Participatory Budgeting: A Framework to Analyse the Value-add of Citizen Participation

Author(s)

Address

e-mail

Abstract. The dynamic and tremendous evolution of information and communication technologies (ICTs) has provided unique opportunities for citizen participation in democratic decision making processes. Such opportunities have been widely noted, in recent years, in processes like Participatory Budgeting (PB). From the originating practices of PB in Brazil, experiences of PB around the world have been uniquely exercised. While some processes leverage widely on the use of ICTs, others do not. This has created a wide perspective on adopting ICTs to the traditional processes of participation in respect to generated benefits and value-add. This paper investigates the added public value through the use of ICTs in PB processes and proposes a framework for its analysis. The paper first introduces three models of participation in PB - offline, online and hybrid models - followed by a comparison to provide insights and understanding of the three models. Thereafter, literature on public value is investigated, followed by drawing a framework for analysing public value-add of ICT use in PB processes. The models of PB are then assessed along the proposed framework to identify the public value-add of ICTs in PB. The paper concludes with the challenges of ICTs in PB and lessons learnt from the comparison and assessment of the PB experiences.

Keywords: Participatory Budgeting, Public value, Citizen participation, Models of participation in PB

1 Introduction

The reforms intended to the modernisation of government through strengthening the role of local governments and citizen participation as mechanisms of accountability have taken particular interest in recent times. Participatory budgeting (henceforth PB) is one of the many participation areas [33], which promotes direct participation of citizens in political decision making processes. Authorities are faced with citizens characterised with capacity, powers and rights to think, propose, decide and act. Experiences of PB demonstrate a contribution to good governance, which requests participation, transparency and openness among other principles [32]. Principles of democracy and of good government in turn contribute to public value. Public value is

thereby understood by Kelly et al as '*the value created by government through services, laws regulation and other actions*' [17]. O'Flynn argues further that public value '*could be used as a 'rough yardstick' against which performance can be gauged, resource allocation decisions made, and appropriate systems of delivery determined*' [25].

Major advancements of Information and Communication Technologies (ICTs) have increased opportunities for citizen participation and are widely noted in PB ([13], [21], [25]). PB experiences reported in literature reveal a diversity of processes in which citizens participate. While some processes leverage widely on the use of ICTs, others do not. This has created a wide perspective on adoption of ICTs to the traditional processes of participation in PB, where a fundamental question on benefits and added value of ICT use in PB is barely investigated till now. Therefore this paper contributes by assessing PB experiences with and without the use of ICTs and discusses the public value-add of ICTs in PB. The next section analyses the foundations and related work on citizen participation in participatory budgeting. Section 3 outlines experiences of PB from a selection of six cases grouped along offline, online and hybrid models of ICT use in PB. The cases are compared along the MOMENTUM evaluation categories [5]. In section 4, we outline concepts and theories for benefit and public value management as discussed in literature. Subsequently, we present a concept for assessing public value-add of ICTs in PB (section 5). Section 6 concludes with reflections of assessing the public value-add of ICT supported PB endeavours and outlines further research work.

2 Foundations and related work on citizen participation in participatory budgeting

The concept of citizen participation has emerged highly in democratic processes and is supported by several theories emerging from different disciplines. Such theories include institutional, legitimacy and stakeholder theories [1]. Stakeholder theory has been discussed in e-government contexts (see e.g. [11], [12], [27], [30]). For citizen participation, stakeholder theory argues on inclusion of stakeholders in innovation and management and thus satisfying their needs. The theory further argues on accountability, satisfaction and efficiency of management and decision making processes through actual inclusion of stakeholders ([1], [11]). Citizen participation is where the citizens are actively involved in decision making processes to achieve more accountability and good governance [2]. As argued by the OECD, citizen participation is one of the key principles to promote good governance [23].

In recognising the importance of citizen participation in promoting good governance, many governments have now launched initiatives to support the transition to good governance. One of the most documented citizen participation initiatives is participatory budgeting which originated in Porto Alegre, Brazil 1989. The main drivers for the initiative was to promote democracy in the area, actively involve citizens in decision making processes and also tackle financial constraints by involving citizens to prioritize resources [15]. PB is regarded as involving citizens in

planning public budgets and thus in decision making processes ([9], [15], [18], [25], [29]). The roles of citizens in such processes include providing proposals for new projects/investments, engaging in discussions and planning, prioritising the projects/investments, voting for projects/investments and evaluating the outcome of the projects/investments.

The 'form of participation' in PB, considered in this paper as models of participation, can be offline, online, or in many cases both (hybrid). Offline PB refers to physical meetings of citizens and authorities in the area to plan and discuss the budget at hand. Online PB refers to the application of ICTs to enable the citizens to participate via internet technologies. The hybrid model refers to the process, which involves physical meetings and use of internet technologies.

While the PB process in Porto Alegre involved only offline processes, Peixoto discusses several initiatives of PB in Europe, where either one or hybrid model of participation were employed [25]. Several cities in UK, Spain and Germany employed online models of participation with others using sophisticated tools such as online budget simulators and planners. Italy employed a hybrid model of participation. The online model was specifically employed to include citizens, who could not attend physical meetings, and also to reach larger populations -- especially the youth.

Miori and Russo argue that the online model of PB provides opportunities for wider demographic, ubiquitous reach and transparency as opposed to the offline model ('face-to-face PB'). The authors however also argue that the integration of both models (hybrid) ensures more success to the participation process than the use of only the online model of participation [18].

In order to grasp and provide more insights on the different models of participation, a comparison of six PB projects is given subsequently. The aspects of comparison used are adopted from the MOMENTUM evaluation approach [5]. While the MOMENTUM evaluation approach defines five key aspects for the evaluation plus the assessment of impact achieved, we only use three assets for the comparison - support in legislation process, participation process, tools and technologies - and the impact assessment. These aspects were selected in a way that the results yielding from the comparison provides the grounds for assessing the public value-add of ICT in PB.

3 Experiences of participatory budgeting

From the originated practices of PB in Brazil to the rest of the world, experiences of PB and in particular models of participation have been uniquely exercised. In this section, a comparison of different PB experiences is presented. Then, the challenges and lessons learnt from the comparison are summarised. A selection of six cases from different countries was performed with an equal divide of representation of three participatory models (offline, online and hybrid). These cases have been selected according to the model of participation used. In this way, it allows us to do a full comparison of each project chosen. The cases are from United Kingdom (2-offline), the United States of America (1-hybrid), Germany (1-hybrid), Canada (1-online) and Spain (1-online). The projects were selected along the following principles: complete

duration, access to comprehensive project information, well described processes in project documentations and cases from different countries. In the following, each project is briefly outlined.

PB in Tower Hamlets, UK was conducted in 2009[1] with the aim of improving local services through prioritisation by citizens, to improve levels of involvement within the community and experiences of participation and to generate social capital. The citizens also had roles in monitoring services in Local Area Partnership (LAP) Steering committees. The budget set for the services was £2.4 million. The model of participation in Tower Hamlets was offline. People participated in discussions through face to face meetings.

PB in Manton, UK was organized by Manton Community Alliance (MCA) in 2007[2] with an aim of generating budgeting priority areas established by the community. MCA set £50,000 upon which citizens can decide how it should be spent. The main objectives of the project were to build trust within the community, provide the community with power on prioritizing how money should be spent in the area, increase democracy and improve delivery services. The model of participation was offline. People participated in discussions through face to face meetings.

PB in New York, USA was conducted for the fiscal year 2012-2013[3] with aims of enabling citizens to propose and vote upon projects and create civic awareness. The process also aimed at more transparency in the budgeting process, accountability, citizen engagement and community building (i.e. implementing good governance principles). Physical meetings as well as online tools were used as methods of participation (i.e. a hybrid model of participation).

PB in Hamburg, Germany conducted in 2009[4] aimed at involving citizens of Hamburg in planning of the future budget (€9.2billion) up to year 2020. The project was organized by the Hamburg parliament with four main budgeting questions: (1) priorities for future budgeting, (2) what benefits are still necessary, (3) possible savings and (4) effectiveness of services. The participation process was online and offline. The project used surveys as a tool to reach people who could not access the internet. Hence the model of participation was hybrid.

---

[1] Participatory Budgeting (PB) Unit.: You Decide! Tower Hamlets (London). http://www.participatorybudgeting.org.uk/case-studies/case-studies/you-decide-tower-hamlets-london (accessed on 13/03/2013)

[2] Participatory Budgeting (PB) Unit.: Voice Your Choice, Manton, Nottinghamshire. http://www.participatorybudgeting.org.uk/case-studies/case-studies/voice-your-choice-manton-nottinghamshire (accessed on 13/03/2013)

[3] Gilman, R.: Participatory Budgeting New York, http://participedia.net/en/cases/participatory-budgeting-new-york-new-york (accessed on 13/03/2013)

[4] Hamburgische Bürgerschaft.: Abschlussbericht zur Onlinediskussion Bürgerhaushalt Hamburg. (2009), http://www.buergerhaushalt-hamburg.de/site/downloads/6400_32_090909_Abschlussbericht_Hamburger_Buergerhaushalt_2009_FINAL.pdf (Accessed 13/03/2013)

PB in Zaragoza, Spain conducted in 2010[5] aimed to encourage active participation of citizens in public decision making processes in Cadrete, an experiment to evolve the e-cognocracy approach ([21], [22]). The citizens were required to vote on whether the public budget should be spent in cultural or sport activities. Citizens only participated online in the process.

PB in Calgary, Canada conducted in 2011[6] for the city's 2012-2014 business and budgeting plans. The project is designed to engage citizens of Calgary to set priorities on projects and review services provided by the council. The participation process was online.

The projects are compared in Table 1 based on the three MOMENTUM evaluation aspects mentioned in section 2 and two additional aspects: model of participation, theories supporting the participation process. The comparison enables a structured analysis of models of participation, therefore drawing strengths and weaknesses of each. Such comparison also provides insights in challenges and lessons that can be learnt from the models.

Table 1: Comparison of Participatory Budgeting projects

TOWER HAMLETS, UNITED KINGDOM	
Model of participation	Offline
Support in legislation process	-
Process of participation	1. Inform: people were informed about the 'menu' of services prepared by the PB team, the problems and funding 2. Deliberate: people sat in tables and discussed about the services they preferred. 3. Decide: people voted for services. The process was displayed in big screens. Voted services proceeded to a discussion with LAP committee 4. Services discussion: LAP steering committee discussed with citizens on particular services on how to improve the services 5. Delivery: services were delivered and reports were filled each month for monitoring
Tools and technologies	Advertising: posters, adverts, press releases, leaflets, 'word of mouth' Participation: viewing screens
Impact achieved	No insight available
MANTON, UNITED KINGDOM	
Model of participation	Offline
Support in legislation process	-
Process of participation	1. Prioritization: people prioritize suggestions made by the MCA 2. Money allocation: people decide money allocation for each priority 3.Identify organisations: people decide which organisations get the money to carry out the priorities 4. Lobby for voting: Organisations from 3. promote their projects and bid for money 5. Voting: people vote for organisations

[5]Grupo Decisión Multicriterio Zaragoza (GDMZ).: e-Participa. (2010), https://participa.cadrete.es/ (accessed on 13/03/2013)

[6] The City of Calgary.: Our City, Our Budget, Our Future, http://www.calgary.ca/CA/fs/Pages/Plans-Budgets-and-Financial-Reports/Our-City-Our-Budget-Our-Future/Our-City-Our-Budget-Our-Future.aspx (accessed 13/03/2013)

Tools and technologies	Advertising: local newsletter, website, leaflets and word of mouth DVD of bidding projects/organisations
Impact achieved	More than 60% of people felt involved and acknowledged the process
NEW YORK, USA	
Model of participation	Hybrid
Support in legislation process	-
Process of participation	1. Inform: people where informed about the process and formed groups to discuss potential projects and volunteering of budget delegates 2. Deliberation: people meet to deliberate and form project proposals 3.Decision on organisations: people decide which organisations get the money to carry out the priorities 4. Lobby for voting: Organisations from 3. promote their projects and bid for money 5. Voting: people vote for organisations
Online process	Online submission of project proposals
Tools and technologies	Email, phone, social media: facebook, twitter, blogs Advertising: local newsletter, website, leaflets and word of mouth DVD of bidding projects/organizations
Impact achieved	No information available
HAMBURG, GERMANY	
Model of participation	Hybrid
Support in legislation process	Hamburg parliament 2020 budgeting plan
Process of participation	1. People set priorities and discuss ideas in the forum and information how to operate the forum 2. Thematic sub-forums: priorities were discussed, evaluated and generation of priority list 3.Final discussion and review 4. interview and live chat with experts 5. Evaluation of results and discussions in forums and surveys
Offline process	Use of survey for under 18 and over 64
Tools and technologies	Advertising: online banner, social media marketing Surveys, budget calculator, wiki, discussion forums, video chat (live), interactive financial planner, facebook, twitter, email, DEMOS online platform, e-voting.
Impact achieved	Suggestions through the PB process were picked up by the Hamburg City council
ZARAGOZA, SPAIN	
Model of participation	Online
Support in legislation process	-
Process of participation	1. 1st vote on whether the budget should be spent in sports or cultural activities 2. discussion and debates in a forum 3.2nd vote on whether the budget should be spent in sports or cultural activities 4. consensus of statements from politicians, citizens and associations
Tools and technologies	Discussion forum, e-polling, JAVA, JSS libraries, Tomcat, Apache, MySQL, Linux i386, Open SSL
Impact achieved	The decisions of the Cadrete exercise were taken up by the local council and citizens; the experiment was however with a limited number of citizens involved
CALGARY, CANADA	
Model of participation	Online

Support in legislation process	-
Process of participation	1. identify key values and themes 2. gather value-based input from all stakeholders that will identify values, priorities and needs 3. gather inputs and identify pros, cons and trade-offs for city services and budget allocations 4. decision making by the city council
Tools and technologies	Online platform, smartphone application, Calgary budget TV, Newsletter, social networking tools: twitter, facebook, YouTube
Impact achieved	Not sufficient information available

The use of ICT in PB processes in Table 1 has provided benefits for participation such as wider reach of the community and ubiquitous participation process from anywhere, and also in evaluation of inputs from the users. However there are also challenges imposed through incorporation of ICT in PB processes. The challenges observed from the projects in Table 1 are as follows:

The use of ICT demands for more dynamic and sophisticated application of the tools and technologies in PB. The challenges foreseen are such as cost in use of the tools and technologies. Many local governments and city councils depend on private vendors to provide the tools and technologies. The use of online tools provides opportunities to more transparency and collaboration between authorities and citizens as seen in the cases of Hamburg, Calgary and Zaragoza. These opportunities of citizen engagement require more sophisticated tools and technologies.

Another challenge is building capacity, skills and knowledge of employees to run and maintain the process and the platform. In all three projects that have employed the online model of participation, an online platform is used to support the participation process. The platforms are built using different underlying technologies and provide support in different ways. The platforms therefore require operational, knowledge and supporting skills.

Ensuring authenticity in participation process is another challenge. Authentication processes are required to know who is participating in order to limit participation only to the neighbourhood community. For PB to meet its objectives, generation of priorities and voting must be done by the residents in the community. Authentication is also significant for evaluators to follow up which input is provided by who. The latter helps to avoid subjective contributions made by politicians or people with particular interest in projects and therefore bring forth biasness in results.

Ensuring constructive inputs from participants is another challenge in this regard. PB projects in Calgary, Hamburg, and New York have used social networking tools in their processes. The use of such tools requires an extra effort such as use of data mining technologies to extract valuable inputs from participants and also ensuring authentication.

The projects presented in Table 1 offer examples of the three models of participation, online, offline and hybrid models. Lessons learned from the projects are as follows:

- Participation processes in all three models involve suggestions of projects, deliberation, prioritization and/or voting. These processes can be supported through offline, online or hybrid models of participation.
- The offline model limits the audience reached as people have to go physically to the meeting areas and at a specified time. The process of offline PB may also be considered not sufficiently transparent and efficient as citizens only engage through the physical meetings and cannot follow the process further. However, the participation is evidenced to be useful with high impact to the process. Offline models seem well suited to processes for very small communities engaging in PB, e.g. in schools.
- Online and hybrid models offer the advantage that a wider audience can be reached and the use of ICT enables more efficiency and transparency in participation process. Also, effective extraction and analysis of inputs is possible as evidenced by PB in Hamburg and Zaragoza.
- The hybrid model provides a desirable environment to involve experts and policy makers in discussions as the example in the case of Hamburg shows. This model also encourage people with no access to the internet such as seniors to participate by use of tools such as surveys and it provides freedom for people to participate according to their reach.

As the aim of our paper is to investigate the public value-add of ICT support in PB, the next section provides the grounds for understanding public value.

4 Theories for benefit and public value management

The notion of public value is garnering considerable attention in practitioner and academic literature. Three main theories of public management lay the grounds for understanding public value of citizen participation in public governance. Thereby, different perceptions of the role of public servants and politicians, their influence on governance structures and the public interest have to be weighed against each other:

- Principal-agent theory, which argues that politicians make policy that public managers implement [6] [8].
- New public management (NPM), which encourages public managers to follow targets rather than to orient them towards the changing nature of political legitimacy, or to seek public authorization for activities [16] [28].
- Public value, which is considered from new public service theory. Public value argues for a new emphasis on the important role public managers can play in maintaining organization's legitimacy. The public value embraces notions of valued public services and efficiency. It emphasises on more accountability whereby organisations face their citizens as well as their political masters, rather than static, top-down models that focus public managers on meeting centrally

driven targets and performance management. In this way, it attempts to grapple the tension between bureaucracy and democracy [20].

Given the problems and challenges of experiments with NPM, especially during the 1990s, there is increasing interest in what can be called a public value approach, which draws heavily on the work of Moore ([19], [20]) and signals a change away from strong ideological positions of market versus state provision [6].

Discussing public value has become increasingly popular; however there is not a clear definition. Public value has been described as a multi-dimensional construct – a reflection of collectively expressed, politically mediated preferences consumed by the citizenry – created not just through 'outcomes' but also through processes which may generate trust or fairness [24]. Kelly et al have defined public value as '*the value created by government through services, laws regulation and other actions'* [17] and O'Flynn adds transparency on performance, allocation of resources and delivery systems [25]. Stoker describes public value as '*more than a summation of individual preferences of the users or producers of public services…[it] is collectively built through deliberation involving elected and appointed government officials and key stakeholders'* [31]. Horner and Hazel as well as Stoker argue that '*politics can influence the basis for co-operation by changing people's preference and creating an environment in which partnership is possible*' (cited in [6]). In this respect, public value management in a modern democracy demands for networks of deliberation with the following five guiding propositions (Stoker cited in [6]):

1. *'Public interventions are defined by the search for public value.*
2. *There is a need to give less emphasis to the legitimacy that stems from party input into the process and give more recognition to the legitimacy of a wide range of stakeholders.*
3. *An open-minded approach to the procurement of services is framed by a commitment to a public service ethos.*
4. *A flexible repertoire of responses and self-reflexive irony should drive interventions.*
5. *Accountability relies on a complex and continuous exchange between leadership, and checks and balances to that leadership.'*

Stoker further claims that '*the search for public value brings a new perspective to the long-standing tension between democracy and efficiency. Whereas traditional and 'new' approaches to public management tend to give excessive weight to efficiency, public value increases the relative weighting of democratic participation and value-laden outcomes that have been publicly authorized*' (Stoker cited in [6]). In this way the dynamic of public value again reveals itself for its measurement through the public. This creates opportunities to explore bottom-up methods of accountability instead of imposing traditional top-down policy levers which are poorly understood [6].

5 A framework for assessing public value-add of ICTs in participatory budgeting with exemplifications

Generating public value in the new era of digital democracy is highly involved in the way that public services are carried out. The advancement of ICTs has largely shaped how governments provide services. ICTs have become key elements of government modernization such as interaction of processes with citizens, services with more quality and improved productivity, reduced operated time and costs, traceability in management and information in internal procedures (accounting, administrative and others) ([4], [14]).

Public value theories described in section 4 outline value-add through effective, efficient, efficacy and transparent processes. The government authority is responsible to ensure its processes and services are of value to the citizenry and hence promote democracy and good governance. The great need of governments to optimise, and strive for better processes in the public system has led to the use of ICTs to develop experiences such as Participatory Budgeting (PB).

Figure 1 outlines a framework for public value assessment of ICTs in PB. The framework describes ICTs as an enabler when applied in PB experiences to generate public value-add by improving their impact in democracy, government and society through promoting effectiveness, efficiency, efficacy, transparency and accountability. This is represented by the bold arrows in the diagram. Since the realization of the public value-add is through the application of ICTs in PB, this indirect relationship is presented by the dotted arrow.

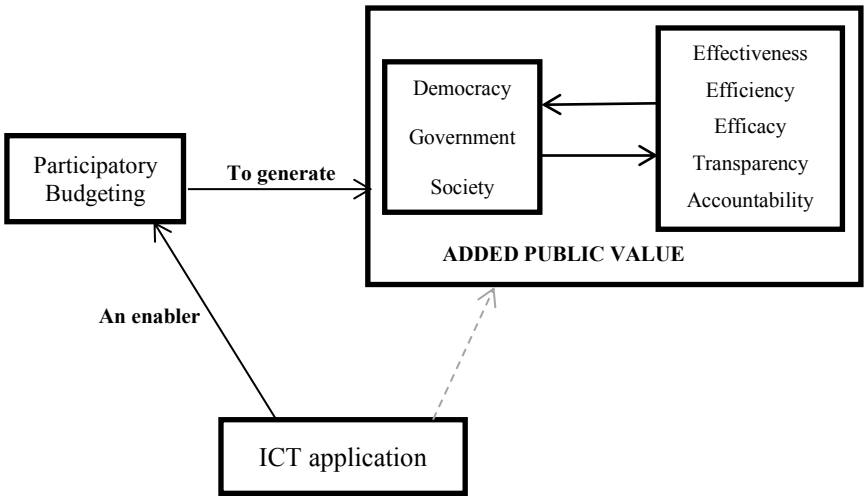

Figure 1: Added Public value of ICT in PB

The use of ICTs enhances the efficiency of PB by improving the quality of the processes. Online tools enable people to participate in their convenience thus reduce waste of time and cost of travelling and preparations of meetings as observed in offline models cases presented in Table 1. The platforms are also re-usable and

efficient to manage content for many cycles of PB endeavours as the example of Calgary evidences by using the platform in several cycles of PB.

ICTs also enhance effectiveness and efficacy in PB processes by providing technical capabilities such as the platform which provides a ubiquitous environment for deliberation. For example, social networking tools were used in the New York PB case by citizens to send suggestions through multiple ways. Video chat (live) was used in Hamburg PB by citizens to ask experts and policy-makers questions for better understanding. Furthermore, the use of surveys in the hybrid model of Hamburg PB provided opportunities for seniors to participate.

Online and hybrid models provide more transparency and accountability than offline models. Dykstra describes accountability as '*answerability, blameworthiness, liability, and the expectation of account-giving'* [10]. Websites used for PB provides sufficient information on budgets, plans and services which are easily available to citizens for understanding and monitoring progress. Hence, they enforce transparency in PB and bring forth accountability as described by Dykstra. Information such as council's fiscal plans, city services, city revenues and expenditures are available in Calgary PB website. PB cases in Calgary, Hamburg and Zaragoza provide reports of the deliberation process. These reports describe the deliberation process, the topics discussed and voting outcomes. Calgary provides also information on how the inputs from citizens are used in city's budgeting plan.

ICTs promote democracy through direct citizen engagement in budgeting decisions and how the government is held accountable to focus on services prioritised by the community. In the offline models of participation such as in Manton and Tower Hamlets, most citizens remain to be represented by their leaders due to inconveniences of cost and time to travel to the meetings. In contrast citizens can directly participate and vote for the projects in ways most convenient to them in online platforms.

The application of ICTs also impacts societies through the learning and ability to have direct influence in PB processes. The experience creates more educated, democratic and participative societies.

Table 2: Assessment of models and ICT added public value

MODEL	PUBLIC VALUE ADD	DESCRIPTIONS
Offline	Efficacy	Partly efficacious: results are obtained but lack of opportunity for more people and discussions
	Effectiveness	Not effective: process depends on physical meetings only.
	Efficiency	Not efficient: people waste time and money for travelling, difficult to manage data.
	Transparency & accountability	Not transparent: much data is not available to people hence difficult to hold authority accountable
Hybrid	Efficacy	Efficacious: ICT provide opportunities for more people to participate and more discussions
	Effectiveness	Effective: process is ubiquitous and more people can be engaged. Use of surveys enhanced participation
	Efficiency	Efficient: improved quality of process, provides

		convenience and easy to manage data
	Transparency & accountability	Transparent: available information and through monitoring, people can hold authorities accountable
Online	Efficacy	Efficacious: ICT provide opportunities for more people to participate and more discussions
	Effectiveness	Effective: process is ubiquitous and more people can be engaged, but only those who can get access to the internet
	Efficiency	Efficient: improved quality of process, provides convenience and easy to manage data
	Transparency &accountability	Transparent: available information and through monitoring, people can hold authorities accountable

As evidenced in Table 2 above from the PB experiences in Table 1, online and hybrid models provide governments more opportunities to leverage on ICTs to enhance efficiency, effectiveness, efficacy and transparency in PB experiences therefore improving democracy and building well informed societies to generate public value-add in the experiences of citizen participation.

6 Conclusions

In recognising the importance of citizen participation in promoting good governance, many governments have now launched initiatives for e-participation. From the originated practices of PB in Brazil to the rest of the world, experiences of PB and in particular models of participation have been uniquely exercised. Such endeavours of e-participation allow local governments to transition from authoritative and traditionally representative direct models of democracy to more openness and participation as demanded when moving towards good governance. The advancements of ICT have largely shaped how governments provide services.

The use of ICT demands for more dynamic and sophisticated application of the tools and technologies in PB. Challenges such as costs and resources in using such tools and technologies have to be weighed against the added value created through more transparent and open participatory decision making. Therefore this paper brings forth a framework for assessing the added public value of ICTs in PB and then uses the framework to assess the three models of participation-offline, online and hybrid. Even though many local governments and city councils depend on private vendors to provide the tools and technologies for PB, the use of online tools has proven valuable to establish more transparency and collaboration between authorities and citizens as seen in the case of Hamburg, Calgary and Zaragoza. The framework describes ICTs as an enabler in PB to generate public value.

The great need of governments to optimize and strive for better processes in the public system demands a wider use of ICTs. The application of ICTs in PB experiences and their impact in democracy, government and society can be valued in promoting effectiveness, efficiency, efficacy, transparency and accountability – hence contributing to better public governance. Furthermore, application of ICTs has impact

on societies through the learning and ability to have direct influence in PB processes. The experience creates more educated, democratic and participative societies.

The proposed framework in this paper is to be used by the authorities to assess the benefits and added public value of ICTs in PB. However further research is required to investigate the implementation of the framework in more projects and hence supplement an understanding in application of ICTs in PB to promote good governance.

References

[1] Acerete, B., Royo, S., Yetano, A.: What is driving the increasing presence of citizen participation initiatives? In: Environment and Planning C: Government and Policy, 28 (5), pp. 783--802. Pion, England (2010)

[2] Ackerman, J.: Co-Governance for Accountability: Beyond "Exit" and "Voice". In: World Development, 32 (3), pp. 447--463. Elsevier (2004)

[3] Aichholzer, G. et.al: Introducing eParticipation. In: Tambouris, E. (ed.): DEMO-net booklet series, no. 1. DEMO-net, 2007, http://www.ifib.de/publikationsdateien/Introducing_eParticipation_DEMO-net_booklet_1.pdf

[4] Beynon-Davies, P., Martin, S.: Electronic Local Government and the Modernisation Agenda: Progress and Prospects for Public Service Improvement. In Local Government Studies, 30 (2), 2004, pp. 214--229

[5] Bicking, M.; Wimmer, M.A., Evaluation Framework To Assess eParticipation Projects In Europe. In Tambouris, E.; Macintosh, A. (eds.): Electronic Participation: Proceedings of Ongoing Research, General Development Issues and Projects of ePart 2009, 1st International Conference, ePart 2009, Trauner Druck: Linz, Schriftenreihe Informatik # 31 Linz, Austria, 2009, pp. 67--75

[6] Blaug, R., Horner, L., Leki, R.: Public value, politics and public management: A literature review. Report, The Work Foundation, 2006, http://www.theworkfoundation.com/DownloadPublication/Report/117_117_politics_lit_review.pdf (accessed 13/03/2013)

[7] Bossert, Thomas: Analyzing the decentralization of health systems in developing countries: decision space, innovation, and performance. Social Science and Medicine, 47 (10), 1998, pp. 1513-1527

[8] Box, R.C.: Running Government like a Business: Implications for Public Administration Theory and Practice. American Review of Public Administration, 29 (1), 1999, pp. 19-43

[9] Cabannes, Y.: Participatory budgeting: a significant contribution to participatory democracy. In: Environment and Urbanization, 16 (1), 2004, pp. 27--46

[10] Dykstra, C. A.: The Quest for Responsibility. In: American Political Science Review, 33 (1), pp. 1-25 (1939)

[11] Flak, L.S., Rose, J.: Stakeholder Governance: Adapting Stakeholder Theory to E-Government. In: Communications of the Association for Information Systems, 16 (1). AIS (2005)

[12] Flak, L.S., Nordheim, S., Munkvold, B.E.: Analyzing Stakeholder Diversity in G2G Efforts: Combining Descriptive Stakeholder Theory and Dialectic Process Theory. In: e-Service Journal, 6 (2), 2008, pp. 3-23

[13] Garcia, A.C.B., Ferraz, I.N., Pinto, F.B.: Electronic participatory budgeting (e-PPB): increasing people participation in the decision-making process. In: International Journal of Web Based Communities, 1 (4), pp. 504-517. Inderscience (2005)

[14] Hazlett, S., Hill, F.: E-government: the realities of using IT to transform the public sector. In: Managing Service Quality, 13 (6), 2003, pp. 445--452
[15] Herzberg, C., Röcke, A., Sintomer, Y.: Participatory budgeting in Europe: potentials and challenges. International Journal of Urban and Regional Research, 32 (1), 2008, pp. 164–178
[16] Hood, C.: A Public Management for All Seasons? Public Administration, 69 (1), 1991, pp. 3-19
[17] Kelly, G, Muers, S and Mulgan, G, Creating Public Value: An analytical framework for public service reform, London, Prime Minister's Strategy Unit, Cabinet Office, (2002), URL: http://webarchive.nationalarchives.gov.uk/20100416132449/http://www.cabinetoffice.gov.uk/media/cabinetoffice/strategy/assets/public_value2.pdf
[18] Miori, V., Russo, D.: Integrating Online and Traditional Involvement in Participatory Budgeting. In: Electronic Journal of e-Government, 9 (1), 2011, pp. 41--57.
[19] Moore, M.: 'Public Value as the Focus of Strategy. Australian Journal of Public Administration, 53(3), 1994, pp. 296–303
[20] Moore M.: Creating Public Value: Strategic management in government. Cambridge, MA, Harvard University Press (1995)
[21] Moreno-Jiménez, J.M., Aguarón, J., Escobar, M.T., Turón, A.: Philosophical, Methodological and Technological Foundations of E-cognocracy. In: Proceeding on the TED 2006 Conference on Towards e-Democracy: Participation, Deliberation, Communities. Mantova, Italia (2006)
[22] Moreno-Jiménez, J.M., Pérez Espés, C., Velázquez, M.: E-cognocracy and the design of public policies. In: Government Information Quarterly, (2012b). Submitted.
[23] OECD: The Case for E-Government: Excerpts from the OECD Report "The E-Government Imperative". In: OECD Journal on Budgeting, 3(1), 2003, pp. 61-131.
[24] O'Flynn, J.: 'A Public Value Framework for Contractual Governance. PUBLIC, Issue 07, ESADEs Institute of Public Management, Barcelona, 2005b.
[25] O'Flynn, J.: 'From New Public Management to Public Value: Paradigmatic Change and Managerial Implications. The Australian Journal of Public Administration, 66 (3): 2007: 353-366
[26] Peixoto, T.: Beyond Theory: e-Participatory Budgeting and its Promises for eParticipation. In: European Journal of ePractice, vol. 7, 2009, pp. 55-63. ePractice.eu
[27] Reed, D.: Stakeholder management theory: a critical theory perspective. Business Ethics Quarterly, vol. 9, 1999, pp. 453–483
[28] Schedler, K., Pröller, I.: New Public Management, 2. Aufl., Haupt UTB: Bern et al, 2003
[29] Scherer, S., Wimmer, M.A.: Reference Process Model for Participatory Budgeting in Germany. In: Tambouris, E., Macintosh, A., Sæbø, Ø. (Eds). Electronic Participation (IFIP ePart 2012), LNCS # 7444, Springer Verlag: Heidelberg et al, 2012, pp. 97—111
[30] Scholl, H. J.: Involving salient stakeholders: Beyond the technocratic view on change. Action Research, 2(3), 2004, pp. 281-308
[31] Stoker, G.: 'Public Value Management: A New Narrative for Networked Governance American Review of Public Administration 36(1): 41–57 (2006).
[32] UNESCAP. What is Good Governance? United Nations Economic and Social Commission for Asia and the Pacific, http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/ gg/governance.asp, Accessed 13 March 2013
[33] Maria A. Wimmer. Ontology for an e-participation virtual resource centre. In Janowski, Tomasz and Pardo, Theresa A. ICEGOV 2007, Macao, Proceedings of the 1st International Conference on Theory and Practice of Electronic Governance, ACM Press: New York, 2007, pp. 89 - 98