

E-Governments: Utilizing Customer Relationship Management (CRM) Platforms to Serve Citizens

Satya P. Chattopadhyay

Arthur J. Kania School of Management
The University of Scranton
Scranton, PA 18510, USA
spc354@scranton.edu

Abstract

In a democracy, elected governments are expected to meet the needs of their various constituencies in order to have an opportunity to continue in power. “Citizen” or “constituent” is legitimate stand-in for the letter “C” in Customer Relationship Management, accepted in the world of business. Currently, many CRM companies are prospecting the public sector organizations to market their products. The government markets, globally, are the fastest growing market for CRM systems in the upcoming years. This paper describes the goals of e-Government implementations and applications that characterize the nature of citizen service delivery initiatives in the public sector. The paper examines the differences between applying CRM in public and private sector. The paper goes on to discuss the application of four E-Commerce based CRM implementation strategies in the public sector and their outcomes in selected cases. The second part of the paper uses publicly available empirical data to investigate scope, extent and impact of global e-Government implementations.

1. Introduction

As democracy takes hold in more of the world's nations, governments feel more compelled to recognize their ultimate accountability to the citizens. Even benevolent autocracies, and one party governments have realized that citizen satisfaction is vital to remain in power. The move to e-Government has gathered momentum as a viable platform to make progress in that direction. Using advanced information and communication technology (ICT) and the capabilities of the world wide web (WWW) governments try to implement high level of service orientation to citizens and effectively managing relationships between them and the government personnel to minimize frustration and dissatisfaction.

SAP, a leading provider of enterprise management systems to organizations identifies the e-Government market as one characterized by the need for a “integrated solution... that empowers public administrators to better communicate and collaborate with its people and employees, while facilitating cost-efficient processes.”[SAP] This focus has been characterized as the paradigm of complex and one directional systems that broadcast information to citizen customers. A complementary approach, the paradigm of “interactivity”

is the focus of administrators in Europe [EDEN]. The goal is thus to streamline the delivery of citizen services on one hand, and on the other, make the services widely available in spite of barriers imposed by location, demographics, and ability to pay [Nigeria], and make them friendly, convenient, transparent and inexpensive[World Bank].

An internet search of case studies of e-Government implementations show a tremendous diversity in scope and characteristics [Chatt and Pratt] as well as degree of success [Prattpati and Chatt].

The next section will lay out the definition of E-Government as it diverges from that of e-Commerce and also establish a framework for evaluating its scope, extent and success.

2. e-Government: Definitions

E-Government refers to the use by government agencies of information technologies that have the ability to transform relations with citizens, businesses, and other arms of government [World Bank]. E-G differs from E-Commerce and E-Business in that the former does not focus on volume, revenue or profit maximization, but instead seeks improved governance procedures to connect better with and within civil society [Nigeria].

The direct conceptual benefits that are expected outcomes of E-G implementation are: a. Re-affirming the citizen centric organization of the government, b. Deliver citizen services where they are needed/sought rather than locating them only in government agency offices, c. Making it possible to access citizen services with seamless integration rather than requiring multiple points of contact, d. Transparency and ease of access to government information, e. Ability to complete remote transactions with government agencies.

The operational tasks that can accomplish these goals are described as: a. Handling all forms of customer contact, including telephone, face to face, e-mail and internet, b. Systems integration within and across agencies that serve citizens, c. Improvement in quality, efficiency and effectiveness of service delivery, d. Unified and updated access to full citizen contact history, e. Provides single point of enquiry for all citizen, f. Empowering staff to act to resolve issues, after backing them up with all necessary information [Aniteps]. Implementation of E-G must also consider adopting appropriate open source technologies that can support diverse operating platforms and

communications equipment that may be in use.

From the citizens' perspective, the outcomes of E-G will be demonstrated through: a. Ease of access to information about governance policies, b. Timely access to information regarding safety and security from threats both natural and otherwise, c. Ease of completion of transactions with government agencies, such as registration of events, voter registration, passport application, tax filing, exercising voting rights, registration of motor vehicles, and obtaining permits/licenses for personal and business reasons, among other things.

3. Impediments to E-Government

The sustained push toward E-G notwithstanding, the results have been mixed so far. Some citizens have been "turned off" by E-G. A study conducted by the UK government found information on the system to be inaccurate and out of date. Low usage by targeted citizens pointed to the inadequacy of the implementation and inability of the system to satisfy citizens' needs. A blue ribbon commission pointed out that to be successful, the E-G had to be more than simply moving existing operations to the internet [UK MP Report].

The primary impediments to implementing E-B have been characterized as a. Institutional weakness, b. Inadequate human resource capability, c. Lack of funding for infra-structural expenditures, d. Lack of facilities and institutions to flesh out the multi-layered system of vendors and technical support necessary to keep the system running, and e. Uncertainty over the choice of competing technology (hardware and software) that will maximize citizen acceptance [UNPAN]. From the citizens' perspective, apart from ease of access and usability, the over-riding concern is with security of transactions and integrity of system in preserving privacy of participants.

As more E-G systems come online, they seek to deal with the citizens' issues with increasingly sophisticated technology and improved business processes. However, addressing the macro impediments have been more difficult in a depressed global economic environment.

4. Impact of E-Government Initiatives

The impact of E-G implementation spans participative governance, economic efficiency and social responsibility. In addition, the promise of real time availability of information is expected to benefit the cause of transparency in government affairs and decrease perceived corruption.

The UNPAN 2001 benchmark study found the following status of its member states as shown in Figure 1.

Figure 1. E-Government status of UN members [UNPAN]

UN member states (total)	190
Some govt. web presence	169
National govt. website	84

Single entry portals	36
Sub-national govt. website	84
On-line transaction capacity	17

Using an index of E-G, [UNPAN] captures the member states relative sophistication in creating a platform to deliver information and services to all sections of its society. The researchers then assigned the member states to five hierarchical stages of E-G implementation.

In the "emerging" category are states that have been able to incorporate some information content in published web pages at some point. Information in the form of notices, some downloadable forms and possibly e-mail contact is published over the web. There are no procedures in place to keep the information updated. Syria, Cyprus and Mali fall into this category.

In the category of "enhanced" E-G, the countries show increased diversity and quality of on-line content, but the focus is more on political and public affairs rather than citizen services in the areas such as health care, education, environment etc. Georgia, Nigeria and Monaco are in this category.

In the "interactive" category, the citizens are not passive recipients but instead determine the content they seek, and also may choose the time and place to some degree in actually obtaining the same. Countries such as Argentina, Israel and Thailand are in this category, providing its citizens with a wide array of quality published information on demand and at their convenience.

The "transactional" category signifies ability to support not only information needs but also the secure completion of transactions involving payments and information products. In one case, a transaction over the web is sufficient to secure an electronic visa for border crossing at a later date. Australia, Norway and Singapore are examples of this group.

The "seamless" customer -centric system where all aspects of the government's functions are virtually organized to provide integrated one stop system customized to respond to the unique needs of the querying citizen-customer. This has not happened. The CAPPS system proposed by the Department of Homeland Security to process security of airline passengers proposes such integration, and has been subject of much controversy related to privacy and proper use of information.

The stages, characteristics and distribution of the 169 member countries with some form of E-G is shown in Figure 2.

Figure 2. Stages of E-Government of UN members

Stage	Characteristics	Members
Emerging	Limited basic information presented in static views, at the initiative of individuals	32
Enhanced	Regularly updated content	65

Interactive	Possible to download content and request services interactively	55
Transactional	Ability to complete payment transactions	17
Seamless	Integration across agencies to complete one-stop shop for most if not all citizen service requests	0

World Markets Research Center and Brown University reported a Global E-Government Survey in 2001, which noted an interesting phenomenon: 72 % of the E-Gs used the English language as at least one language of use. 45% of the sites were multilingual. This indicates a definite consideration of the global integration in today's world. The same study also provided an assessment of content type provided by E-Gs. It appeared that contact information (for follow up and possible resolution of enquiry) was the most common, with many sites providing links to databases or other sites to assist with the enquiry. The main findings are provided in Figure 3.

Figure 4. WMRC Findings

Characteristic	%
Websites with one stop or govt. portal	6
Websites with online execution capability	8
Websites with Links to database	41
Websites with Access to Publications	71
Websites with Privacy policies	6
Websites with Security policy	3
Websites with disability access	2

The findings indicate that even among the high end implementers of E-G, there is significant lack of assurance to public as to the security and integrity of the query and or transactions that are even possible. The perceived safety of using on-line access to government is a factor that effects the usage of such services by the citizens.

Another area of interest to the policy makers, particularly in the context of global economic development and poverty alleviation has to do with the "digital divide." The availability of government sites providing on-line services shows a very clear geographical bias. The prosperous regions of N. America and Europe stand in sharp contrast to the poorer regions of the world.

The next section of the study is going to look at some empirical data from published sources to examine the

following relationships:

1. Citizen use of E-G and Population Internet Usage
2. Citizen use of E-G and Human Development Index (provided by UNDP)
3. Citizen use of E-G and Perceived Safety of Transaction
4. Citizen use of E-G and E-Govt. Index Provided by UNPAN
5. Citizen use of E-G and Geographic Location
6. Citizen use of E-G and Perceived Corruption Level
7. E-Government Index and Perceived Corruption Level

5. Methodology

The data for the empirical analysis was obtained from published sources.

1. Taylor Nelson Sofres (2001) report a Government On-line study that surveyed respondents from 28 countries, querying a. levels of e-government usage, b. safety issues as a barrier to internet use.
2. UNPAN (2001) conducted a global survey of E-Government that developed an E-Government index and also examined the scope and extent of E-Government implementation.
3. World Markets Research Center (2001) also conducted a Global E-Government Study that focused on the contents of national government websites.

6. Analysis of Empirical Data

The results of the analysis will be reported at the conference.

7. Implications of Study and Recommendations for Policy and Future Research

The results of the analysis will be reported at the conference.

8. References:

Note: The paper version with references is available from the CD of conference proceedings.