vs. twenty-three percent) participated in the Munich online discussion. *See id.* at 8-9.

²⁴⁷ Interview with Hans Hagedorn, Manager, Bürger Forum Project (Online Platform), in Berlin, Ger. (Dec. 9, 2010); *see also* Dan Jellinek, *Online Debate Experiment to Unite 10,000 Random Citizens*, 313 E-GOV'T BULL. (June 2010), http://www.headstar.com/egblive/?p=487; Press Release, Bertelsmann Found., Budespräsident startet neues Project zur Bürgerbeteiligung [The President Launches a New Civic Project] (May 21, 2010), *available at* http://www.bertelsmannstiftung.de/cps/rde/xchg/bst/hs.xsl/nachrichten_101247.htm (Ger.).

random selection of participants can potentially mitigate the major weakness of the previously discussed initiatives.²⁴⁸

D. Toward E-Participation in the United States?

The German models discussed above are certainly far from fully satisfying the ideal of democratic participation. Some initiatives do not ensure that participants are representative and thus might distort, at least to some degree, the outcomes of the process. Other projects do not place sufficient emphasis on the quality of deliberation or on the availability of structured impact opportunities. Participation rates are frequently disappointing as well. Indeed, these initiatives are still in their infancy (Berlin-Lichtenberg is the oldest, with just five years of experience). They make first and shaky steps, often stumble, experiment with various design choices, and often lead to unexpected results (for better or for worse). Surely, none of these initiatives serves as an exemplary model.

despite the imperfections, Yet. these endeavors represent an important tendency-they all progress in a direction that is largely absent from the American municipal landscape. They aim to engage citizens in municipal policymaking in a structured and relatively transparent manner. Rather than treating citizens as consumers who can potentially produce helpful innovations, these initiatives encourage citizens to take part in local governance-deciding upon resource allocation, collaboratively developing urban plans, or contributing to the design of social policies. Learning from previous successes and failures, these initiatives evolve and improve year by year, inducing more cities to join the effort and generate sustainable e-participatory practices.

Why is a similar course of affairs absent in the United States? Why do American municipalities adhere to a consumerist state of mind, virtually ignoring the participatory potential of digital technologies? The answer could be easy if digital technologies played a lesser role in American society: if municipalities were not extensively relying on digital tools in

²⁴⁸ It should also be noted that random selection may be combined with selfselection and thus allow broad participation which is balanced by an additional measure of inclusiveness. *See, e.g., supra* Part IV.A.3. The practice of random selection for deliberative forums has been developed and implemented in several occasions by James Fishkin and his colleagues, both in face-to-face and online settings. *See* FISHKIN, *supra* note 53. However, it has not yet been practiced formally on a municipal level in the United States, either offline or online.

their day-by-day work, if digital technology was not on the national agenda, if the United States was not a global hub for the development of digital technologies. However, since these limitations do not apply, what can explain the monopoly of consumerism in municipal digital platforms?

I suggest two possible explanations: a practical one and a conceptual one. On the practical side, the consumerist nature of digital practices in American municipalities may be the result of path dependency—a particular course of action that is hard to reverse once introduced.²⁴⁹ A contingent series of events may have shaped the contours of digital initiatives, leaving participatory features out of the picture. For instance, the officials responsible for digital technology may be part of the matter. In fact, the three individuals who are in charge of digital technology and information management in the Obama administration have been recently described as "a new brand of Silicon Valley-era, private-sector-minded managers recruited into the public sector."250 Hence, it is hardly surprising that consumer satisfaction and private entrepreneurship are at the top of their agendas. Moreover, their explicit goal has been to "create government websites that are more like an Apple app store than the Department of Motor Vehicles . . . and to make accessing information more consumer-friendly."²⁵¹ The Apps for Democracy competition that was designed and led by Vivek Kundra, the current Chief Information Officer of the United States, is of course a notable example of this vision.

As part of a path dependency effect, the publicity for Apps for Democracy and the resulting endorsement of consumerist aspirations by the federal government (as manifested by the Open Government Directive) have led local governments across the country to implement corresponding practices. As discussed above, the misleading participatory rhetoric and pretensions are a major problem in this development. Path dependency exacerbates the issue, as "initial institutional decisions—even suboptimal ones—can

²⁴⁹ See generally, e.g., Paul Pierson, Increasing Returns, Path Dependence, and the Study of Politics, 94 AM. POL. SCI. REV. 251 (2000).

²⁵⁰ Abby Phillip & Kim Hart, *Bringing Government Up to Data*, POLITICO (July 20, 2010 3:56 AM), http://www.politico.com/news/stories/0710/39939.html. The individuals are Vivek Kundra (Chief Information Officer), Jeffrey Zients (Chief Performance Officer), and Aneesh Chopra (Chief Technology Officer). Id. Vivek Kundra is also the former Chief Technology Officer of Washington, D.C., who initiated Apps for Democracy. See supra Part III.B.1.

 $^{^{251}}$ *Id*.

become self-reinforcing over time."252 Such initial choices "encourage the emergence of elaborate social and economic networks, greatly increasing the cost of adopting once-possible alternatives and therefore inhibiting exit."253 Hence, the personal appointments and the initial consumerist orientation of the Obama administration's project may lead to poor and hard-to-reverse participatory outcomes on the municipal level.

While path dependency surely plays an important role in the current trajectory of municipal digital endeavors, a broader conceptual explanation is also plausible. The consumerist orientation may stem, for instance, from a more general adversarial and contentious attitude toward popular participation in politics in the United States.²⁵⁴ American civic groups often operate as advocacy organizations, which serve clients rather than members.²⁵⁵ Instead of creating vast federations and recruiting members who would slowly climb the ladder of the association, these advocacy organizations rely on centralized and professional mechanisms of management, and largely abandon the grassroots local structure.²⁵⁶ Civic causes are therefore being promoted via centralized and professional bodies that are located (both conceptually and geographically) close to governmental agencies and the media.²⁵⁷ As action is now in Washington, lawyers, lobbyists, and other professional staffers are seen as the key players in the political arena.²⁵⁸ Hence, members of these associations are likely to be regarded as "consumers with policy preferences,"²⁵⁹ rather than citizens who actively participate in policy making.

Paul Pierson, The Limits of Design: Explaining Institutional Origins and Change, 13 GOVERNANCE 475, 492 (2000).

²⁵³ *Id.* ²⁵⁴ JASANOFF, *supra* note 196, at 247-71. ²⁵⁵ Theda Skocpol, Advocates without Members: The Recent Transformation of American Civic Life, in CIVIC ENGAGEMENT IN AMERICAN DEMOCRACY 461, 492 (Theda Skocpol & Morris P. Fiorina eds., 1999).

²⁵⁶ See generally Matthew Crenson & Benjamin Ginsberg, Downsizing DEMOCRACY: HOW AMERICA SIDELINED ITS CITIZENS AND PRIVATIZED ITS PUBLIC (2002); Skocpol, supra note 255, at 494; Theda Skocpol, Voice and Inequality: The Transformation of American Civic Democracy, 2 PERSP. ON POL. 3, 9 (2004); Theda Skocpol, Unraveling from Above, 7 AM. PROSPECT (Mar. 1, 1996), http://www.prospect.org/cs/articles?article= unsolved mysteries the tocqueville files 311996. For a similar trajectory in the context of local government, see Peter Dobkin Hall, Vital Signs: Organizational Population Trends and Civic Engagement in New Haven, Connecticut, 1850-1998, in CIVIC ENGAGEMENT IN AMERICAN DEMOCRACY 211 (Theda Skocpol & Morris P. Fiorina eds., 1999).

Skocpol, *supra* note 255, at 494.

 $^{^{258}}$ *Id*.

²⁵⁹ *Id.* at 492.

Assuming that this account accurately reflects the current patterns of citizen participation in the United States, it sheds some light on American digital patterns. If both municipal officials and citizens are accustomed to a reality in which the major participants in policy making are advocacy groups, a mere introduction of new technologies cannot change the participatory equation. Hence, advocacy groups continue to play a central role in policy making, and digital technologies are only utilized to engage citizens in matters related to provision and improvement of municipal services. In order to affect policy making, citizens are therefore expected to join or independently organize into advocacy groups, without any governmental assistance or interference. Hence, while in the German cases presented above the municipality serves as a facilitator and catalyst of citizen participation in municipal affairs, the role that American local governments assume is substantially narrower.²⁶⁰ Rather than actively creating (or at least attempting to create) a virtual Agora, cities focus their digital efforts on the improvement of service and information provision.

These two factors—path dependency and political culture-may explain the current trajectory of the usage of digital technologies in American municipalities. The next question is, then, how to take a more participatory path at the current digital crossroads. To be sure, the existing consumerist progression should by no means be abolished. A satisfactory performance on the consumerism axis is important for any municipal governance (assuming that there are no misrepresentations as to the nature of the initiatives). However, it is particularly important to incorporate robust participatory patterns in the agenda of American cities before their digital practices become hard to reverse.

Given that the penetration of digital technologies into local governments has only started, the path dependency effect may not be strong yet. Moreover, even if the general political culture is not in favor of citizen participation, some notable offline municipal exceptions can serve as potential models. For instance, the city of Chicago has been operating an inclusive system of community policing and school reforms in its poorest

²⁶⁰ As Sheila Jasanoff notes in the context of science regulation in the United States, there is an assumption that "disclosure and transparency are *possible*, and that people have the will, the means, and the competence to evaluate the claims and proofs presented to them." JASANOFF, *supra* note 196, at 263.

neighborhoods.²⁶¹ Minneapolis has invested considerable funds in a neighborhood revitalization program.²⁶² Seattle has initiated "neighborhood matching funds" and collaborative urban planning programs.²⁶³ As part of a strategy dubbed autonomy,"²⁶⁴ these cities "accountable have strongly emphasized transparency, accountability, citizens' and decision-making authority. Chicago and Seattle have also invested substantial efforts in reaching out to disadvantaged communities.²⁶⁵ The success of participatory initiatives in a few American cities stems, of course, from a combination of political, legal, and social factors.²⁶⁶ However, these examples demonstrate that participatory initiatives are not foreign to the American municipal landscape. Hence, the window of opportunity to introduce digital participatory initiatives, learning from existing practices around the world, is now open. It should not be missed.²⁶⁷

CONCLUSION

The purpose of this Article is to assess the current state and potential role of digital technologies in American cities. The Article delineates city-citizen relations in general and the usage of digital technologies in cities in particular along two axes—consumerism and participation. Then, based on evaluative criteria that aim to compare and assess both consumerist and participatory digital initiatives, the Article analyzes existing American practices in the field. It demonstrates that municipal digital endeavors in the United States are characterized by a consumerist orientation and rest on theoretical premises of economic production, largely disregarding participatory features. Citizens are treated as

FUNG, supra note 41. 262

See generally Elena Fagotto & Archon Fung, Empowered Participation in Urban Governance: The Minneapolis Neighborhood Revitalization Program, 30 INT'L J. URB. & REGIONAL RES. 638 (2006).

²⁶³ CARMEN SIRIANNI, INVESTING IN DEMOCRACY: ENGAGING CITIZENS IN COLLABORATIVE GOVERNANCE 66 (2009).

 ²⁶⁴ FUNG, *supra* note 41, at 5-8.
²⁶⁵ *Id.*; SIRIANNI, *supra* note 263.

²⁶⁶ See, e.g., Jeffrey M. Berry, Kent E. Portney & Ken Thomson, The REBIRTH OF URBAN DEMOCRACY 283-300 (1993); see also FUNG, supra note 41, at 220-42; JANE J. MANSBRIDGE, BEYOND ADVERSARY DEMOCRACY 233-99 (1980).

²⁶⁷ As it is difficult to wholly rely on the good will of public officials in this respect, an encouraging legal structure is required to accommodate digital participatory initiatives and ensure that the participatory criteria discussed earlier are satisfied. This discussion is beyond the scope of this article and it is left for further research.

consumers, who may occasionally contribute their professional skills or local knowledge to improve the service provided by the municipality. While this attitude may seem harmless at first sight, the Article argues that its danger is in its framing and the rhetoric that surrounds it. The definition of these enterprises as genuinely participatory and the reference to unprecedented opportunities for citizen engagement distorts the meaning and understanding of citizen participation in local democracy. The practical importance of this trajectory is that the democratic and participatory potential of digital platforms is utterly wasted.

The Article then aims to present an alternative role for digital technologies in municipal affairs. It discusses three categories of municipal matters in which citizen engagement can be particularly valuable-participatory budgeting, urban planning, and social policy consultations-and exemplifies the role of digital technologies in the process. Given that digital technologies may successfully satisfy participatory requirements, the Article suggests possible causes for the current absence of digital participatory practices in the United States. The Article concludes with a normative call for a more participatory path in municipal digital endeavors. As American cities are currently at a crossroads in terms of their digital development, the opportunity to adopt participatory features is still wide open and should not be missed.

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