

The Role of Citizen Trust in the Success of E-Government

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CONTEXTUALIZATION

When it began over a decade ago, e-commerce quickly encountered difficulties preventing it from reaching the potential level of success regarded as possible by specialists of the field. After having identified trust as being an important factor of success for e-commerce, both researchers and online retailers were quick to put emphasis on the mechanisms and software that make online transactions possible, and on the need to study and improve security of the Internet infrastructure. At first, researchers were interested in the various mechanisms that enable secure transactions, and also in the visual signs imbedded in web sites that convey security to consumers and let them gain the level of trust necessary for online transactions. But after a while, they came to realize that a secure infrastructure, though essential, was only one factor of success among many others. Additionally, they became aware of the necessity of simultaneously taking into account the trustworthiness of the organizations behind the Web sites as well as the risks that users perceive in using them.

Thus, according to IS literature, the lack of trust users have towards both the internet infrastructure of e-commerce, and the organizations that provide the products and services, counts much for the slow adoption (Wang et al, 1998). Trust and its influence (Chatterjee et al., 2002) on e-commerce have been the subjects of several studies, some of which have in the last few years investigated what influences the degree of trust (Gefen, 2000) and the success of information systems (DeLone and McLean, 2003).

PROBLEM FORMULATION

After retailers, governments of all levels are now showing a growing interest towards setting up various online relations with their citizens, and this mainly for reasons of cost reduction and quality improvement of services rendered. A significant part of e-government projects are related to the implementation of various systems of online transactions that allow citizens a fast and easy access to services that were previously accessible only by mail, phone or in person. The

setting up of these online governmental services is facilitated by the expertise that e-commerce specialists acquired during the last decade, particularly in the usability and security of systems. And because governments, for various reasons, feel pressured to do so, they assign major resources for the implementation of these online services while making sure that they meet the highest standards of usability and security.

Citizen trust towards information systems such as applications of e-government has until now not been studied much, Warkentin et al (2002) and Carter and Bélanger (2005) being some of the few authors in IS literature who have published on the subject of user trust building in e-governments. We find that the dynamics of trust building and the adoption of governmental web transaction processing systems are still poorly understood.

OBJECTIVE

Taking these problems into account, the main goal of this research is to provide a better understanding of the opinions held by different stakeholders of the role citizen trust has in the success of governmental web transaction processing systems in the province of Quebec (Canada). Success is expressed here through the six interrelated dimensions DeLone and McLean (2004) define for e-commerce success: system quality, information quality, service quality, use, user satisfaction, and net benefits.

METHODOLOGY

In an exploratory study carried out in the province of Quebec (Canada), interviews are done with e-government specialists of both the municipal and provincial civil service and of non-governmental organizations with a strong interest in e-government, such as citizen groups, e-government information system solutions suppliers, and university researchers. Table 1 below presents a brief portrait of the stakeholders met so far.

Table 1. Identification and role of stakeholders

stakeholder	type of organization	role in that organization
# 1	provincial government	e-government planning
# 2	provincial government	e-government planning
# 3	provincial government	e-government operationalization
# 4	provincial government	e-government operationalization
# 5	municipal government	e-government planning
# 6	municipal government	e-government planning
# 7	municipal government	e-government planning
# 8	e-government IS solutions provider	general management, sales
# 9	e-government IS solutions provider	strategic planning and marketing
# 10	university	research, commercial law on internet
# 11	university	research, ethics in IS
# 12	IS research institute	management, research
# 13	community and citizenship development organization	management
# 14	community and citizenship development organization	management

Because of the exploratory nature of the study, the interviews are semi-structured qualitative interviews done according to the methodology proposed by Rubin and Rubin (1995). On account of the flexible design of these interviews, they are considered guided conversations using a questionnaire built to facilitate the exploration of main themes and the comparison of answers. This type of interview allows for the examination of themes that emerge during the conversation and for the use of follow-up questions when there is a need to clarify certain topics. Interviewed individuals are selected to reflect different points of view. This is done in accordance to their knowledge of the dynamics of e-governments and their having developed, through their professional activities, a founded opinion concerning the way in which citizens react to governmental web transaction processing systems. The number of individuals interviewed is not pre-defined. Rather, interviews are carried out until attaining saturation of data.

Once saturation is attained and interviews are over, a content analysis using the methodology proposed by Krippendorff (1980) will be carried out on the information collected during the interviews in order to identify emerging new results.

PRELIMINARY RESULTS

Preliminary results show a real divide in the opinions of the different stakeholders that were interviewed. Indeed, e-government specialists that participated so far in this exploratory study perceive citizen trust as having a role of variable importance to the success of governmental web transaction processing systems. First, municipal e-government specialists consider trust as being a minor factor of success of e-government applications that municipalities have put on the web. In fact, according to them, the trust that citizens have in municipal governments or in an e-government application has very little effect on the level of success encountered by e-government applications. They perceive that citizens trust municipalities and municipal organizations, and therefore have no reason not to trust the governmental web transaction processing systems they have put in place. They also attribute the non-attainment of the anticipated level of success of e-government applications to citizen's lack of knowledge in their advantages or even their existence.

This perception of citizen trust as not being an important stake for the success of municipal e-government might be explained by the fact that they consider that citizens have no reason to mistrust governmental web transaction processing systems since the infrastructure is secure and that they are dealing with governmental authorities. Furthermore, it might also be explained by the nature of the transactions between citizens and their municipalities, even large ones, since these transactions do not usually imply an exchange of sensitive data, hence a relatively low perceived risk by these citizens.

At the provincial level, the situation is slightly different. Indeed, some of the provincial e-government specialists participating in the study perceive citizen trust as absolutely not an important stake for the success of provincial government web transaction processing systems. For some others however, citizen trust is undeniably an important factor. Just as their municipal e-government peers, those who think trust is not a big stake consider that citizens have no reason to mistrust governmental web transaction processing systems because the infrastructure is secure and that they are dealing with governmental authorities. As at the provincial level where exchanged information is more sensitive and perceived risk higher, some other e-government specialists consider a secure infrastructure as not a sufficient condition to guarantee user's trust and perceive citizen trust as a major concern. For these specialists, it is important that the government and the individuals responsible for the setting up of on-line government applications be conscious of the importance of the trustworthiness of e-government and that they work to increase and to ensure it. It deserves to be noted here that among the specialists met, those for whom citizen trust is not an important stake are those whose task is to plan the setting up of e-government and have thus a more macro vision of it. Whereas those whose task is more closely related to the op-

erationalization of e-government, thus closer to citizen concerns, regard citizen trust an important stake and one which they have to work on in order to ensure the success of e-government applications.

The other stakeholders involved in the study are e-government specialists working for non-governmental organizations with a close interest in e-government. They are university researchers, representatives of citizens groups, and suppliers of e-government information system solutions. Though these specialists have very different interests in e-government, they nevertheless share the same opinion about the importance of citizen trust. They all think it is a factor of success of e-government not to be ignored. According to these e-government specialists, it is a lure to think that a secure infrastructure and the general confidence people have in governments will easily make citizens adopt e-government. In fact, they consider these factors insufficient because, rightly or wrongly, and in spite of the posted security of the systems put online, citizens keep certain fears and express a certain level of mistrust towards governmental web transaction processing systems.

According to these e-government specialists, this lack of trust is articulated particularly around concerns related to security, confidentiality, ethics, and the integrity of the data transmitted to governments or held by them. As their peers who are responsible for the operationalization of provincial e-government, they consider that emphasis must be put not only on the infrastructure of governmental web transaction processing systems but also on its general trustworthiness. In fact, in their opinion, e-government specialists who do not consider citizen trust an important stake are at the same level as the e-retailers who a few years back considered that the main factor of consumer trust was security.

CONTRIBUTION OF THE RESEARCH

In IS, the study of e-government is still new and this field of research has not yet reached its maturity, so a certain number of problems still remain to be studied in order for the knowledge pertaining to the IS field to be more complete. One of these problems in particular is the important role trust has in the success of governmental transactional web sites. Still very little studied, these applications, which evolve in a context distinct from that of traditional e-commerce where governments are the providers of services, seem to induce a different dynamics of user trust building. The contribution of this research will thus consist of a better and essential comprehension of this dynamics from the perspective of the various stakeholders that are e-government specialists.

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