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REFLECTION OF EGOVERNANCE ON WEBSITES OF INDIA AND RUSSIA

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ABSTRACT

Governments of the developing countries have been exploring new ways to allow participation of citizens in the governance, enabled by the Internet revolution. In this paper, we have explored, through a preliminary analysis of national government web sites, the attempts of two developing nations -- India and Russia, to establish digital governance. We have used the KPMG E-Commerce maturity model, Wilcocks eBusiness evolution model and the WebQual site analysis tool as a theoretical framework to analyse the website performance and content, as a social construct that reflects government intentions, attitudes, digital governance directions and policies.

INTRODUCTION

Governments worldwide have been recognising the potential of ICT, and Internet specifically to become a powerful tool in fulfilling government strategies. Government bodies see advantages of using the web for citizen information dissemination and interaction, provision of services, enabling democratic processes, and facilitation of their organisational processes.

Governments of the developing countries have been exploring new ways to allow participation of citizens in the governance, enabled by the Internet revolution. In this paper, we have explored, through a preliminary analysis of national government web sites, the attempts of two developing nations -- India and Russia, to establish digital governance. Our focus is on the analysis of website performance and content as a social construct that reflects the government intentions, attitudes, digital governance directions and policies.

METHODOLOGY

For the analysis of the cases presented in this paper we have adopted an approach which includes analysis of website maturity, performance and content. In this section we discuss the theoretical frameworks selected for the analysis of government websites as most suitable after a thorough investigation of a number of frameworks presented in IS research. The idea that organisations pass through a number of stages of sophistication in technological advancement to support and facilitate their core activities has been discussed since pre-Internet times. Recently the discussion has been advanced into specific area of web-based technologies, and it can be traced through a number of works, that organisations usually go through 3-4 distinct stages of web presence.

Theoretical frameworks describing the website evolution stages or maturity models include E-Commerce Maturity Model (KPMG 1997), Stages of Growth for e-Business Model (McKay, 2000), e-business evolution model (Wilcocks, 1999), quantitative evaluation of web site performance model (Bauer and Scharl, 2000) and others. Ho (1997) proposed a framework for evaluation of commercial web sites from a customer's perspective, identifying four types of value creation: timely, custom, logistic and sensational. Palmer and Griffith (1998) suggested a model that examines use of web sites for supporting marketing activities such as promotional activities, sales, availability of quality service and support. Schubert and Seltz (2001) proposed a model for measuring effectiveness of e-commerce web sites from the consumer perspective.

The frameworks selected for the research analysis in this paper include the KPMG E-Commerce maturity model, Wilcocks eBusiness evolution model and the WebQual site analysis tool with all of the three conceptual models being applied to 3 main Indian federal Web sites and 3 main Russian federal Web sites. The KPMG model studies the website maturity through three stages -- experimentation, ad-hoc implementation and integration. The Wilcocks model utilises four stages of evolution: Publish, Access data, Transact, Interact (Transform). The WebQual conceptual model was initially developed for a study that aimed to compare current levels of commercial use of the Internet across standard industrial classifications (SIC) in Australia and New Zealand and use the data collected to contrast intent and outcomes by organisations (Adam and Deans, 2000, 1997). However, it has been illustrated by (Baron 2001a, 2001b) that this model may be extended for performance analysis on Web Sites. The WebQual model applies approximately 46 assessment criteria including interactivity and user-friendliness to Web sites to derive an overall maximum score of 53 for performance. The WebQual tool assesses Web site performance in terms of communication value, relationship enhancement and functionality. Once the tool is applied to a site, it will provide the
assessors not only with an overall performance rating of the site, but also with detailed information on strengths and weaknesses of the site.

For the purposes of this analysis, we have selected Web sites representing the national governments of India and Russia. There are a number of reasons why digital governance initiatives in the two countries are worth comparing. Both countries have large territory and population with disparate geographic and demographic features, low level of ICT and Internet diffusion within the population. In contrast, both economies have high level of ICT tertiary education, and export ICT skills and software products worldwide. With these obvious similarities and differences, the directions of the governments in establishing digital governance may be radically different. We have studied the reflection of their attitude as mirrored on the national government websites, by a thorough analysis of website content and maturity, through the models mentioned in the methodology.

BACKGROUND

India – being a developing country with a huge 1.2 billion population. In 2001, there were 7000 Internet connections reported for the population (approximately 68.16 users per 10,000 inhabitants). The PC penetration was 6000 for the population (approximately 0.58 per 100 inhabitants). The telephone penetration level was 3.38 per 100 inhabitants. However, given these low levels of PC, Internet and telephone diffusion, it is interesting to note that most of the Internet traffic is routed through Cyber Cafes (410 approximately in 2002; 60% Internet connections reported in 2002).

Also, India has a high cable penetration rate among developing nations that is helping the diffusion of broadband. The Indian government has over the past decade realised the use of ICT diffusion in the country, to enable the democratic principles that underlie its policies. To facilitate participation of the common citizen in all levels of administration, the government has initiated a number of programs as reflected also on their websites. The government policies to support ICT diffusion through announcing the various ICT bills in the parliament, private participation of ISPs, subsidies for Cyber Cafes, opening of information kiosks etc seem to be representative of this factor.

In Russia, the Internet use and diffusion is a complicated issue. On one hand, some researches argue that there is a low trust in new technologies among the population, and that Russians are inherently opposed to telecommunications development. On the other hand, despite the comparatively low level of ICT and Internet diffusion in the country, there are signs of fast growth of Internet access and high level of interest to its opportunities. Only 5% of the 147 million population of Russia have regular access to Internet, and the year audience in 2001 is estimated as 8.8 million users. 37% of Internet users are young people, aged 16 to 29, and about 20 % of Internet users have higher education. Numbers of PC per 100 inhabitants was 4.97 in 2001.

Places of access to the Internet include: 53% from the office, 19% - from the University, 13% from home, 25% - from internet café, friends, etc. The government initiatives and support in the area of ICT diffusion is continuing to focus on education. The government program aimed at computerisation of the schools has been successfully conducted in the large cities, with over 70 % of schools being equipped with computer labs and Internet access. Now the target has moved to the rural areas, where so far the program meets with significant difficulties, including lack of telecommunications, and severe lack of ICT specialists and teaching staff. The new government undertaking towards e-commerce development is a federal “Russia Online 2002-2010” program, aimed at developing conditions, based on modern information technologies, for the advancement of democratic society and free access to information.

CONTENT ANALYSIS OF GOVERNMENT WEBSITES

Applying the three models of website maturity mentioned in the methodology, we found some interesting unexpected results in our analysis.

Applying the KPMG model, we found that Indian sites exhibit the features of ad hoc implementation and integration stages. They are not only integrated with various business and government sites, but also involve transaction processing. The sites of Russian central government on the other hand are between the phases of experimentation and ad hoc implementation.

The Wilcocks model described web evolution/maturity through 4 consequent stages namely publish, access data, transact and interact or transform. Applying this model to Indian national websites, we found that all the three sites fall between transact and transform stages. For example, www.nic.in has online application facilities, two-way channel for public grievances, and a directory for government services. The godirectory.nic.in/fparliament.htm is a fully functional directory of public services and officials. It is also integrated with the www.nic.in site. The
www.cdacindia.com/html/egovidx.asp provides latest information on digital governance and links to other related sites, which may be transactional.

The Russian federal government sites (Gov.ru, eGovernment.ru, e-Russia.ru) are on the initial stage that is represent Publish model. Information is limited to self-advertising nature, low functionality, and no avenue for visitors' feedback provided. The site is organised as broadcasting with one-way communications. For example, Gov.ru provide one e-mail link only - to the site Webmaster. E-Russia.ru appears to be a slightly better site as it incorporates some basic feedback facilities. The site publishes visitors' opinions of the program, which represent an attempt to start a dialogue with the citizens through democratic process.

The WebQual Web site performance analysis model has been applied to the 3 main Web sites for Federal Government in India and Russia. Scores derived from the performance analysis are given in the table 1.

<table>
<thead>
<tr>
<th>INDIA</th>
<th>SCORES</th>
<th>RUSSIA</th>
<th>SCORES</th>
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<td><a href="http://www.gov.ru">www.gov.ru</a></td>
<td>8</td>
</tr>
<tr>
<td>godirectory.nic.in/parliament.htm</td>
<td>30</td>
<td><a href="http://www.eGovernment.ru">www.eGovernment.ru</a></td>
<td>8</td>
</tr>
</tbody>
</table>

TABLE 1 WEBQUAL PERFORMANCE SCORES OF FEDERAL GOVERNMENT WEBSITES IN RUSSIA AND INDIA

The study shows that all of the three applied website assessment models demonstrate advancement of the Indian government Web sites over the Russian Web sites. Application of the WebQual revealed that the Indian Web sites are outperforming the Russian Web sites in every single functionality area.

All the Russian sites do not contain sufficient information content to mirror the government intentions. The www.gov.ru site is apparently aimed at being a directory to the federal agencies, but is not serving its purpose due to poor maintenance. The site management policies are inconsistent with some pages being available in Russian only, while others have minimal information in English. www.eGovernment.ru received a very low rating due to its user-unfriendliness, lack of graphics and black-and-white pages. The site has not been updated for a long time. www.e-russia.ru is the best of the three Russian sites analysed in the study in terms of site design and informational content. The findings do not come as a surprise given that the site is for the federal “Russia Online 2002-2010” program. However, the site’s score of 15 suggests that even www.e-russia.ru has a lot of space for improvement.

Overall, performance of the Russian Federal Web sites can be rated as very poor. All of the sites analysed above do not offer even a basic degree of interactivity and are typical examples of one-way communications. The sites do not have much to offer. It is not possible for visitors to the sites to engage into real-time online communications with the federal government departments. The sites are nothing but simple portals that could be used as points of reference but lack even the most basic facilities that could enable visitors to experience a fully interactive environment that is regarded as a norm in countries with a developed infrastructure for electronic communications.

Content analysis of the Indian Web sites reveals that unlike their Russian counterparts, the Indian federal government agencies are taking their Web presence seriously. Although there is space for improvement, the sites are already fully functional and serve their purpose reasonably well. All of the sites are informative and interactive and act as efficient communication channels. For example www.nic.in is a fully functional Web site that goes well beyond simple presentation of informational content. The site visitors can submit online applications, obtain certificates and download a wide range of forms from the federal government agencies. The site has also achieved a superior score for design, due to its high degree of interactivity. The other Indian Web sites considered for the study are also informative and well designed.

Overall, the Indian Federal Web sites, chosen for the study clearly outperform the websites of Russian Federation by a very significant margin. The findings are consistent across all 3 of the assessment models applied. The findings also reflect that while both India and Russia are heading towards establishing their governments online, Indian government has made a major breakthrough with electronic communication while Russian efforts have not yet delivered visible results. Although both India
and Russia can be regarded as developing countries, the structure of the Indian economy can hardly be regarded as advanced in comparison with Russia. However, the study shows that development of electronic communications is truly one of the key priorities of the Indian government.

Baron (2001a) pointed out that the Russian federal government does not appear to view development of electronic communications as one of its primary tasks due to the need to address other issues that it perceives to be more pressing. This study confirms that the Russian federal sites are still not of great importance to the government agencies, as electronic communications are not being viewed as being of strategic importance. The difference between the eGovernance in Russia and India seem to lie in the attitudes towards electronic communications rather than availability of personnel or facilities to develop and maintain the sites.

FUTURE RESEARCH

Our preliminary research consisted of a restricted sample of 6 websites compared across two countries. Increasing the number of sites analysed, with the two economies could develop this research further. The suggested approach may also be useful for any of the developing and developed economies to be compared in a similar manner to elicit valuable insights.

A framework for analysing websites for eGovernance is also proposed, with socio-cultural perspectives. Clearly, there is sufficient research potential for academia to benefit from this preliminary analysis.

REFERENCES