

# Case Studies of Digital Participatory Budgeting in Latin America - Models for Citizen Engagement

Ricardo Matheus  
University of São Paulo  
Araújo Street, 124. São  
Paulo – SP – Brazil  
+55 11 7227 7521

ricardomatheus  
@gmail.com

Manuella M Ribeiro  
Fundação Getúlio Vargas  
Araújo Street, 124. São  
Paulo – SP – Brazil  
+55 11 7633 1678

maiamanuella  
@gmail.com

José Carlos Vaz  
University of São Paulo  
Araújo Street, 124. São  
Paulo – SP – Brazil  
+55 11 2174 6800

vaz  
@usp.br

Cesar A de Souza  
University of São Paulo  
Araújo Street, 124. São  
Paulo – SP – Brazil  
+55 11 30915892

calesou  
@usp.br

## ABSTRACT

This article presents the study of the relationship between information and communication technologies (ICTs) and local governance in Latin America, mainly using the internet for participatory processes, such as the experiences of Digital Participatory Budget (DPB), purposing the direct participation of citizens in setting priorities in public investment. The methodology used was the literature research on key concepts, followed by the discussion of the relationship between local governance and citizen participation and the presentation of experiences that produced findings on the impacts of the use of ICTs in participatory processes. Four Brazilian cases (Porto Alegre, Ipatinga, Belo Horizonte and Recife), one Peruvian (Miraflores) and one from Argentina (BellaVista) are presented and related challenges to local governance in identifying their real capabilities of building a new relationship between government policy and society in Latin American regions is discussed. Through the use of the Internet, these participatory government budgets can increase citizen participation and allow thousands of people deciding the allocation of public investment. This research considers that the use of ICTs, especially the Internet, can be a promoter of citizenship and citizen participation. However, this promotion may be limited by the condition of access to these technologies and the depth and quality of information available to citizens that would undermine the enjoyment of the rights of citizens.

## Categories and Subject Descriptors

J.1 [Computer Applications]: Administrative Data Processing – Government

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

ICEGOV2010, October 25-28, 2010, Beijing, China

Copyright 2010 ACM 978-1-4503-0058-2/10/10... \$10.00

## General Terms

Management, Theory

## Keywords

Digital Participatory Budgeting, Citizen Engagement, Latin America, Electronic Governance

## 1. INTRODUCTION

Recently, several experiences of participatory processes have been taken by local governments in the world. Latin America was one of the regions with relevant number of experiences. The Brazilian city of Porto Alegre is considered a milestone for the national and international recognition of the program and its dissemination. Currently some of municipalities are going beyond the traditional processes of participation such as the Participatory Budget (PB) and start using information and communication technologies (ICTs) as the internet in these local participatory processes, called Digital Participatory Budgeting (DPB).

This phenomenon is closely connected the concept of governance, the concept of electronic government which are under construction because the newly of the subject and area study [12][13]. This means that no concept is widely accepted or rejected. There are differences between the limits of these concepts and some authors have called for electronic governance will be for others electronic government and vice-versa. Regardless of the theoretical discussions that are underway, the electronic government and electronic governance has been seen as a tool with many possibilities to support changes in government and even the transformation of society itself.

This paper aims to study the concepts of electronic governance (e-governance), electronic government (e-government) and the bearing with citizen participation in Latin America through the use of ICTs. Six Argentinean, Brazilian and Peruvian municipalities will be presented and related challenges of local governance to identify their real capabilities of building a new relationship between government policy and society in Brazil and other countries will be discussed. These experiences in local governments using the internet aims to strengthen the citizen opportunity to participate directly in the deliberations about the local budget, may increasing citizen participation and allowing thousands of people deciding the allocation of public investment.

## 2. RESEARCH OBJECTIVES AND THEORETICAL FRAMEWORK

The objective of this research is to study the concepts of electronic governance, electronic government and information and communication technologies and the bearing with the citizen participation and present experiences of using the Internet in Digital Participatory Budgets in Argentinean, Brazilian and Peruvian cities. Furthermore, it was necessary setup a theoretical framework for several concepts used in this paper, mainly because the newness of the subject of study, DPB, and the rivalry between some authors in several concepts used to construct the paper. The concepts used are presented below, divided in subtitles.

### 2.1 The Citizens Rights

This research considers the use of the Internet in the DPB as a way of promoting citizens' rights, considering 6 types of citizens' rights on the internet [18]: The first is about the right to information of particular interest. It refers to providing information on the Administration of both general and individual, and strictly linked to transparency. The second one is the right to public services. It refers to activities that facilitate access to public services, for example, the provision of information for access to public services. The third right is about the citizen owning time, referring in access to services offered by the government to reduce "time spent by citizens on travel arrangements and to use public services, applications of information technology can expand access to the right to enjoy yourself with free time. The fourth right is the right to social control of the government, directly linked to the promotion of transparency, to monitor the formulation of policies and initiatives of government by citizens and their organizations. Creates conditions for the establishment of relations of trust between rulers and ruled and gave legitimacy to the actions of the latter. On the other hand, requires the existence of mechanisms of accountability of government actions. The fifth one is the right to participation in public management. It refers to the possibility of participation and interaction of citizens with the decisions of government. The sixth, the right to be heard is about the existence of channels that receive suggestions, questions and complaints, among other issues the public, but does not necessarily imply participation in the decisions.

The DPB cases found in this research promote the citizens right of social control of the government, in Porto Alegre, the citizen right to be heard, by the municipality of Ipatinga and right to participation in public management within the cities of Belo Horizonte, Bella Vista, Miraflores and Recife. These will be clarified above, within the discussion of these cases.

### 2.2 Conceptualizing Electronic Government

Electronic government is seen largely as the government's relationship with the company regarding the provision of services via electronic tools, primarily for the use of the Internet, the intensive application of information technology in the process of services and relationship of governments to citizens for electronic brokerage, continuously and remotely. That is, electronic government is often taken by a side whose focus is more on providing information than in an interaction between government and society capable of influencing a decision or action of any other state. The use of ICTs is currently widely discussed because of the proportionate changes from the Reform of the State. The

development of a concept of electronic government permeates the wider exposure settings until you reach a more specific definition. However, the advance existing concepts may cover less extensive as used by Mora [11], who defined electronic government as the use of information technology in its various State hues. Ferrer et al. [5] point the electronic government is the set of services and access to information that the government offers various sectors of civil society, by electronic means.

### 2.3 Conceptualizing Governance and Electronic Governance

The concept of electronic governance goes beyond electronic services delivery and technological improvements in public administrations such as several authors say for electronic government and electronic governance. This paper believes electronic governance extends to a broader issue, which concerns the relationship between citizens and government body in the current context of democratization. Governance has several implications [14][17], being understood as the State capacity to implement, efficiently and effectively, the decisions taken. So, the concept of governance refers to decision making processes and government action, and its relationship with citizens, based on control and accountability, transparency of data and information and participation in decision-making both in the formulation, monitoring phases of public policies [4].

Electronic governance in turn, also reflects a wide character with respect to the conceptual delimitation. There are also lines of thought that remain in a more open concept, as electronic governance can be understood as the application of IT resources in public administration and policy of such organizations [6]. The vision of Diniz [4] may be transferred to electronic governance and take the following line of thought: electronic governance is the ability of government action, through the use of ICTs for the implementation of policies with the participation of citizens.

Already governance would be extending this action to the sphere of participation. That is, electronic governance is a character that Vale [17] called the development of an electronic government: "As the size emphasized the civic and political sense of the electronic government, electronic governance has been identified as the most advanced stage of the electronic government". Currently, UNESCO uses three modes of action to illustrate electronic governance: information to citizens, improvement in service delivery and increased citizen participation. That is, the innovative character and central to the governance based electronics and is addressed as is the main mechanisms for increasing participation.

### 2.4 Local Electronic Governance

Since the 80's, several factors in global society, economy and policy, had produced abrupt changes in the reality of states and municipalities in all Latin American countries. These impacts called for austerity policies implementation, including deregulation and privatization, the withdrawal of the state's economic sphere, reducing the possibilities of state intervention and increased dependence on public sector of the decisions taken by private economic agents [1]. This has meant that those cases had real impact in the management of the city, which may endanger the governance, but can also create new chances and

opportunities for development and public management and local governments began to move to face this new challenge of improving municipal management through the use of local governance, such as the Participatory Budgeting in 1989.

Furthermore, some changes also occurred in technological environments, bringing electronic government. However, the use of ICTs just to improve efficiency in public services delivery was not enough and several experiences in the 90's and 2000's had appeared using ICTs to also improve social control, accountability, transparency and citizen participation in public policy decisions. Some authors purposed that the Internet could be a forum for discussion and creation of an environment for promoting new models for networking and social policies and new forms of democratic participation, and improving services, with more focus on the citizen [18]. Thus we have three solutions to the problems in using internet to delivery services, promoting social control, transparency and public participation in public policy decisions [6]: i) Points of public access for the poorest people, providing digital exclusion that this country has, ii) Campaigns for the teaching of digital language, fostering citizenship and culture of virtual electronic participation and iii) Supporting applications for citizenship to keep real political organizations, the population will eventually cease to participate in decision making processes.

## 2.5 Citizen Participation and Electronic Democracy

Citizen participation requires a distribution of power among all members of a community. The promotion of civil society participation in the processes of definition, implementation and evaluation of public policies is an alternative to strengthening the process of governance and the legitimacy of democratic regimes in countries. This is a transformation of the model of governance characterized by the abandonment of the concept of citizenship based on passive duties, submissive to the government, back to a concept of active citizenship, centered in the exercise of powers and responsibilities.

This model brings great benefits to the effectiveness of government that can identify the problems and also the strategy of conflict resolution in the creation of a consensus needed to implement the decisions. The involvement of civil society as a key player in the government promotes the legitimacy of the democratic system [16]. The participation of citizens in decision-making close the link between political decisions and the preferences citizens, contributing to the development of more efficient decisions and policies, strengthening the administration and deal with social issues and promoting public confidence in government.

It is important to notice that some of Latin American countries had, and several still having, a state structured in authoritarian design. In opposition to developed countries, participatory processes are not the rule, but the exception in those countries. Regions have been lived in political structures of patronage and clientelism [8]. The various concepts, linked to political projects, are at the heart of conflict and control the formulation of public policies by civil society and various forms of resistance that the state offers. Therefore the participation of civil society faces strong opposition within the state structures, in addition to the

internal clashes in the civil society, for various projects, ideas and interests.

So, the formation of a common idea of collective interest of the hegemonic construction is an essential point and of a difficult learning. As citizen participation in local government assumes power distribution to all members of a community, it creates a political problem because state and society have conflicting goals, and there are degrees of subordination to the state, very different among members of the community [15].

In the specific case of Brazil, the Constitution of 1988, known as "the citizen's constitution", has in its arts. 182 and 183, the establishment of general guidelines for urban policy and other provisions, regulated by the City Statute, the Federal Law 10257 of 10/07/2001. This law has, among other management tools, with collegiate bodies, municipal councils of public policies and especially with reference to the PB through discussions, consultations and public hearings. There are successful in seeking the extension of citizen participation through the Councils of Citizen Participation and Local Budgets. They have been somewhat effective, considering the difficulties already raised when dealing with society's participation in decisions of public policy, as experienced in PBs of the cities of Belo Horizonte, Porto Alegre, Ipatinga, besides about a hundred other cities [10].

## 3. METHODOLOGY

The methodology used in this paper was literature research on key concepts, discussion of the relationship between local governance and citizen participation and presentation of cases studies in which the impacts of the use of ICTs in participatory processes of local governments could be studied. We conducted an exploratory study in Latin America and found six cases of use of ICTs in participatory processes of Participatory Budgeting. They were from three different countries; Argentina, Brazil and Peru. In Argentina we choose the case of Bella Vista to study. In Brazil, they were 4 city cases; Belo Horizonte, Ipatinga, Porto Alegre and Recife. The Peruvian case was Miraflores. These case studies are related to experiments conducted under a project carried out by Network Logolink called "Electronic Local Governance: Latin American Perspectives" and coordinated by the Instituto Pólis, in São Paulo-Brazil. Through the use of the Internet, these DPBs can increase citizen participation and allow thousands of people deciding the allocation of public investment. Furthermore, were made a related challenge of local governance to identify their real capabilities of building a new relationship between government policy and society in Latin American regions, through the study of the municipal cases of DPB.

## 4. THE LATIN AMERICAN EXPERIENCES

### 4.1 Argentinean Experience

#### 4.1.1 Bella Vista

The city of Bella Vista conducted the PB for the first time in 2006 with an operating plan in 2007 that the Internet would be used for all processes on the day of the participatory budget vote. However due to technical and methodological problems, the use of the Internet was not done in 2007. Thus, the first experience of DPB was performed through the Internet between 3 and 15 March 2008 for the choice of projects with a limit of 100,000 (one hundred

thousand) pesos, where it was the limit allowed the execution of a project or the sum of several projects the most votes.

The selected works were executed in 2009. Thus, seven projects were made available for online voting, which were not chosen in the face of PBs years 2006 and 2007. At the time of registration was offered a password to access the voting system on the Internet. They could vote online citizens over 14 years, during 12 days, between 3 and 15 March 2008. Every citizen could vote on any computer with internet access in only one of seven projects with the password given at registration. The City of Bella Vista has the DPB and a possibility of remote voting, without the need to move, thus increasing the chances to participate in decisions of the development and growth of the city.

## 4.2 Brazilian Experiences

### 4.2.1 Porto Alegre

Experience of PB in Porto Alegre started in 1989, and it is considered a milestone for the national and international recognition of the program and the dissemination of the PB. The Internet is used as an auxiliary tool of the PB providing general information on the PB of the municipality. Furthermore, to disclose information referents the Participatory Budget, the Mayor of Porto Alegre using the Internet as a tool to provide information on the implementation and progress of works and services performed through the Participatory Budget since 1990. The "Monitoring of Works and Services of the Participative Budget" will monitor the implementation and progress of works and services determined by the population. You can perform four different types of queries: the number of demand, a year and local body of the work or service, by region, agency and municipal year by subject matter, and the Year of Porto Alegre site cannot be assessed without consider the mobilization of civil society around the Participatory Budget. Since there is a strong tradition and a participatory leadership committed to results, is interesting not only the monitoring done through the Internet, but also extends this possibility to be done both by delegates and leaders in the Participative Budget as any citizen.

### 4.2.2 Ipatinga

The participatory budget in the city of Ipatinga began in 1989 and changed over the years, becoming an important area of public debate about the municipal budget for infrastructure development project investments. In 2003, U.S. \$ 1.2 million were allocated for the Participatory Budget for development projects in their districts and almost \$ 12 million for development projects of long-term embedded in four years.

The total amount allocated this year was almost \$ 13 million, which means more than 13.5% of the total budget of the municipality for 2004. From 2001 it was incorporated as an indication of CP demands on the Internet. Budget Interactive called before, is now called the People's Budget Expanded (OPA). All citizens with residence in Ipatinga and people over 16 years registered on the site may indicate priorities for the OPA. For people without Internet access, computers were available in public places the city and supported by local authority staff were helping people, explaining how to use the site to indicate their priorities for the Participatory Budget.

### 4.2.3 Recife

The DPB of Recife uses internet such as a complementary tool to vote since 2007. The Internet is part of traditional PB (just the phases done with the physical presence of the citizens), which is held annually and allows vote in the 10 projects already prioritized in PB presence in micro-regions of the municipality, and all shares voted by Internet and electronic voting machines in accredited regional plenary.

The votes cast by the Internet are added to the vote of the plenary and voting machines. In 2008, the citizen can choose one of 180 shares voted on the 18 micro-regions, having the opportunity to change the order of priorities. They can also vote for one of three priorities already established in each of the seven plenary sessions, or can vote for up to seven priorities, the maximum one vote per issue. First, the shares are voted. Every citizen can vote for up to an action by micro-region. Finally, they can vote in the thematic priorities as women, human rights and culture.

The citizens had three opportunities to participate in the choice of thematic priorities, in PB presence in electronic voting machines and ultimately the Internet, thus ensuring one vote per citizen. To vote over the Internet had to register with the following information: number of RG (Brazilian Citizen Identification); CPF number (Brazilian Financial Citizen Identification) and address. The voting period for the Internet is 15 days, and occurred following completion of the plenary and voting by electronic ballot. In 2008 22,856 people voted via the Internet, approximately 25% of participants in this cycle of PB.

### 4.2.4 Belo Horizonte

The DPB is an experience of popular participation through the Internet, first held in 2006 in the city of Belo Horizonte. Any citizen with an election of council could vote on certain previously selected projects by the Mayor, in a voting site developed by the computer company of the municipality, PRODABEL. It was decided that the division would remain in the city's 9 Regional Administrations, totaling 9 works between the 36 works offered for the city, and 4 per Regional. These works were chosen for the regional infrastructure that would be supported by the Commission for Monitoring and Surveillance of DPB (COMFORÇAS). It was also decided that the whole vote would be held solely by the Internet and work more for each vote would be selected for the Regional round of the DPB 2007/2008, totaling 9 works between the 36 works offered for the city, and 4 per Regional. The value of each work would be up to R \$ 2,250,000.00 – around 1,3 million dollars. The total resources for the DPB was R \$ 20,250,000.00 – around 12 million dollars. The period available for voting on the website of DPB was November 1 to December 12, 2006.

It was decided to use the title of the number of voters to have been the most secure to ensure the smoothness of the process, preventing, for example, more than one vote per piece. They can also vote for one of three priorities already established in each of the seven thematic sessions, or may vote for up to 7 priorities at most one per topic. To vote via the Internet was not necessary to have voted in the plenary or the electronic ballot box and register with the following information: number of citizen identification number (RG); Fiscal identification number (CPF) and their address. First, the shares are voted. Every citizen can vote for up to an action by micro-region. Finally, you can vote in priorities

such as women, human rights and culture. The voting period for the Internet is 15 days. It occurs after the completion of the sessions and electronic voting urn. In 2008 voted by Internet 22,856 people, approximately 25% of participants in this cycle of PB.

## 4.3 Peruvian Experience

### 4.3.1 Miraflores

Miraflores is a satellite city of the capital Lima. It has a project called "Participation Vecinal" which is running the program Participatory Budget Digital. It provides citizens the opportunity to participate in selecting a portion of the works to be constructed by the municipality the following year. In the year 2008 was invested 26,500,000.00 in Peruvian currency, soles. This year 15,000,000.00 soles were designed for 12 projects, from improving infrastructure to social projects. The website publishes the results and information about the election. There are featured statistics on the winning projects and information about the 14 delegates elected in their respective regions that divide the city. There is also the election of a monitoring committee, a sort of supervisory board and works, consisting of three persons.

## 5. RESULTS

### 5.1 Electronic Governance in Latin America and Citizen Participation

Talking about electronic governance in Brazil is somewhat troubled. If on the one hand we have a society that due to social and cultural conditions is held outside of technology and the lack of infrastructure and services for those citizens who cannot pay, we have a country in some areas that combine technological feasibility, resources and skilled workers to provide services with deep social inequality to the power of social movements and civil society organizations.

It is important to emphasize that citizens are promoters of rights as the right to information, public service, its own time, to be heard by the government, the social control of government and participation in public management [18]. The first three duties are related to performance of public services and access to individual rights. The last three rights mentioned are related to the exercise of collective rights, and this is where electronic governance can potentially promote the expansion of the rights of citizens in public management. We must emphasize that the field of electronic governance is still an object in dispute. However, others argue that electronic governance is a tool that can move public decision-making towards a more participatory scenario [18].

Citizen participation is indispensable to a good local manager to produce public policies consistent with the reality of the population. Online public consultation, deliberation and other online tools can be used for popular participation in the Internet increases, however, as noted above, there must be applications that make these decisions that can influence the outcome. This is one of the challenges of locations worldwide, including Europe, where studies suggest various experiences of success but of failure to decisions taken in this Scope of electronic local governance [6].

That is, the citizen participation will be as key as the investment in technology infrastructure for this model. It should be clear, for

example, that investments made in electronic governance will only be valid and for citizens as a whole if the government makes great efforts to make available to the population of free access points and training people in efficient use of common new technologies. I.e., it is also necessary political will to implement this model of governance. Even in Europe, municipalities have found problems to reduce poverty and promote community participation in decision making of the neighborhood [6]. As shown in this article, there are several possibilities for local governments use the information and communication technologies in order to complement existing efforts to create a government more democratic and efficient [6].

### 5.2 Use of ICTs in Digital Participatory Budgeting in Latin America

The cases selected presented the use of ICTs in participatory budgeting in the following occasions: to monitor the participatory budget; to collect the proposals would be taken for voting in participatory budgeting and participatory budgeting vote. The monitoring of projects undertaken by the PB can be found in the city of Porto Alegre, Brazil.

**Table 1. Use of ICTs in processes of Participatory Budgeting**

	Custom queries for monitoring the Participatory Budget	Use the Internet to collect proposals for the Participatory Budget	Use the Internet to vote on Participatory Budgeting
Local	Ipatinga	Porto Alegre	Bella Vista Recife Belo Horizonte Miraflores
Featured	Delivering the progress of the works chosen for the Participatory Budget	Public debate in the municipal budget to developing the infrastructure of the city	Public debate in the municipal budget to developing the infrastructure of the city
Organization of governments and portals	Inside the site of the municipality	Inside the site of the municipality	Inside the site of the municipality
Tendencies	Building a Portal for control of works and services of the PB	Using ICTs to send proposals of OP.	Using ICTs for determination of DPB (Separate procedure to the traditional PB)

MATHEUS et al [10]

Using the Internet to the monitoring done by the citizen to the PB is really important for the promotion of social control. Besides allowing search the database of the site, monitoring the PB

allowed the monitoring of citizens through information sent by email to the government in the PB site, bringing more innovation to the process: social control through the use of ICTs, that not only expands the number of people who will do the tracking and monitoring of works, since local citizens, representatives of PB and community leaders are monitoring in person, and disseminate information via the Internet so that everyone has access to progress of the PB.

Only the city of Ipatinga was using the Internet to gather the proposal to be voted on participatory budgeting, it is, decisions are still taken by the popular assemblies (Porto Alegre, Recife, Bella Vista and Miraflores) or by the city hall (Belo Horizonte).

## 6. FINAL CONSIDERATIONS

Just like the concept of governance, the issue of e- governance is also an issue under construction. However in the context of state reform and the participation of all actors at the local level you can think of a structure of governance that is based on citizen participation. From this understanding, the use of ICTs becomes for some the solution of all problems to increase citizen participation. Accordingly, electronic local governance is a key project for achieving a more participatory government: time to participate in a process presence. However not many studies on the quality of discussion and decision of deliberations conducted by electronic means as the Internet. Future studies would be interesting to study how altering the structure of participants in decision making of these main types of PB and look deep into the effect that the rise in citizen participation technologies.

## 7. REFERENCES

- [1] Capella, Ana Cláudia Niedhart. Less government and more governance? Rethinking the logic of state action. *6th Meeting of the Association of Political Science (ABCP)*, July 29 to August 1, 2008.
- [2] Campos, Anna Maria. Accountability: When can we translate it to Portuguese. *Revista de Administração Pública*, Rio de Janeiro, v. 24, n. 2, p. 30-50, fev./abr. 1990.
- [3] Dagnino, Evelina. Civil society, participation and citizenship: What are we talking about? 2004.
- [4] Diniz, Eli.. Governance, Democracy and State Reform: The Challenges of Building a New Order in Brazil in 90 Years. *Data*, vol. 38, No. 3. 1996.
- [5] Ferrer, F., Santos, P., Queiroga, A.. E-government: Electronic Government in Brazil. *Saraiva Press*. ISBN: 8502047655. 2004.
- [6] Frey, Klaus. Electronic Governance: Experiences of European cities and some lessons for developing countries. *I Electronic Conference of the Virtual Centre for Policy Studies (CEVEP)*. 2000.
- [7] Frey, K.. Eletronic urban governance and digital inclusion: experience em European and Brazilian cities. *New Society*, Venezuela, v. 196, p. 109-124, 2005.
- [8] Frick, María M.. Electronic Participation Towards Open Government in Latin America. *E-democracy Centre -- Université de Genève -- Faculte de Droit*, 40, bd Du Pont-D'Arve CH-1211 Genève 4 -- Switzerland. 2005.
- [9] Fugini, M.G., Maggiolini, P., Pagamaci, B. Why is it difficult to make a true "electronic government". *Production Journal*, v. 15, n° 3, p. 303-309, Sept./Dec. 2005.
- [10] Matheus, R. ; Ribeiro, M. M. . Models for Citizen engagement in Latin American Case studies of Public Digital Budgeting. *In: III International Conference on Electronic Governance*, 2009.
- [11] Mora, Mônica. Electronic government and fiscal aspects: the Brazilian experience. Text for discussion n° 1089. *Institute of Applied Economic Research Press (IPEA)*. 2005.
- [12] Peixoto, T.. e-Participatory Budgeting: e-Democracy from theory to success?. *E-democracy Center - e-Working Papers* 2008.
- [13][18] Peixoto, T.. Beyond Theory: e-Participatory Budgeting and its Promises for eParticipation. *European Journal of ePractice* - [www.epracticejournal.eu](http://www.epracticejournal.eu) 1 N° 7 - March 2009 - ISSN: 1988-625X.
- [14] Pereira, José Matias. State Reform and Transparency: Strategies for Control of Corruption in Brazil. *VII International Congress of CLAD on State Reform and Public Administration*, Lisbon, Portugal, 8 to 11 October 2002.
- [15] Pinho, José antonio Gomes de. Investigating e-government portals of states in Brazil: a lot of technology, poor democracy. *Public Administration Journal* – Rio de Janeiro 42(3):471-93, May/June. 2008.
- [16] Rothberg, Danilo. For a research agenda on electronic democracy. *Public Opinion [online]*., v. 14, n. 1, pp. 149-172. ISSN 0104-6276. 2008.
- [17] Vale, Paulo H. M. *Electronic government in the dimensions and capacity-management, e-participation and e-transparent: identifying aspects of electronic governance in 64 municipalities in the metropolitan area of Belo Horizonte*. PhD Thesis. Belo Horizonte: Fundação João Pinheiro. 2006.
- [18] Vaz, J.C. Prospects and challenges for the expansion of electronic government in the Brazilian municipalities. In: *International Seminar on Electronic Government and Local Government*. Brasília, 2003.