# **Electronic Government: Information Technology and Master Plans of Manipulating Communications with Citizens**

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Abstract: Electronic state is a methodology that governments may utilize to take advantage of information technology and other new technologies to enable people to have indispensable facilities to access governmental services and information, to amend their quality, to proffer vast opportunities to participate in democratic processes and emblems. Citizens used to have hierarchical relationships with the government however as the electronic government has been put forth, such interdependences have altered. The role of citizens as entia who can directly impact the governmental decisions has to be delved into. Poly-channel management strategies can ameliorate the communications betwixt the populace and the government. This link has to be enhanced and rectified. According to empirical data obtained from various sources there is a hiatus betwixt the preferable communicative channels of governments and the citizens' predilections. Electronic government can render the communication among the state, denizens, governmental organs, investors and other kernels simpler, more secure and more inexpensive by the establishment of an interactive infrastructure. Governments have to guide the burghers through logical debates on expenditures, the channels efficaciousness right at the time when the burgesses should opt for the channels based upon their functioning and personal specifications or the situational determinants. Poly-channel manipulation methodology has to be hunted through to obliterate and enhance the populace's comprehension on the structures of dissimilar channels. The poly-channel handling methodology takes into account both the burgesses and the government. This action scheme has been founded upon the variations and specifications of each passage in a manner that matches the actions of the government and the denizens. Some exertions have been made in this article to bandy words over dissimilar communicative culverts betwixt the government and the burgesses. The utilization percentages in diverse countries have been ferreted. Manners of interacting with burghers have been cited. A blueprint for culvert manipulation has been put forth. The portals situation, objectives and hindrances of electronic state implementation in Iran have been dealt with.

Key words: Electronic Government • Multi-channel management • Citizen • Portal • Wielding electronic state

### INTRODUCTION

Electronic state comprises the whole dissimilar aspects administrating the of private governmental sectors in the theoretical executive scopes. This will entail generic populace partaking in decision-making, the feasibility of making initiatives in plying general and social capitals. Stacks of countries have inserted an electronic state in their agendas [9]. An electronic government can foment the alteration of all the commercial processes and all the desiderata stemming from the comprehension of the electronic government as regards the sources. They can

be cinched by ritualistic general manipulation information systems [12].

Electronic state is the most brand new technological phenomenon of the recent century which has not been defined beyond question.

The World Bank designated the electricity state in 2002 as follows:

Electronic state signifies the utilization of communicative and information technology to transform the government into an accessible efficacious collection. [9]

The electronic state can be delved into from two major attitudes:

- As a phenomenon originating from global alterations in the interactions betwixt the government and the burgesses whose theoretical and conceptual dimensions are evaluated beyond its orismological dimensions.
- As a means of plying novel technologies which can facilitate the implementation of diverse services and affairs for instance impost disbursement, deeds registration, information swapping and grasping as well as presence in elections.

These two propounded attitudes are not idealized views. They are delved into in each program of the electronic state in an intermingling mode. The principle s of manipulating relationships with customers are as follows: personalization (of products, information and services), integration (of planning processes, engineering processes for business rendering, product proliferation), interactions (of culverts and policies, communications, development and appraisals) as well as selection / sundering (data analysis, getting to know 20% of the customers who effectuate 80% of the trade profits, discontinuation of communication with non-profitable customers in addition to the quality / efficaciousness gauging. Customers' orientation management and propagation strategies are among the indispensable concepts of each project to manipulate relationships with customers [6].

Governmental agents expected a drastic augmentation of electronic services utilizations in the midst of 1990. According to perusals made in dissimilar countries such as Switzerland, Canada, Australia and Netherlands denote the fact that governmental agencies are still implementing a great number of their tasks through traditional service-rendering channels such as telephones, notebooks and so on and so forth.

There are 5 diverse methodologies for establishing contacts amidst diverse organizations and users.

Channels manipulation topic in electronic government can be sundered into 4 sections.

**Diverse Types of Channels and the Collation of Culverts with the Services They Render:** There are 3 types of services in marketing and trade fields. The first type concerns "customers services" for instance fulfilling shoppers' needs, obtaining orders, etc. the 2<sup>nd</sup> sort pertains to "free value-added services" which can comprise bracing, accompaniment, merchandise profitability increase. The third kind has a bearing upon products presented for vending.

One has to distinguish betwixt information services, production services and commodity assemblage [11, 17].

There are blueprints and dimensions to measure the services quality for instance gap-analysis templates, or the most lionized one called SERVQUAL or the services quality scale, which is a blueprint to forestall buyers' dissatisfaction and grasping the denizens' desiderata [2].

Diverse Types of Channels: Burgesses ply disparate sorts of culverts to interact with governmental agencies, various ritualistic channels for example chief office, phones, traditional mails, which are regarded as a major channel for actions such as returning forms and bartering official information until the commencement of the new era. New diverse types of channels such as e-mail and global spreadsheets and new mass media which are mostly utilized for interactive purposes for instance SMS, internet and chatting emerged during 1980s and 1990s as ICT expanded in our society. There are 3 outstanding communicative channels nowadays. They are the ones which are utilized by denizens in their interactions with agencies and governmental incorporations, that is to say, web sites, telephones and the major offices [11].

**Communicative Methodologies:** Governments adopt initiatives to implement a task in most conditions. The crucial factor to control an action pertains to dissimilar manners of plying the aforementioned initiative.

The 2<sup>nd</sup> determinant in communicative interactions applies to the monolateral or bilateral nature of the interface, for instance a global spreadsheet can't fulfill the populace's desiderata. People have to interact monolaterally with a web site to come across the responses for example referring to a human entity in an office to obtain the pertinent response.

We delve into 4 communicative information-bearing methodologies. Four interactive blueprints have been illustrated in Table 1.

There are 5 types of communicate methodologies at most. Four types of them have information natures and one has a financial nature. These 5 methodologies comprise wheeling and dealing, powwowing, apportionment, registration and transactions. (Figure 1 depicts these five interactive blueprints together with 3 types of the most significant interactions).

Lack of a Commensuration Betwixt the Government and the Burgesses in Channel Preferences: When it is a matter of seeking advices or driving bargains, governments prefer web site channels whereas people favor phones and chief offices.

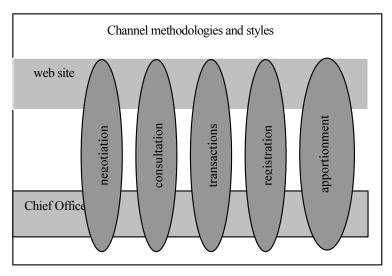


Fig. 1: dissimilar types of services

Table 1: manners of setting schemes into effect

Interactions	
monolateral	collateral
apportionment consultation	registration negotiation

# Governments Incline Towards Web Site Channels:

Revision of the national performance in the United States of America manifests the fact that internet utilization ameliorates service-rendering levels. It can obliterate the red tapism (or bureaucracy); hence governments can be accessed in a simpler manner. Such initiatives have been carried through England's data communicative projects and the European Union. People have a penchant for such verves owing to several reasons. The first one applies to the electronic and dot com success in the private sector.

The novel generic manipulation methodologies brace up the customer-oriented discussions. The new run-of-the-mill management objectives at first pertain to government diminishment, expenditures curtailments and performance improvement. According to the effectuated researches can accomplish the average rates allotted for such cases.

The primary feature has a bearing upon the efficaciousness and the expenses of such a culvert. According to perusals made in Canada upon emoluments and consumption the electronic services are 20 times less costly than individually rendered internal services.

Another positive feature of internet pertaining to the amelioration of the service-rendering levels encompasses velocity, storage capacity, precision and selection. **Denizens Are More Partial to Hold Talks and Take Counsels in Offices or via Phones:** The perusals made in Switzerland, Canada, Australia and Netherlands (from 2003 to 2005) evince this idea in diverse culverts that the burgesses plied to contact the government. Upshots of these studies have been limned in Table 2. [11, 13, 14].

The Nature of Americans' Communication with Their Government: Most of the populace in the United States of America utilize phone to contact the government men. The 2nd group consists of those who refer to the governmental sites to interface with the government. Each respondent can reply several questions in the effectuated canvassing. Thus the realized percentage outstrips 100%. 42% of the populace have divulged the fact that they have plied phones to access governmental sectors in their last contacts. 29% opted for the governmental web site referring. 20% attended personally. 18% sent emails. 17% effectuated correspondence and 22% plied several manners to contact the government.

According to the most brand new statistics 77% of the internet users in America (namely 97 million individuals) get online quotidianly to find governmental sites information or to communicate with them. Such statistics indicate that people avail internet 50% more than ever to communicate with government men, that is to say, three fourth of the network users in America have had communications with the government for several reasons. 64% of users referred to governmental sites to find information.

41% of the internet users have effectuated researches which required on-line governmental figures and census

Table 2: the implementation percentages in 4 countries

Countries channels	Switzerland	Canada	Australia	Netherlands
the chief office	55%	48%	46%	33%
telephone	54%	55%	28%	28%
internet	24%	25%	13%	24%
post (or fax)	14%	30%	19%	13%

Table 3: channels utilized for dissimilar purposes in Australia (2005)

Channels	Consultation	Registration	Negotiation
Personal	30%	41%	52%
Telephone	36%	28%	26%
Post or fax	0%	20%	13%
Internet	33%	16%	15%

34% of users have sought touristy and recreational data 28% of the users have received immunization and medical proposals from the government 26% of users have utilized internet to send emails to the governmental organs [1].

The extant manner of channels utilization was collated with the past ones in two perusals (in Switzerland and Netherlands).

These two comparisons evince that the further the internet is availed, the lower other fax or mail devices are used. Post and fax utilization in Switzerland decreased from 26% (in 2004) to 24% (in 2005). The year 2001 was collated with the year 2004 in a Dutch perusal. The conclusion evinced that internet utilization augmented from 7% in 2001 to 24% in 2004 whereas the application of text-based channels diminished from 31% in 2001 to 13% in 2004. It looks as though internet is most often utilized for registration and consumption purposes in the communication for instance data panning and impost registration. These observations illustrate the analysis of objectives for each one of the diverse service-rendering channels. Table 3 limns the upshots obtained out of studies in Australia which portrays the relationships betwixt the communicative methodologies and the germane channels.

Explication of the lack of commensuration: Some factors contribute to the lack of proportion. There are no empirical researches to evince the factors determining utilization or choice of a reliable channel by burgesses. The first factor concerns the personal specifications of denizens. The 2nd determinant pertains to the vocational characteristics or the quandaries that burghers encounter when they contact a governmental firm. The third or the last determinant concerns the situation in which a reliable channel is availed.

**Personal Factors:** A specimen perusal in Australia demonstrates diverse statistics for service-rendering channels for instance 57% of men are willing to utilize internet but 66% of them in the 25-49 age range are willing. 65% of people with higher educational levels and 57% of ladies prefer phone. 41% of people more than 50 years old and 41% of those who have diplomas prefer personal contacts. The statistical variations between the acceptors and rejecters of the new ICT comprise manners of delivering services such as ATM and electronic banking. ICT access is a crucial requirement to utilize the electronic government services. Researchers sunder the populace into 3 groups to delve into the life style factors.

The primary group contains active data seekers and correspondents who are highly motivated to avail digital medias. Most of the populace in the developed societies with advanced technologies comprises the 2nd group. The third or the last group consists of digitally illiterate people namely 30% of the populace in the developed nations with sophisticated technology who use it in a slapdash manner. They sheerly use digital mass medias such television, telephone and the pertinent equipment sans any internet or computer access.

The Vocational and Problem-prone Factors: One of the vocational determinants propounded in channels specifications is the ambiguity. We believe complexities and vagueness are two crucial factors which determine channels preferences. Australia users opt for the solution of problems with a low complexity level in internet. They use face-to-face contact for highly complicated predicaments.

One of the quandaries of the governments concerns the time-consuming nature of solving complicated problems in tête-à-tête meetings. **Situational Factors:** Utilization of a services-rendering channel depends upon the situation in which it is availed. Such situational factors cause diverse actions of individuals. Situational factors include people's sensations and emotions, requirement to effectuate talks and the ability to access channels [11, 16]

# The Lack-of-commensuration Result, Presentation of a Scheme to Manage Communications with Denizens: Some quandaries may occur in the interactions between the government and the burgesses in their negotiation and consultation procedures for instance Canada has some complementary channels to ameliorate the electronic government services in future. Should the governments be willing to solve the quandaries mentioned in the previous sections, they will have to check the channels manipulation strategies. Three principles have been

proposed for this purpose.

According to the first principle notebook and phone are superior channels. Should there be some quandaries for taking away the vague aspects, internet and notebooks will be preferable for complexities obliteration so web sites, note books and phones will be preferable channels for trouble-shooting. According to the 2nd principle web site and the office are preferable channels to solve complicated problems. Thus complicated and vague quandaries will be respectively solved through consultation and negotiation methodologies.

According to the third principle the negotiation manner has to be backed up through office or phone calls so consultation via phone and internet has to be shored up. Some believe that not any type of channel can be utilized for any purpose. The negotiation channel is a collateral interactive one whose best applications pertain to the time when it is propped up by phone and offices.

Nonetheless governments have to twig the channels specifications and equal information requirements in each channel.

A blueprint for the preliminary management of the new poly-channel entia has been proposed based upon these 3 principles, which comprises 3 types of channels and 2 procedures, which have been limned in slide 2.

The most momentous objective of the channel management proposed blueprint is to render a swift appropriate reply to denizens which accelerates the efficaciousness in a shorter duration which will be profitable both for the government and the burgesses. The obliteration of the vague aspect is ore pivotal than complexities removal [11, 15]

Presentation of a Master Plan to Manipulate Communication with Burgesses: Management of communication with denizens concerns manipulation and technology discussions. These two entia have to be availed in a juxtaposed manner to fulfill the denizens' needs. The presented scheme applies to the technology of managing communication with denizens supposing that all the services proffered from governments to denizens will tend to be electronic more than ever in future.

The channels utilized by denizens comprise vast technologies such as email, internet, digital interactive televisions and wireless internet which are becoming more popular than ever. Internet kiosks in exhibitions and airports can act as complements of the communicate channels between the government and the denizens. It seems somehow difficult to predict the sort of channels that burgesses most often utilize. The governmental organizations should have the capabilities of proffering their services through all the feasible channels to the burghers. Since the private sector has been accentuated upon in manipulating the communication with the customers, the general sector will be emphasized when management of communication with denizens is concerned. General services will be proffered to all burgesses based upon their desiderata.

The management of communication with burgesses is designated as a type of strategy whose objective is to understand, portend and manipulate the denizens' needs. Chief general services that the Iranian government can render to the Iranian burgesses can be summarized as follows:

Reception of impost, issuing construction permits, employment, the hygienic and sanitary services, enrolling in diverse educational levels, issuing or changing the car plate numbers, issuing birth and wedding certificates, general library services, police services. Management of communication with denizens is based upon the integrative presentation of such services through new communicative channels [7].

The Sinequanon of the Electronic State: Development and implementation of an electronic state is a dynamic allembracing process. Considering the fact that the conditions in diverse nations vary up to some extent, each one of them pursues special purposes out of implementing an electronic government. Thus one can't prescribe a unified methodology for all of them. Hence electronic sate development should be carried through based upon the accurately recognition and

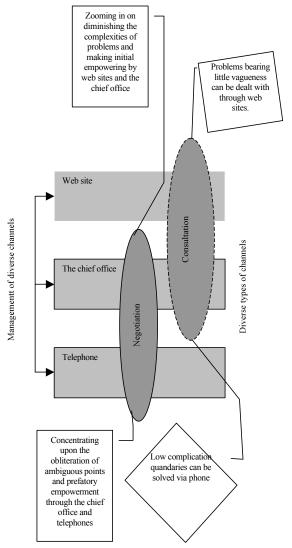


Fig. 2: The proposed blueprint for the management of new and preliminary channel

analysis of the environmental situations in other words transformation of the government into an electronic one has a strategic nature.

Implementation of an electronic government entails awareness of the capacities of nations that are willing to execute it. It can't be effectuated sans an accurately analysis. Dissimilar blueprints have been recognized in this case for the establishment of an electronic government. Although each one of the m has utilized their own nomenclature and orismology to introduce this process, all of them express the same concept and all of them regard the implementation of an electronic government in an evolutionary step by step manner [5].

### **Objectives of the Electronic Governments:**

- The structural development
- Presentation of services with higher quality and vast cooperation betwixt the government and the customers to achieve a digitized economy and a databased society
- Presentation of integrative services
- Proffering value-added services
- Obliteration of digital classes
- Presentation of personal services
- Submission of swifter services [8]

# **Electronic Governments Application Obstacles in Iran:**

Dissimilar quandaries may be beheld to achieve and implement an electronic state for instance orismological and technological limitations, fiscal and frugal difficulties, the extant social views of those in charge and the executive organs of the nation, other denizens and walks of life. The ensuing cases can be cited specifically: the accountable officials, authors and vox populi of the society have not grasped the necessity of realizing an electronic state. The high ranking managers of the governmental organizations do not make sufficient bolstering of the electronic government realization.

Should managers and authors grasp the specifications and coordinates of the future data society and Iran's status, we will witness correct implementation of an electronic state in the nation. Mass media should make people aware of the advantages of an electronic state to pave the way for the implementation of an electronic state. Establishment and maintenance of data-rendering plexuses and databases demands high expenditures especially for the developing countries.

Internet is the platform upon which an electronic state is implemented. It is necessary and inevitable to provide the required facilities. Other limitations pertain to the lack or deficiency of the information technology cognoscenti especially in the 3rd world nations. Government should pay attention to policies such as the thrifty quandaries, compilation of regulations and the users' rights when an electronic state is being devised and implemented. Enlisting and maintenance of the electronic data are among chief matters for devising and implementing an electronic state. Some of the challenges of an electronic state implementation pertain to the social dimensions and the data policies of internet as a basis to execute the electronic state.

**Portals and Their Role:** Portal is defined as the beginning point or a gate leading to other internet or intranet sources. Governmental portals are chief web sites out of which denizens can opt for their favorites for instance when burgesses connect to their own government's portal and observe online denizens services, they can access all the available services by making a click irrespective of knowing the name of the organization or administration which has executed these tasks.

The Situation of Portals in Iran: None of the governmental or payments services can be rendered by the government for the time being. Most of the governmental sites even don't possess a link to their own organizations and incorporations. Only some of them have links to their subordinate incorporations and organizations. There are no criteria for the extant web sites. Thus users are forced to download and install diverse Persian fonts to observe variations governmental sites. Some of these governmental sites have ir extensions while others end in. com, net or. org.

There is no coherence or harmony betwixt the terms opted to be internet addresses and the content of the topics available in the pertinent web sites. This fact causes incongruity in the design and nomenclature of the governmental sites. The 2nd matter is updating governmental portals. Unfortunately most governmental sites are outdated. Although the quality and volume of the information proffered b the governmental organs has enhanced with regard to the survey made last year, none of these governmental institutes has rendered any online services yet [4].

### **CONCLUSION**

Channels-running has several aspects for instance, the users' aspects, the specifications aspects and the organizational aspects. Each dimension has numerous factors. A great quantity of pragmatic researches have to be carried through to ameliorate this blueprint for instance, formulation of the complexities, vagueness of the problem and plenty of other factors such as age, sexuality, etc, it is aspired that governments revise their views to superintend channels and new thoughts. Anyway governments should apprehend channels manipulation. The red-tapism has to be diminished. Denizens should pursue their studies because they deserve to have an optimum government and to be digitally literate. Each new generation expects new entia

out of the novel mass medias. Electronic government is developing in the extant societies. Iranian society is not an exception. Hence it is crucial to pay attention to concepts proffered in this field. Manipulation of communication with burgesses is one of these cases, which zooms in on burgesses. An efficacious system of manipulating communication with burghers is effectuated by simultaneous combination of an accurate management and the utilization of the updated technologies. Some principles have to be observed for the realization of this matter so that less sources and expenditures will be spent to render burghers satisfied and this is the most crucial principle in the electronic state. Cognoscenti have admonished legal deficiencies in this case and the lack of a particular mechanism to pinpoint this technology in people's relationships with organizations. They believe undeveloped nature of internet in Iran and the lack of sufficient knowledge to wield it as well as the inappropriate platform of the telecommunication systems are among extant difficulties which impedes the electronic manipulation of the nation.

What is proffered in electronic state as a principle concerns facile access to information and services that governmental organizations and offices submit. Should the electronic government be devised and initiated accurately, burgesses will be able to enter an internet site easily to access those governmental services and information which they require. Such matters can be set into effect by provision of a national portal. According to the effectuated probes, unfortunately Iranian government does not possess a national portal baring the specifications of a governmental portal. The existence of such a portal is indispensable. A portal that is able to proffer comprehensive information on offices and organizations to the burgesses.

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