ABSTRACT

This study advances the development of a transparency model for government communicators. Previous research conducted by Fairbanks et al. (2007) used in-depth interviews of federal public information officers to develop a three-dimensional model composed of “valuing transparency,” “organizational support,” “communication practices” and “provision of resources.” This study develops a quantitative instrument to confirm the dimensions of the model and to predict which of the dimensions best predicts perceived governmental transparency at the city level.

All three parts of the model were supported by the finding. This study also shows that valuing transparency has very little effect on predicting whether an organization is going to be perceived as being transparent. Organizational support was also evident and that the communicator has a place at the decision-making table. Although having sufficient resources to practice transparency was not as strong a predictor of perceptions of organizational transparency, it appeared to be the biggest obstacle.

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. Knowledge will forever govern ignorance, and a people who mean to be their own Governors, must arm themselves with the power which knowledge gives.
—James Madison

This famous quote from James Madison articulates the popular belief that a democracy cannot survive without its citizens having access to information. In democracies, citizen trust in government is necessary for political leaders to make binding decisions and to commit resources to attain societal goals (Gamson, 1968). However, Americans are losing trust in the government. In the late 1950's and early 1960's, 75% of the American public believed that you could always or almost always trust the lawmakers and agencies in Washington to do what is right. According to the 10th edition of the Edelman Trust Barometer, this past year has been unlike any other. Only 37% of Americans trust the American Government to do what is right according to the 2014 Edelman Trust Barometer.
Increasing transparency has been heralded by several authors as one way to increase trust (see Edelman Trust Barometer, 2007; Golin, 2004; Public Relations Coalition, 2003; Savage, 2005). In a study of employees, Rawlins (2008) found that as the perception of organizational transparency increased, so did trust in the organization. If transparency plays a major role in an organization’s ability to obtain and maintain public trust, a profession that wants to be trusted by its publics needs to be transparent (Bunting, 2004).

Transparency in government operations is also getting increased scrutiny. Although within a relatively new subfield of study in public affairs, academic books and articles are helping to build a body of knowledge that defines, prescribes, and measures governmental transparency (see Fairbanks, Plowman & Rawlins, 2007; Florini, 2007; Hood & Heald 2006; Piotrowski, 2007; Roberts, 2006).

This article seeks to add to that body of knowledge by quantitatively testing a model of governmental transparency developed by Fairbanks et al. (2007). To test the concurrent and predictive validity of the instrument, the results will be analyzed against another quantitative transparency measure developed by Rawlins (2009). Finally, this paper will apply these transparency measures at the city government level, which has been researched less frequently than the state and national levels.

LITERATURE REVIEW

Purposeful and concise communication between government and its citizens is a moral obligation as well as a pragmatic practice that originates from the very principles of democracy (Viteritti, 1997).

Governmental transparency has been defined by Finel and Lord (1999) as the following:

*Transparency comprises the legal, political, and institutional structures that make information about the internal characteristics of a government and society available to actors both inside and outside the domestic political system. Transparency is increased by any mechanism that leads to the public disclosure of information, whether a free press, open government, hearings, or the existence of nongovernmental organizations with an incentive to release objective information about the government.*

(p. 316)

According to Piotrowski (2007), “Governmental transparency allows the public to develop a more accurate picture of what is happening inside a government” (p. 6). This allows publics to evaluate the performance of governmental agencies, hold them accountable, and answer concerns pertaining to management of public resources. Since people are affected by decisions made by governmental bodies, they have a right to know how the decisions were made. Balkin (1999) identified three primary purposes for transparency: providing essential information to publics, increasing public
participation, and holding organizations accountable. These three purposes are reflected in Cotterrell’s (1999) definition of transparency: “transparency is the availability of information on matters of public concern, the ability of citizens to participate in political decision, and the accountability of government to public opinion or legal processes” (p. 414).

Rawlins (2009) developed a measurement tool that allows stakeholders to evaluate the transparency of an organization. A factor analysis of the questions used in the instruments resulted in a four-dimensional model of transparency that is remarkably similar to previous definitions. The four dimensions were participation, substantial information, accountability, and secrecy (a reverse item construct that represents the opposite of openness).

The responsibility for sharing information that allows for more transparent governance falls squarely on the shoulders of public affairs, public information, and communications officials in governmental agencies. These communicators can be found in all governmental organizations at the national, state, and local levels. They have the obligation to keep publics informed, increase awareness of public policies and how they were created, facilitate feedback and two-way communication with publics, and use that information to improve agency performance and accountability (Avery et al. 1995; Garnett, 1997).

J. Arthur Heise (1985) proposed a model for public communication to help government communicate more effectively with the many publics it serves. The model consists of five tenets. First, government officials needed to make publicly available all releasable information, whether it sheds a positive or negative light on the organization. This dissemination needs to be timely and completely accurate. Second, government officials need to communicate with their publics through the mass media and other channels to reach publics. Third, rather than continue to rely on a small group of politically active organizations and individuals for partial and biased feedback, government communicators need to develop better channels to gather perspectives and feedback from all of their constituent groups. Fourth, senior public officials should legitimately employ public resources and communication channels for the purpose of policy making, without bias toward electoral politics. Fifth, the implementation of the public communication approach needs to be the responsibility of top administrators who hold communicators responsible for the implementation of the agency’s communications policy.

While developing a transparency model for government communications, Fairbanks et al. (2007) interviewed several federal government communicators and found that the majority recognized the need for and benefits of transparency and believed that it is essential to a functioning democracy. Although many government communicators valued transparency, the model posits that there were other factors that influence the practice, namely the communication practices of the agency, the organizational support for transparency, and whether there are adequate resources. Many communicators expressed concern about how to determine how much information to release. There
was a fear of releasing too much information and that it was often safer to be more conservative with messages, unless there was strong organizational support for transparency. At the same time, transparency requires significant resources. Upkeep of Web pages, responding to requests, and working with media requires additional time, personnel and money.

There is very little research on transparency at the city or municipal level. One exception, a study by Piotrowski and Van Ryzin (2007), found that citizens expect local governments to be transparent about their finances (budgets, bids, contracts, campaigns), public safety (crimes, health inspections, sex offenders), principles (knowing what the government is doing, public records and documents) and governance (open and not secretive, fighting corruption).

The existing literature on government transparency provides a robust definition that includes sharing substantial and useful information, citizen involvement, being accountable, and open to public scrutiny. Citizens expect their governments to be transparent about fiscal, safety, and policy issues that affect them. Government communicators value transparency, but their practice is affected by perceived organizational support, availability of communication tools, and provisions of resources.

RESEARCH QUESTIONS

The Fairbanks et al. (2007) model provides a good framework to evaluate government transparency efforts. However, it was developed through exploratory research using qualitative interviews. The model has not been tested with a quantitative method to confirm the impact of these dimensions on a more representative sample.

This study created such an instrument and tested its concurrent validity with the dimensions of the Rawlins (2009) stakeholder measurement tool. To that end, the following four research questions and one hypothesis hope to be answered:

RQ1: Can the three-dimensional model be tested quantitatively?

RQ2: How do city communicators evaluate themselves on each of the four parts of the three-dimensional model for transparency in government communication?

- Part 1: Valuing Transparency
- Part 2: Organizational Support
- Part 3: Communication Practices
- Part 4: Provision of Resources.

RQ3: How do city communicators evaluate their cities’ transparency efforts according to Rawlins’ test for transparency?

RQ4: Which of the four parts of the three-dimensional model best predicts the overall score for transparency?
H1: The higher cities score on the overall three-dimensional model for transparency section of the survey, the higher they will score on Rawlins’ test for transparency.

METHOD

An invitation to complete an online survey was emailed to the public information officers of the largest cities in the United States. The survey has become a very widely used and acknowledged tool in the research world, and is considered to be one of the best and most accurate methods of research for determining information about populations (Rea & Parker, 1997). According to the 2000 US Census, there are 601 American cities with a population of 50,000 or more. The addresses were compiled from city websites and phone calls to city offices. Online research of city websites and telephone calls to city offices were used to get accurate email addresses for communications officers in each city, and the email invitation was sent to all 601 cities. Each city had a different name for its public information officer, so the survey was sent to the individual in each city office who oversees communications, public relations, public affairs, and/or media relations for the city and/or the mayor’s office. For the remainder of the study, this individual will be referred to as the Public Information Officer.

The online survey was designed using Qualtrics, a Web-based survey software. The survey was composed of demographic and descriptive questions pertaining to the communicator and the city. To test the four parts of the Fairbanks et al. (2007) model, 21 statements were created (6 for value transparency, 4 for communication practices, 6 for organizational support and 3 for provision of resources) with 7-point Likert-type responses from Very Strongly Disagree to Very Strongly Agree (see Figure 2 for the list of statements). The Rawlins (2009) transparency efforts survey was reduced from 36 questions to 10 questions using statements that scored the strongest in each of the four dimensions (see Figure 3). Additionally, the Rawlins test was modified to fit the participants of this study. Since the Rawlins test was developed to measure transparency of organizations by employees, the questions were modified to allow the public affairs officers to evaluate their cities’ efforts from an administrator’s point of view.

After several follow-up emails and phone calls, 295 participants completed the survey. Fifty-three individuals specifically opted out of taking the survey (8.8%). The survey did not require every question to be answered, and therefore, the total number of answers for each question varied. Of the 295 respondents, 247 completed the entire survey. The 247 completed surveys represent a 41% response rate, which is very respectable considering the population (government communication professionals).

As previously stated, all participants came from cities with a population of 50,000 or more. The graph below shows the populations of those that completed the survey.
A large majority of the public information officers (73 percent) reported directly to the mayor or city manager. Of the cities that had a public television station (n=198, 75 percent), nearly all of them broadcast city meetings (n=178, 90 percent). Nearly 97 percent of the cities had a city Website that allowed citizens to reach city officials electronically to ask questions and provide feedback.

RESULTS

RQ1: Can the three-dimensional model be tested quantitatively?
One of the main purposes of the study was to determine if the three-dimensional model can be quantitatively tested by operationalizing the constructs. To answer this question, the statements created to measure the four parts of the Fairbanks three-dimensional model were tested for internal consistency using Cronbach’s alpha. The closer Cronbach’s alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. Churchill (1979) recommended that minimum reliabilities should be .6, which all but one exceed, and the other construct comes as close as possible. The reliability of the constructs were not improved by removing items, therefore the full set of items were used for subsequent analysis. Alphas for each of the constructs were the following: the six statements pertaining to how much the communicator values transparency had an alpha of .76; the four statements on communication practices had an alpha of .59; the six statements pertaining to organizational support had an alpha of .67; and the three statements on provision of resources had an alpha of .76. The alpha for the section that measures transparency from Rawlins’ test was .85. This stronger alpha is expected since that test was previously tested for validity and reliability.

It is recognized that two of the four scores for the parts of the three-dimensional model are below a .70. The Cronbach’s alpha scores are sufficient for an exploratory study but it is recognized that certain items within the survey could be improved for future studies. Overall, this result provides evidence that the three-dimensional model for transparency can be tested quantitatively.
RQ2: How do city communicators evaluate themselves on each of the four parts of the three-dimensional model for transparency in Government communication?

- Part 1: Valuing Transparency
- Part 2: Organizational Support
- Part 3: Communication Practices
- Part 4: Provision of Resources

As Figure 2 indicates, the city public information officers strongly agreed with the statements that assessed their value of transparency. They also evaluated themselves highly on their communication practices that would lead to transparency. The weakest agreement in this construct pertained to effective policy or protocols for disseminating information. This might suggest that there is still some uncertainty about what information should be released. For the most part, the communicators felt the organization acted in ways that support the principle of transparency. However, there seems to be a lesser sense of support from particular individuals and the dominant coalition. Respondents were less sure about city employees’ commitment to transparency, and some still were struggling to gain influence at the top management level.

Not surprisingly, the statements with the lowest agreement related to the provision of resources. About half of the respondents did not feel there was sufficient budget and personnel to practice optimal transparency.

**Figure 2: Responses to statements representing the four parts of the Fairbanks Three-Dimensional Model Value Construct Alpha=.76**

<table>
<thead>
<tr>
<th>Statement</th>
<th>No. of Respondents</th>
<th>Percentage Agree</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency (openness) in government is a vital part of a successful democracy</td>
<td>246</td>
<td>98.4</td>
<td>6.63</td>
<td>.801</td>
</tr>
<tr>
<td>Transparency (openness) in government is a vital part of a successful democracy</td>
<td>246</td>
<td>99.2</td>
<td>6.65</td>
<td>.558</td>
</tr>
<tr>
<td>I regularly try and help others within the organization understand the importance of transparency</td>
<td>245</td>
<td>94.7</td>
<td>6.34</td>
<td>.856</td>
</tr>
<tr>
<td>Transparency and openness is always the best policy with the citizens of my city</td>
<td>245</td>
<td>97.6</td>
<td>6.37</td>
<td>.738</td>
</tr>
<tr>
<td>The city government is transparent and open with its citizens</td>
<td>245</td>
<td>96.4</td>
<td>6.13</td>
<td>.868</td>
</tr>
<tr>
<td>The City management/leadership values transparency</td>
<td>244</td>
<td>95.5</td>
<td>6.18</td>
<td>.859</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
</tbody>
</table>
| **Communication Construct**  
**Alpha=.59** | | | | |
| I do my best to regularly inform the public of important city matters | 245 | 99.6 | 6.62 | .557 |
| I regularly consent to requests for interviews and questions from the news media | 245 | 91.9 | 6.44 | .942 |
| There is an effective policy/protocol to follow within the city structure to disseminate information to the public | 245 | 87.8 | 5.78 | 1.211 |
| I regularly send news and city information (i.e. press releases) to local media outlets | 245 | 96.0 | 6.52 | .842 |
| **Support Construct**  
**Alpha=.67** | | | | |
| The mayor/or city executive regularly consents to requests for interviews and questions from the news media | 244 | 95.3 | 6.38 | .911 |
| The city provides information to its citizens in a way that is readily and easily available | 245 | 97.6 | 6.27 | .831 |
| The city regularly holds meetings where the public is invited to participate and give feedback and suggestions | 245 | 95.5 | 6.39 | .864 |
| The general feeling and attitude among the city employees is one of openness and trust | 244 | 76.2 | 5.25 | 1.226 |
| I have a respected place at the management table or a place in decision making | 244 | 85.6 | 5.74 | 1.353 |
| Generally speaking this city wants to know how its decisions are affecting its citizens | 242 | 94.7 | 6.13 | .936 |
| **Resources Construct**  
**Alpha=.76** | | | | |
<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The city website is user friendly and easy to navigate</td>
<td>245</td>
<td>82.5</td>
<td>5.47</td>
<td>1.421</td>
</tr>
<tr>
<td>There is adequate staff allocated to communication practices to ensure transparency</td>
<td>243</td>
<td>53.0</td>
<td>4.19</td>
<td>1.814</td>
</tr>
<tr>
<td>There is sufficient funding allocated to communications and transparency in the city budget</td>
<td>244</td>
<td>47.5</td>
<td>4.04</td>
<td>1.759</td>
</tr>
</tbody>
</table>
RQ3: How do city communicators evaluate their cities’ transparency efforts according to Rawlins test for transparency?

Ten questions were used from the Rawlins (2009) test for transparency efforts. The first two questions measured citizen participation, questions 4, 5 and 8 measured sharing useful information, questions 3, 7 and 9 measured accountability, and questions 6 and 10 measured the reversed factor of secrecy. Since the secrecy questions were reversed items (meaning a negative response to these statements was a positive evaluation of transparency), the scores were inverted to work with the means of the other statements. Overall, the public information officers scored their cities with a mean of 5.64 on the 7-point transparency test. The most positive evaluation they gave was of the cities’ efforts to communicate useful information. They were less likely to evaluate the citizen participation factor as high, and two statements regarding accountability (3 and 9) were among the lowest means on the scale.

**Figure 3: Rawlins Transparency Test**

<table>
<thead>
<tr>
<th>Statement</th>
<th>No. of Respondents</th>
<th>Percentage Agree</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The city government takes the time with its citizens to understand who they are and what they need</td>
<td>242</td>
<td>80.6</td>
<td>5.31</td>
<td>1.272</td>
</tr>
<tr>
<td>The city government involves its citizens to help them identify the information they need</td>
<td>242</td>
<td>79.8</td>
<td>5.36</td>
<td>1.249</td>
</tr>
<tr>
<td>The city government presents more than one side of controversial issues</td>
<td>242</td>
<td>69.4</td>
<td>5.13</td>
<td>1.272</td>
</tr>
<tr>
<td>The city government provides information that is relevant to its citizens</td>
<td>241</td>
<td>94.6</td>
<td>6.05</td>
<td>.905</td>
</tr>
<tr>
<td>The city government provides information that is easy for the citizens to understand</td>
<td>242</td>
<td>94.7</td>
<td>5.85</td>
<td>.917</td>
</tr>
<tr>
<td>The city provides only part of the story to its citizens (reversed item)</td>
<td>242</td>
<td>10</td>
<td>2.55</td>
<td>1.369</td>
</tr>
<tr>
<td>The city is open to criticism by its citizens</td>
<td>242</td>
<td>93.1</td>
<td>5.75</td>
<td>1.110</td>
</tr>
<tr>
<td>The city provides accurate information to its citizens</td>
<td>241</td>
<td>98.4</td>
<td>6.43</td>
<td>.750</td>
</tr>
<tr>
<td>The city freely admits when it has made mistakes</td>
<td>243</td>
<td>81.9</td>
<td>5.55</td>
<td>1.244</td>
</tr>
<tr>
<td>The city only discloses information when it is required (reversed item)</td>
<td>242</td>
<td>11.2</td>
<td>2.45</td>
<td>1.583</td>
</tr>
</tbody>
</table>
RQ4: Which of the four parts of the three dimensional model best predicts the overall score for transparency?

A step-wise multiple regression was conducted to answer this research question. The dependent variable was the overall score of the 10 questions used for the Rawlins test for transparency efforts. The scores of the four constructs that measured the Fairbanks three-dimensional model were entered as the independent variables. The step-wise regression analysis built three models. The third model was the strongest, and it consisted of three of the four parts of the three-dimensional model. The final model excluded the construct that measured valuing transparency, because it did not make a significant contribution to predicting the change in variance of the dependent variable. The adjusted $R^2$ was .565, which means that 56.5 percent of the variance in the dependent variable can be explained by the model. The ANOVA found the results statistically significant, $F(3, 219)=97.2, p<.001$.

Figure 4 shows that the strongest predictor of the overall transparency score is organizational support ($B=.58$), followed by provision of resources ($B=.20$), and communication practices ($B=.10$). Valuing transparency has no significant effect on the overall score for transparency.

**Figure 4: Regression Analysis of Fairbanks Model Predicting Overall Transparency**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>SEB</th>
<th>$B$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Support</td>
<td>1.152</td>
<td>0.112</td>
<td>0.576*</td>
</tr>
<tr>
<td>Provision of Resources</td>
<td>0.386</td>
<td>0.097</td>
<td>0.204*</td>
</tr>
<tr>
<td>Communication Practices</td>
<td>0.349</td>
<td>0.16</td>
<td>0.102*</td>
</tr>
</tbody>
</table>

$F(3, 219)=97.2, p<.001$

*Significant at $p<.001$

H1: The higher the city scores on the overall three-dimensional model for transparency score, the higher they will score on Rawlins' test for transparency.

To test this hypothesis, a simple bivariate regression test was run. The test found that there is a positive relationship between the overall score on the three-dimensional model and the overall score for transparency. The regression test was conducted to investigate how well the overall score of the three-dimensional model would predict overall transparency. The results were statistically significant $F(1, 221)=219.3, p<.001$. The adjusted $R^2$ value was .496, indicating that nearly 50% of the variance in overall transparency scores can be explained by the overall score on the three-dimensional model section of the survey. This hypothesis was supported.
DISCUSSION

Much of what Fairbanks et al. (2007) found through qualitative in-depth interviews was supported by the quantitative survey method used in this study. The results of this study provide confirmatory evidence that the factors identified in the three dimensional model (communication practices, organizational support, and adequate resources) also affect government communicators’ perceptions of municipal-level transparency. The study also moves a step closer to developing a quantitative instrument that can measure the four parts of the three dimensional model. Such an instrument will allow for comparative studies of different groups, levels, or agencies for future research.

The study also provides evidence that city public information officers experience many of the same situations as their federal counterparts. Much like the findings in Fairbanks et al. (2007), this study found that city government communicators strongly value transparency and recognize its benefits.

However, this study goes one step further by identifying that valuing transparency has very little effect on predicting whether an organization is going to be perceived as being transparent. Answers to RQ2 showed that public information officers valued transparency but there was weak agreement for effective policy that actually disseminated information that showed transparency was evident. This may be explained by the possibility that valuing transparency is a constant rather than a variable. Everyone ranks the need for transparency highly, therefore this dimension doesn’t discriminate different levels of support.

The regression analysis found organizational support as the strongest coefficient for predicting perceived transparency by city government communicators. Fairbanks et al. (2007) described organizational support as administration understanding the importance of transparency and making sure that is communicated to all staff. Organizational support also means that the communicator has a place at the management and decision-making table. It also means that the communicator has the ability to communicate within the office, and with the rest of the staff so that their objectives can be realized. This means that if the communicator has strong convictions concerning transparency, but does not have the organizational support, he or she will not likely consider the organization to be transparent.

Although having sufficient resources to practice transparency was not as strong a predictor of perceptions of organizational transparency, it appeared to be the biggest obstacle. This was the area where participants were least satisfied. This was true with responses to the Likert scale question, but also became very apparent in the responses to the survey’s only open-ended question. The final question in the survey allowed respondents to comment on their situation. Sixty-five participants opted to leave a comment, and the majority addressed the need for more resources. Here is a sample of their remarks:
• “Unfortunately, during these difficult budget times, governments are no different than their counterparts in the private sector cutting into communications and outreach budgets when those services are most needed and our customers need to be informed more than ever.”

• “I think we do an excellent job of keeping our city transparent with the staff and funding we have but I would still say we are underfunded and staffed. The reason these questions are hard is because communications are a bit of a black hole in that you could always use more funding and staff; there is always something more that could be done, or what you do could be done better.”

• “Our website is our weakness in regards to external communications. The problem is due to lack of staffing, not lack of ability.”

CONCLUSION AND FURTHER RESEARCH

Ultimately, this study sought to determine if a city government adhered to the guidelines established in the three-dimensional model of government communication -- that their level or degree of transparency would increase in communication practices of the agency, the organizational support for transparency, and in providing adequate resources. The study found that there is a strong positive association between perceived transparency and adhering to the three-dimensional model, with particular emphasis on organizational support and sufficient resources. The study therefore provides evidence that adhering to the tenets of the three-dimensional model will help increase perceptions of a more transparent city government.

This study confirmed what previous research has determined: government communicators value transparency, and they recognize its importance in government communications and in society today. However, they face many challenges. It is these challenges that create an even greater need for more focus on research pertaining to government communications. This area of research has been greatly neglected in the past and more research is needed. The three-dimensional model for government communications (Fairbanks et al., 2007) presents a start, but there must be more. Government communicators need models and theories with which to work. This study took a previously created model that was designed through qualitative research by studying federal government communicators, and it applied the model to city government communicators to ascertain if the model could be applied at different levels of government than the original study.

Of course, this study was limited to research of just the public information officers so the results showed their bias towards their own or their organizations’ perceived transparency. Future research could reflect findings from either senior management or outside third parties to better triangulate transparency in government agencies.

Other possibilities for future research are many; there is still relatively little research done on government communications, specifically state and local government
communications. Those surveyed in this study were quick to share challenges and frustrations, while recognizing the importance of transparency. Future studies could continue to address the challenges that limit effective government communications. The Fairbanks et al. (2007) study looked at federal agencies and this study explored the issue of transparency with city communicators. The state-level government entities should also be studied. The quantitative instrument developed in this study would also allow for comparative studies between these levels, different agencies, and different communicator roles.

REFERENCES


Reddick (Ed.), *Handbook of Research on Strategies for Local E-Government Adoption and Implementation* (pp.391-410). Hershey, PA: IGI Global.


