Residents’ Evaluation of Local Portal Site’s Providers in Terms of Credibility

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Abstract: Recently, local governments have begun to outsource information provision to private web companies, so as to use their own local portal sites to disseminate governmental information alongside private sector information. However, this approach involves some issues that must be addressed. First, there has been no attempt to determine the public's views regarding requirements to be met by public information providers. Second, there has been no attempt to clarify how the public evaluates, in terms of business continuity and information reliability, the credibility of private companies to which such information provision is outsourced. The aim of this research is to examine these issues via resident survey analysis.

Keywords: Local Informatization, Local Portal Site, Credibility of Information Provider, Analytic Hierarchy Process, Questionnaire Survey

1. Introduction

With the recent evolution and prevalence of the Internet as the dominant information infrastructure, there exists growing recognition among local governments and private business sector that transmitting local information that relates to the daily lives of residents, as well as to the culture, history and tourist attractions of a region, can promote local revitalization and improve residents’ lives. However, residents are not necessarily able to obtain the information they need from local government websites that transmit information through conventional methods, or from private companies that provide their information on an individual basis. In addition to this, some residents have expressed a desire to have access to communication functions such as local social networking services (SNSs).

We can also see that local governments, because of their urgent need for administrative and fiscal reform, are actively seeking to commercialize projects through various methods or procedures such as the Private Finance Initiative (PFI) or "market testing," and outsource some of their operations. Recently, along with the current trend of introducing the concept of "New Public Management," local governments have been experimenting with providing their public information
via web companies, in order to transmit their information alongside private sector information. In this scenario, public information provision is outsourced to private companies, with the dual aims of administrative cost reduction and local revitalization, while the selected company constructs a local portal site and transmits both public and private sector information as a strategy to attract more viewers and more advertising revenue. In addition, the government hopes that these sites will improve local residents’ access to information closely related to daily life, thereby improving their quality of life (QOL).

However, this trend raises certain issues and questions. First, keeping in mind that information collected and owned by local governments is a public asset, there is an issue regarding the choice of a suitable organization, or “who shall be regarded as the appropriate information provider.” Next, when a private company is recognized as the appropriate information provider, it is not clear how residents will evaluate the credibility of the organization, such as the continuity of its business, and the trustworthiness of the information it provides. Furthermore, it is not yet clear how residents would evaluate the economic value of a service which provides both public information customized to users’ demographic attributes, such as their age and area of residence, and private sector information.

This research study attempts to answer these questions and issues based on responses to a questionnaire. Here, we will report on some of the questionnaire results, with focus on the selection factors pertaining to information providers who provide local public and private sector information via the Internet, along with the factors defining the credibility of those providers.

2. Public Information Transmission as Local Informatization Policy

Informatization in the public sector is generally classified into “administrative informatization” that attempts to increase the efficiency of the administrative organization, and “local informatization” that attempts to improve the QOL of residents through improved services enabled by the utilization and application of information and communication technology (ICT). With the spread of personal computers and open technology, as well as the universalization of home Internet use, new informatization policies have been created that aim to unify administrative informatization and local informatization. The incorporation of electronic applications into various procedures required in central and local governments has been one of the primary goals of the e-Japan strategy since 2001, and this is one of the policies that represent this. Moreover, the enrichment of websites that provide residents with public information is also regarded as a unified policy. According to the Local Information Policy Department of the Ministry of Internal Affairs and Communications’ Local Administration Bureau (2008), all of the 1,811 municipalities have created websites, and of those, 1,579 (87.2%) report accepting opinions and requests on their websites (Data as of April 1, 2008).

Recently, municipalities have also highlighted tourism destinations and local events, to attract out-of-town visitors and to promote local revitalization. Cases of local governments transmitting this type of information from their official websites are becoming more commonplace. Though the main groups responsible for local revitalization are traditionally local residents and organizations such as local companies, shopping districts, nonprofit organizations (NPOs) and residents’ associations, the idea that local governments should take on this task is becoming widespread.

3. The Role of Local Portal Sites in Local Revitalization

Local portal sites that focus on regional matters are web businesses that appeared during the mid-1990s; they aim to be sites that “allow you to find out anything about the region.” They handle overall local sightseeing and business information, including infor-
mation about shops, restaurants, and other local attractions, with the main goal being sharing information within the area and providing regional public information to visitors. Now they are becoming invaluable tools for local revitalization in the information society.

Moreover, lively communication activities by local residents are necessary for local revitalization. The Ministry of Internal Affairs and Communications (2007) cites the “promotion of residents’ participation using information and communication technology (ICT)” as one local informatization policy. The Ministry recommends local social networking services (SNSSs), which have a communication function, as one of the functions to be included in local portal sites. The “New Guidelines for Promotion of ‘e-Local Government,’” issued by Ministry of Internal Affairs and Communications (2007), expects that various groups, such as NPOs, communities and business firms, to be responsible for actively participating in the provision of public service in order to manage local issues through ICT channels.

Under these circumstances, more local governments now seek to introduce portal sites, which provide both public and private sector information with the goal of increasing convenience for local residents and revitalizing the area. According to a recent survey, among valid responses from 571 local governments, 86 (15.1%) local governments had portal sites, and 41 (7.2%) were scheduled to open ones. Furthermore, among 86 local governments who operate portal sites, 29 local governments (33.7%) ran the portals and 32 local governments (37.2%) outsourced the portal’s operations to NPOs or other organizations (Matsushita, 2007). This shows that it has become common practice for local governments to entrust their local portal sites to outside organizations.

4. Local Information Transmission on the Internet

Thus far, public and private sector information has been provided separately, with public information being provided by the government, and private sector information being provided by organizations such as local businesses, chambers of commerce and tourism associations.

However, from the perspective of the residents who seek information, it is seen as more convenient to have public and private sector information combined; furthermore, it is even better if this information is customized and provided according to personal attributes such as area of residence, age group, family structure, and so on. On the other hand, expectations on the part of local governments also exist, such as, “We want to cut administrative costs by outsourcing public information provision to the private sector.” Similarly, private companies might say, “We want to bring in public information as local information to increase added value of the site and make the site more attractive.” Recently, we have seen examples of local governments providing their public information to local portal sites managed by private companies in cities such as Nagano (opened in February 2006), Kawasaki (opened in July 2006), and Itami (opened in January 2008). We expect to see an increasing number of such cases in the near future. These trends are thought to be highly visible because the needs and the demands for such local information are now being met.

From the perspective of fairness and ensuring the credibility of provided information, however, there is room to debate the pros and cons of local governments distributing their public information on the Internet through the private sector. The distribution of public information, however, is only becoming more prevalent without such matters being debated.

5. Verification via Questionnaire in the City of Itami

A questionnaire was completed by residents of Itami, where the private-sector-run local portal site “Itamin” was opened in January 2008. The goal of
this questionnaire was to ascertain how residents felt about their local government having outsourced their public information to the private sector, and that such information was being provided alongside private sector information by private businesses on the Internet. The date of the questionnaire coincided with the actual start day of Itamin (the end of January 2008). The questionnaire and return envelope were inserted in the February 1, 2008 issue of an Itami information magazine and distributed to all households with the request to return the questionnaire by mail. The questionnaire took up eight pages of A4-sized paper and stated that it was being conducted in cooperation with Otemae University’s Fujita Laboratory and the University of Hyogo’s Arima Laboratory. The contents of the questionnaire included the following items:

1. Respondent’s Basic Attributes: Respondents’ individual attributes, local information acquisition method, home Internet accessibility environment, internet usage.

2. Use of Itamin: Use frequency, reason for use, level of interest in information provided, information they’d like to see added, necessary local information besides Itami City’s.

3. Evaluation of the Local Portal Site: Quantitative evaluation of the requirements or necessary attributes or factors for the provider and the source of the provider’s credibility by applying the evaluation procedure of the AHP (Analytic Hierarchy Process). Surfacing the preference structure for the contents provided, the usage charge and the provider by applying the conjoint analysis method. An economic assessment of the site by CVM (Contingent Valuation Method) was also performed.

In order to accomplish the research objectives, the ways in which residents assess the importance of “requirements for the provider of the local portal site” and “factors of the provider’s credibility” were examined. More specifically, by applying the relative position measurement approach of AHP, which was proposed by Mori and Suzuki et al. (2001, 2002), we estimated importance weights for “requirements for the provider of the local portal site” and “factors of the provider’s credibility”. Based on the literature survey results with regard to the former point (Fujita, 2007), five requirements are listed to assess each of the following: (a) information and technical capabilities; (b) organizational capabilities, such as human resources and financial power; (c) credibility given by society; (d) public-spiritedness demonstrated in its activities for social contribution; and (e) vitality demonstrated in the provider’s daily activities. For the latter item, eight factors were considered: (a) trustworthiness; (b) reputation; (c) organizational capabilities; (d) authority; (e) recognition level; (f) responsiveness; (g) achievements; and (h) continuity.

The reason why the AHP was used is that it is difficult to appropriately evaluate residents’ individual requirements and importance factors on an ordinal scale, as was pointed out by Arima and Kawamukai (2008). We applied the revised AHP method, i.e. the relative position measurement approach because it is difficult for respondents to answer many bothersome and time-consuming pair-wise comparison necessary to conduct the ordinal AHP evaluation process and very low response rate could be expected.

In this research, as is shown in Figure 1, the questionnaire was formulated in a way that made it easy for respondents to answer questions. We employed a ranking system at the first portion of the question and then asked respondents to mark each factor on a numerical scale so as to reflect their relative importance.

6. Survey Results and Their Consideration

According to the 2005 Japanese census, Itami’s total population is 192,250 (gender ratio: 49.0% male, 51.0% female), and it has 72,983 households. In Itami’s information magazine, 78,458 questionnaires were inserted to be distributed, and 2,426 responses were
Figure 1 Questions Related to the Importance of the Requirements for the Provider of Local Portal Sites (excerpt)

collected by post, making a response rate of 3.1%. Besides those received through the post, 255 responses were collected through one residents’ association and a chamber of commerce. The total number of collected responses was therefore 2,681, giving a response rate of 3.4%. The responses through the residents’ association were collected at individual homes two to three weeks after the questionnaires were distributed in the information magazine. The questionnaires collected through the chamber of commerce were conducted by distributing questionnaires during the monthly meeting and collecting them over the next two weeks when respondents visited the chamber of commerce.

Among all valid responses, 42.3% were male (1,133 questionnaires) and 55.7% were female (1,492 questionnaires), showing some bias towards female respondents. There were 1,795 responses (67.0% of the valid responses) to the questions regarding the requirements for providers of local portal sites and 1,711 (63.8%) responses to the questions regarding factors that pertain to provider’s credibility. The average attribute-specific values of the estimated results of the importance weights for requirements and factors, estimated from pair-wise comparison matrices by applying the power method through AHP’s calculation procedure, are shown in Table 1.

Table 1 shows that the residents’ preferred attributes for providers of local portal sites that transmit both public information and private information are first “credibility,” followed by “information and tech-
Table 1 Requirements for the Provider of a Local Portal Site and Factors Affecting their Credibility

<table>
<thead>
<tr>
<th>Requirements for provider</th>
<th>Gender</th>
<th>Age</th>
<th>t-value</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>18-29</td>
</tr>
<tr>
<td># of responses</td>
<td>1,795</td>
<td>755</td>
<td>1,029</td>
<td>121</td>
</tr>
<tr>
<td>Credibility</td>
<td></td>
<td></td>
<td></td>
<td>0.278</td>
</tr>
<tr>
<td>Technical capabilities</td>
<td></td>
<td></td>
<td></td>
<td>0.226</td>
</tr>
<tr>
<td>Public-spiritedness</td>
<td></td>
<td></td>
<td></td>
<td>0.214</td>
</tr>
<tr>
<td>Vitality</td>
<td></td>
<td></td>
<td></td>
<td>0.156</td>
</tr>
<tr>
<td>Organizational capabilities</td>
<td></td>
<td></td>
<td></td>
<td>0.123</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sources of credibility</th>
<th>Gender</th>
<th>Age</th>
<th>t-value</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td># of responses</td>
<td>1,711</td>
<td>717</td>
<td>984</td>
<td>118</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td></td>
<td></td>
<td></td>
<td>0.228</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td></td>
<td></td>
<td>0.172</td>
</tr>
<tr>
<td>Achievements</td>
<td></td>
<td></td>
<td></td>
<td>0.145</td>
</tr>
<tr>
<td>Continuity</td>
<td></td>
<td></td>
<td></td>
<td>0.126</td>
</tr>
<tr>
<td>Reputation</td>
<td></td>
<td></td>
<td></td>
<td>0.097</td>
</tr>
<tr>
<td>Recognition level</td>
<td></td>
<td></td>
<td></td>
<td>0.086</td>
</tr>
<tr>
<td>Authority</td>
<td></td>
<td></td>
<td></td>
<td>0.075</td>
</tr>
<tr>
<td>Organizational capabilities</td>
<td></td>
<td></td>
<td></td>
<td>0.071</td>
</tr>
</tbody>
</table>

Significance levels: ** = 1% or lower, * = between 1% and 5%

On the other hand, among the factors that make up the credibility for the local portal site providers, the most important factor for all genders and ages was "trustworthiness" or "believability"—in short, the source factor that makes the respondents feel that the web-based information is likely to be valid and free of errors. The next highest factor assessed after "trustworthiness" was "responsiveness," and this means that the

tnical capability" and "public-spiritedness." The table also demonstrates that "vitality" and "organizational capability" are not seen as very important. There are no major differences between the two genders in this assessment, but some differences were apparent among different age groups; for example, respondents in their fifties and sixties placed the importance of "public-spiritedness" next to "credibility."
factor which makes respondents believe that a given provider would respond quickly when problems occur contributes the creation of provider’s credibility. While respondents consider the accuracy and preciseness of the information provided as being more important than any other factor, a quick response in dealing with inaccurate information is also regarded as a source of credibility. The factors following these two are “achievements,” “continuity,” and “reputation”; these are the bases of current and future trust. It appears that “recognition level,” “authority,” and “organizational capabilities” are not highly regarded as sources of credibility in comparison with the other factors.

7. Conclusion

With the aid of AHP quantitative analysis method, this paper has confirmed the sources of credibility and indicated the required factors or attributes for providers of local portal sites that aim to provide both public and private sector information concurrently. As a result of a series of scandals related to altering data at the Agency of National Pension in Japan, local residents and Japanese people seem to have lost trust in public information and information systems operated by the public sector. In this circumstance, it is necessary to clarify exactly what it is that generates trust in public information and public information systems. Indeed, it would be our great pleasure if our research could serve as the basis for an empirical study on the credibility of public information and public information systems.

Acknowledgments

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References


