

E-GOVERNANCE IMPLEMENTATION MODEL: CASE STUDY OF THE FEDERAL GOVERNMENT AGENCIES OF PAKISTAN

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Abstract

This study examines the eGovernance potential to bring about structural changes in the way in which government agencies operate, interact and communicate internally and externally with its citizens. Public sector needs to adopt eGovernance that is focused on the citizen satisfaction. In many developed countries, the types and quality of public services provided by a Government to its citizens have evolved over time, due to their change in thinking regarding the role of Government, from being a traditional government to that of being a modern service provider. Thus, this study will focus on the complaint management information systems of the selected federal government agencies in Pakistan. Authors were able to derive the implementation model of eGovernance only after doing analysis of all of the data obtained from questionnaires, interviews and observations at the federal government level in Pakistan. Authors found that the overall outcome of the validation process indicated that the model is highly satisfactory to improve the overall eGovernance system to provide modern services to its citizens.

Keywords: Citizens, Complaints, eGovernance, Federal, Government, Model.

1 INTRODUCTION

eGovernance is the use of internet to provide high-quality public services to its citizens (OECD, 2009). In this way, public sector can achieve good governance through implementation of eGovernance in their departments. eGovernance services can be improved by bridging the digital divide and it can improve the living standards of citizens (UNCTAD, 2009; IDeA, 2005; CDT, 2002). eGovernance is the latest trend in the governance process all over the world. It focuses on how modern technologies can be implemented to strengthen the public voice as a force to reshape the democratic process, and refocus the management structure and oversight of Government to better serve the public interest. Good Governance can be enabled by eGovernance if appropriately implemented. This is the only way for Government to move forward from 'culture of secrecy' to 'culture of openness'. Thus, this study aims to improve implementation of eGovernance in the Federal Government Agencies (FGA¹) so that citizens can easily

¹ FGA is defined as a Ministry, Division, Commission, Statutory Body, Corporation, Institution established or controlled by the Federal Government of Pakistan but does not include the Supreme Court, Supreme Judicial Council, Federal Shariat Court or a High Court.

availe online services and make online complaints, they can track the status of their complaints and these complaints can be resolved in an efficient and effective manner.

In the last decade, role of the Government has changed significantly. The type, quality etc of services required by citizens are changing rapidly to keep pace with the increasing needs of citizens to have proper documentation to meet security, credit, travel, voting, health, education etc. There is need to rigorously define what is eGovernance, what public sector innovation means and what are the requirements for innovation in policy and implementation strategy. eGovernance is the interface of many soft elements such as skilled human resources, effective change management and process re-engineering strategies. It is thus important to identify the functions, processes and services of Government which are amenable to eGovernance such as Complaint Management Information Systems (CMIS) for redressing the public grievances.

To utilise ICT effectively and efficiently in the public sector, the Government should attempt to retain the best features of existing traditional governance and best possibilities of eGovernance. Therefore, the primary concern in this research is to study the adoption of eGovernance for redressing the public grievances. It will help to improve the public satisfaction with public services. In this connection, the gap between traditional governance and eGovernance to provide public services to the citizens is shown in figure 1.

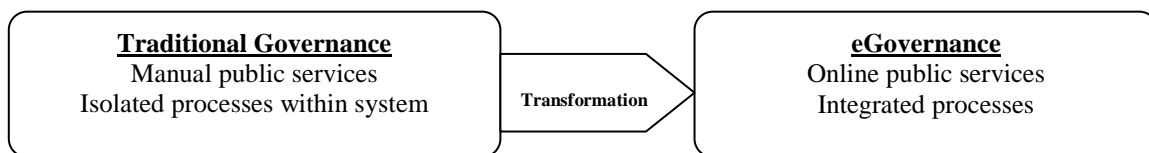


Figure 1. Adoption of eGovernance for Redressing Public Grievances

Federal Ombudsman has developed CMIS to ensure that public grievances are resolved in transparent manner within the shortest possible time². Similarly, many federal agencies have online internal grievance redress management systems to handle its agency specific complaints and issues. However, most of the government agencies do not have any proper management information system to evaluate the causes of public dissatisfaction. Thus there is need to reform government in order to redress public grievances in a more effective manner so that citizens are more satisfied with public services which can have overall impact on sustainable economic growth of a country and help to improve standard of living. Thus, public sector innovation is important for redressing public grievances and improving public trust. In this way, Government of Pakistan can improve its ranking.

According to the United Nations eGovernment Survey, measured for 192 countries, Pakistan's ranking was 137 in 2003, which improved to 136 in 2005 and to 131 in 2008 (Figure 2). However, in 2010 its ranking dropped drastically by 15 ranks to 146. In same way, in 2012 its ranking further dropped by 10 ranks to 156. Pakistan can improve its ranking by focusing on and by finding out ways to improve citizen participation. For instance, web portal of the Government of Pakistan www.pakistan.gov.pk should launch eGovernance system to handle complaints against federal government agencies. This will help a lot in improving ranking of Pakistan.

² Source: <http://www.mohtasib.gov.pk>

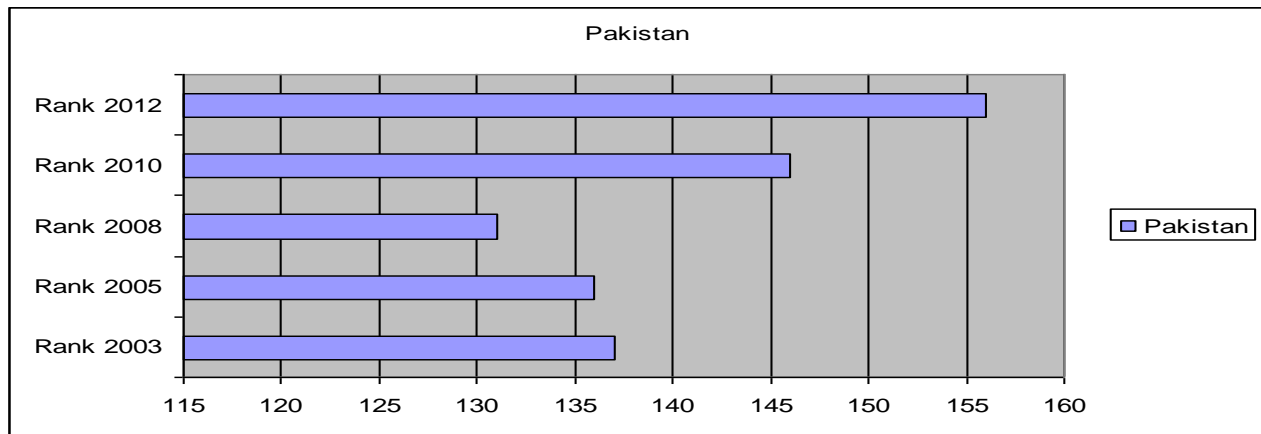


Figure 2. United Nations e-Government Development Index for Pakistan³

Nowadays this is very burning issue and the government is loosing millions due to inefficiency of public sector and poor quality of work. This sector still has less research and become outdated after the new development. When citizens talk about the public sector they give the interesting remarks. Citizens are very cynical about the public sector. Everyone talk about the inefficiency, delays and their response of the public sector, which to some extent seems to be true. This is due to lack of education and training to take appropriate step for transition from manual to ICT culture.

In normal routine, federal government agencies are receiving and resolving customers' complaints which are agency specific. The objectives of this study are to:

- Analyse present policies, rules and regulations on eGovernance to know how these are helping in the redress of public grievances;
- Review of available features of websites of selected federal agencies as well as examine present facilities and infrastructure to know how positive changes could be brought in them to improve complaint management information systems of these agencies;
- To develop eGovernance Implementation Model for Pakistan so that federal government agencies would be able to redress public grievances in an efficient and effective manner.

2 METHODOLOGY

Preliminary review of some of the Agencies has revealed that most of the federal government agencies do not have proper online complaint handling systems and resolution mechanism. At this stage the main question is 'How can federal government agencies adopt eGovernance to have user-friendly online complaint handling system to redress public grievances?'

The desk research was done by critically reviewing the ICT Policy and the eGovernance strategy formulated by the Federal Government of Pakistan. The desk review consisted of qualitative analysis of significant relevant documents, namely, the ICT Policy and Action Plan of Pakistan (2000), the eGovernance Strategy and Five Year Plan for Federal Government Organisation (2005-2010). Additional

³ Source: United Nations e-Government Readiness Knowledge Base, <http://www.unpan.org/egovkb>

documents giving standard operating procedures of complaint handling systems etc were also perused⁴. From October to December 2010, exploratory work was conducted to study the online complaint handling systems of six focused federal agencies: State Life Insurance Corporation (SLIC), Sui Northern Gas Pipelines Ltd (SNGPL), National Database and Registration Authority (NADRA), Pakistan Post (PP), Islamabad Electric Supply Company (IESCO) and Capital Development Authority (CDA). Out of six headquarters of Federal Government agencies, four are located in the Federal Capital, Islamabad., SLIC in the provincial capital, Karachi and SNGPL in provincial capital Lahore. These agencies are selected on the basis of getting top six positions in complaints registered against them in Federal Ombudsman.

Exploratory work was carried out to understand the internal online complaint handling systems, data collection, scene setting and establishing further contacts with the concerned experts of the selected federal government agencies. Exploratory work indicated that online complaints handling systems of selected federal government agencies are at the different stages of development.

2.1 Instruments

Questionnaire survey – A questionnaire was distributed to the representatives of the selected federal government agencies. The questions covered a wide range of issues relating to the complaint handling capability in their respective agencies. This questionnaire was a supplement to the interviews. The interviews did not reveal all the needed information and hence, the questionnaire extracted important statistics and opinions, and captured missing data.

Documentary and archival research – This study drew on a wider selection of documentary information. This method was advantageous because it enabled the study to describe and analyse the implementation of eGovernance to redress public grievances. Desk research⁵ was undertaken together with the collection of documentary evidence. In other words, a review of secondary material was undertaken to offer some historical, social and political context to the study as a whole.

The study's surveys and site visits reveal untapped complaint management best practices, as well as, new ways for resolution of complaints.

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1. ⁴ Idris, I. (2009), 'Capacity Mapping and Assessment: Grievance Redress System of 5 Federal Agencies' SPGRM - UNDP, WMS, Islamabad.
 2. Qureshi, H. S. A. (2010), 'Review and analysis of existing SOPs of complaint handling system of Pakistan Post' SPGRM - UNDP, WMS, Islamabad
 3. SNGPL (2009), 'Contact Management CC&B Process Documentation' SNGPL HQ, Government of Pakistan, Lahore.
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 5. Ali, I. R. (2010), 'Workshop on Marketing/Leadership in Customer Relationship Management, Selling Technique for Increasing Postal Business', Postal Staff College, Islamabad
 6. EGD (2005), 'Outsourcing Services for Customer Contact Center', Capital Development Authority, Government of Pakistan, Islamabad
 7. PDF (2009), 'Ensuring Good Governance through Strengthening Administrative Justice and Accountability', Policy Dialogue Forum 2009, SPGRM –UNDP, Wafaqi Mohtasib Secretariat, Islamabad
 8. BearingPoint Pakistan (2006), 'Road Map for IT Strategies', SLIC HQ, Government of Pakistan, Karachi

⁵ Interviews with key people in the federal government agencies have to be conducted as documentation and official data were insufficient.

3 COMPARISON OF THE SELECTED FEDERAL GOVERNMENT AGENCIES

The analyses clearly show gaps in the CMIS of six selected federal agencies. The existing infrastructure, including manpower and hardware/software applications are a clear predicament in overall picture, where there is a need of capacity building and improvement in complaint handling system (Arfeen, 2011). Agencies differed greatly in their complaint management information systems. There is a dire requirement to address all the issues highlighted in the comparison matrix (see Table 1) at individual/agency level.

S No		PP	NADRA	SNGPL	IESCO	SLIC	CDA
1	ICT Policy	.	√	-	.	-	.
2	Written procedure/ applied mechanism to redress customer complaints	√	√	√	√	√	-
3	Complaint Cell/ Department	√	√	√	√	-	√
4	Top management has e-access of complaints and oversee complaint handling procedure	.	√	√	√	-	√
5	Timeframe to address complaints	√	√	√	√	√	√
6	Monitoring and e-tracking system for complaints	.	√	√	.	.	√
7	Complaint system swiftly generate systemic information about causes of complaints and complaint trends	.	√	.	.	.	√
8	Circulate to top management periodic reports of data from complaint records with suggestions for action to eliminate recurring issues	.	√	√	√	.	√
9	Publicise complaint system	.	√	√	√	.	√
10	Complaint system easily accessible	√	√	√	√	√	√
11	Summary of complaints forwarded to WMS
Detail about ICT Infrastructure for Complaint System							
12	Telephone	√	√	√	√	√	√
13	Fax Machine	√	√	√	√	√	√
14	Internet e-mail	√	√	√	√	√	√
15	Internet www	√	√	.	√	.	√
16	Audio/ Video conferencing	.	.	.	-	.	.

√ Available
- Not Clear/Need Improvement
. Not Available

Table 1. Comparison Matrix

Federal agencies with sophisticated complaint management information system like NADRA has strongest upward reporting arrangements and downward monitoring process, whereas other agencies are at different level of eGovernance development to redress public grievances.

Online CMIS showed considerable variation because of their IT readiness, different complaint mechanisms and deficiency to adopt eGovernance. Presently, most of the federal agencies have drastic scarcity of IT skilled manpower.

- **Barriers to eGovernance for Redressing Public Grievances:** The interviews conducted with the officials in six selected federal agencies revealed the causes that hinder the adoption of eGovernance to redress public grievances. Overall, there are twenty-one different variables that have been identified and ranked according to the frequency their occurrence. These are based on the response received from government officials during their interviews. Integration, insufficient budget, limited transfer of knowledge, resistance from the agencies, as well as, lack of R&D capabilities are some of the barriers that can be anticipated to become more significant in the near future. These barriers are listed as follows:
 - Mixed and unclear instructions SOPs for complaint handling system
 - Inadequate Integration of a complaint system with work and structure of an agency
 - Inadequate technological standard and policy
 - Weak customer satisfaction
 - Limited and inexperienced vendors expertise to provide comprehensive CMIS
 - Weak R&D capabilities to improve complaint mechanism
 - Risk-averse and low initiative culture
 - Inadequate knowledge about eGovernance
 - Weak change management strategy
 - Lack of commitment of leadership at the federal agency level
 - Scarce IT resources
 - Difficulty in recruiting specialist IT staff
 - Long tendering process
 - Weak policy sharing, IT culture and experience
 - More dependence on IT vendors
 - Weak communication among federal agencies
 - Lack of priority given to training
 - Inexperienced IT consultants
 - Limited incentive to encourage complaint solver
 - Insufficient budget
 - Limited knowledge transfer from vendor
- **Issues and Obstacles:** The focal federal agencies have different complaint handling systems because of the varied nature of complaints. However, there are many common factors in their CMIS, such as receiving complaints through call center, UAN, email and web portal; and resolving these complaints through their field units. Whatever way agencies adopt, unsatisfied customers are still approaching for remedy of complaints (see Figure 3).

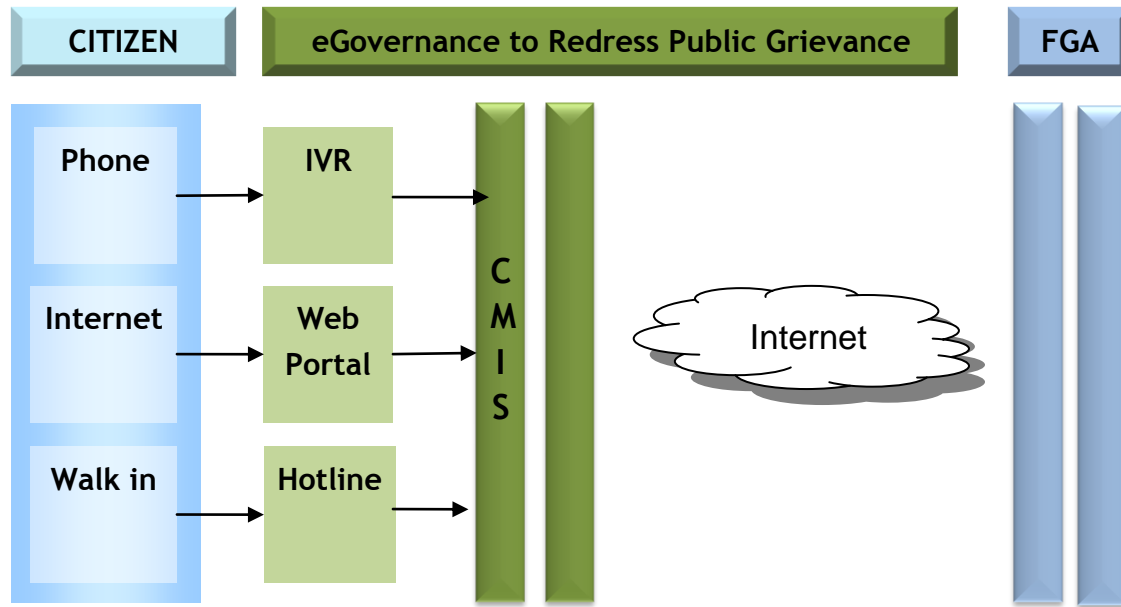


Figure 3. Complaint Management Information System (CMIS)

- Comparison of ICT Facilities in focal Federal Agencies:** Online complaint management systems showed considerable variation because of their IT readiness, different complaint mechanisms and deficiency to adopt eGovernance. Presently, most of the federal government agencies have limited IT skilled manpower, as well as, ICT standard guidelines to interact with citizens. For example, government needed assurance that CMIS would be protected securely by the technology. In other words, security was their major concern and there was a lack of belief in how technology could safeguard confidential matters.
- e-Readiness:** One of the main bottlenecks of eGovernance in Pakistan is the poor level of e-readiness. During an interview with government officials, it was revealed that ‘there is insufficient IT Human Resource capability to support successful delivery of eGovernance program to redress the public grievances’. Generally, the government agencies are drastically lacking in IT manpower. Unfortunately, this aspect has not received the attention of high-ups. ICT skills are undoubtedly needed for a successful implementation of eGovernance, for example in installation, maintenance, designing and managing online processes and functions. Let us now examine the structural barriers to eGovernance.
- Structural Barriers to Redressing Public Grievances:** During the interviews, it was acknowledged by government officials that there was a lack of IT skilled manpower in some federal government agencies. There was a rigid process of recruiting new IT experts. This rigid policy and strict financial regulations have created a bottleneck. This situation shows that the process of recruiting IT experts is ad-hoc basis in the government agencies. Thus career structure of IT service should be reformed in order to retain, expand and further develop the IT human resources in the FGAs.
- Interoperability:** Most of the government agencies are working in isolation. They have developed the agency specific applications for redressing public grievances without keeping interoperability factor in view like different government agencies are using different software for complaint management systems, even, outsourced their call center to private companies like CDA and SNGPL.

Therefore, CMIS integration with other software applications is a problem. The interoperability may be achieved through web based interfaces.

- **Project Resources and Interdependency:** There must be eGovernance need assessment before the preparation of ICT projects to handle public complaints online. This will help in the allocation of proper resources and estimate realistic timelines for the projects. In the strategic projects, there should be no interdependency; each project should have sufficient resources for its execution. In practice, the project managers are hired after project planning and approval. The project manager should be hired at the time of project initiation and planning so that he has full information about all aspects of eGovernance initiatives.
- **Leadership in eGovernance:** The problem of poor or no leadership has been experienced at federal government agencies level. There is no champion of eGovernance who can redress public grievances in Pakistan. No committee has been formed to forecast the future requirements of eGovernance, and development of CMIS and how eGovernance can help to achieve these targets. A stronger technical authority should be required to look at the issues of integration of systems, the replication of projects and the making of policy on standard architecture. There should have been an 'upstream force' or politicians in the government, setting the direction of eGovernance at a policy level and a 'downstream force' or the technical experts translating these policies into action. The IT officers have been more concerned about the latest, best and most expensive technology available in the market to be implemented in the government agencies without any consideration as to a real value of IT to be applied in the government. Giving the IT people the luxury to formulate and influence ICT Policy has been, in fact, a disastrous practice.

Due to the above, eGovernance in Pakistan is more bottom-up rather than top-down. To gain support for new ideas has been difficult and this has prevented the officials (especially Project Managers) from being more creative and innovative. Getting support and approval from the top-level management has been a long, uncertain and challenging journey for the officials and has caused significant delays to the projects. Lack of leadership is connected to two other issues that have also become barriers to eGovernance initiatives for redressing the public grievances in the FGAs in Pakistan. These are lack of risk-taking culture and poor change management strategy.

- **Risk-Taking Culture:** Generally, there is no culture of risk-taking in the government organisations. ICT projects are very risky. The bureaucrats in the federal government perceived ICT as a job of IT experts. They kept themselves aloof from the process of eGovernance. According to the feedback received during survey, there were no incentives to risk takers and many preferred to 'play safe'. Mostly, project managers are not willing to take personal risks due to fear of failure. Generally, the officials are cautious of being too critical of others. They think that it is better to safeguard one's position or status rather than be given a 'reward' for achieving failure through risk-taking. This trend needs to be changed.
- **Change Management Strategy:** Change management strategy is one area that has been overlooked in eGovernance especially for redressing the public grievances. The government has no strategy prepared to handle the changes brought by the technology. Changes in technology bring changes in policy, culture, mindset, agency structure and process. A number of projects; for example a simple application of using the email system failed as people still treated paper as the only official tool of communication (as it has signature in it): there is resistance to change and no trust in the system as there is no email policy formulated by the government to counter the resistance. There should be a policy to accompany the email system that endorses email as an official and recognised way of

corresponding. A change management strategy is crucial as technology does not only require the government officials to equip themselves with new technology, but also to prepare them in accepting new changes to work practices, processes and cultures. This is also true when majority of the government officials agreed that everyone was comfortable with the current situation and was reluctant to change. The change management strategy is needed to deal with culture of over-cautiousness and confidentiality in the government agencies. There was poor information flow and sharing between the various levels of government agencies. One could argue that by declaring reports as 'strictly confidential', the policy-makers could be 'safe' from their performance being scrutinised based on the targets of the plans and avoid vicious criticism on the weaknesses of the plans. But this is a weak argument and does not justify avoiding use of new technology.

The interviews conducted with Government officials revealed that the mind-set of each government agency was that each one had been given the authority to hold certain data and were not willing to share it with others due to security and confidentiality excuses. The fieldwork came across evidence where a government agency was not willing to share a data centre as it had no confidence in other government agency to handle the information that 'belongs' to it. The officials felt that government agencies should realise that the information belongs to the government and citizens. Change management plus strong leadership needed to be enforced here to overcome this in strengthening further their status-quo in eGovernance initiatives for redressing the public grievances. First step in eGovernance is to identify the traditional processes and structures that must be revamped and integrated. Secondly, managing the resistance to change by the officials is vital as this is one of the biggest barriers to a successful change. The behaviour patterns, motivation programmes, impact assessments, potential sources of resistance or culture shock, citizen-centric approach and identification of resources to manage change must be prepared in eGovernance initiatives to redress the public grievances.

- **Public Private Partnership:** The eGovernance has brought one major new experience to the government. New strategic partnerships (known as Public Private Partnership - PPP) with the private sector occurred during eGovernance implementation. The main reason why the PPP was created was mainly due to the lack of IT human resources and infrastructure in the government agencies. With the resources and IT expertise available from the private sector, the government agencies were able to proceed with their projects without having to wait to overcome the lack of human capital and technology. At the same time, the federal government agencies were able to benefit from the transfer of knowledge and technology from the PPP like CDA and SNGPL's call centres. Most of the time, partnership formed is in the shape of outsourcing. Outsourcing is the preferred type of partnership with the private sectors as this is the best alternative to tackle the lack of IT resources. By outsourcing to IT vendors, the government agency can monitor the project implementation. The lack of resources should not be used as an excuse for any federal government agency to have delays in its eGovernance implementation to redress the public grievances. Outsourcing, however, cannot be deployed forever as the government agency should deploy its own people to handle the system in order to save costs.
- **Limited Role of ICT Policy:** eGovernance is all about changing the work process, culture and solving problems in the public sector with technology as the enabler. Strong sponsorship or leadership is required but should be followed with strong enforcement to implement not only in terms of the humanistic role but also in practicing the formulation of new and revision of old policies. Strategic policies are essential for the eGovernance process to have guidance and standards to follow. eGovernance is not only about technology but is actually more about the policy that can facilitate individual, agency level, structural, and cultural change.

A statement appears in paragraph 3.21.1.2 of the IT Policy (2000) that says *'The e-Government model for Pakistan is a gigantic task. It may take 5-7 years because of financial constraints as well as inadequate professional know-how to undertake system re-engineering of different government departments and use of I.T. so that use of paper is minimised. Therefore, a modular approach will be adopted to achieve the goal of e-Government'*. Some of the reactions from the interviewees were: *go send the civil servant for training and employ various IT consultants to develop e-Government model. What happens next? Are they going to use the skills back in the office? Is the technology or system already available? Is there any application for develop model, this will be a complete waste of budget. An identification of training modules related to their working routine and the existence of the technology to be utilised combined together will produce a more positive return on the investment.* Although the general problem is identified, the specific problems are not, and neither is there an evaluation of how to solve the problem.

To make the situation even more complicated, the actions under IT Policy strategies infrastructure development # 3.7.2 appear very ambitious. For example, IT parks and incubators were to be established. There was no evidence that a study has been conducted on the capability of Pakistan to embark on these strategies. It is important how realistic the projects were and how Pakistan can compete with other established software parks such as Multimedia Super Corridor (MSC) in Malaysia. Were these actions simply put to make the content of the IT Policy trendy and in line with the global trends?

The government reports, however, identified critical gaps such as the need to have more IT manpower, skills, knowledge and competency for the success of eGovernment. If these have been identified as the constraints, why did the content of the IT Policy not reflect the reality of ICT innovation capability in Pakistan? In last eleven years to achieve all the goals was almost impossible when the infrastructure and human resources were not yet in place. The policy style here seems to be making grand plans at a political level; but not following through with planning and implementation. Batini et al. (2009) emphasize the integration of back office processes for improving the quality of services, and say that a one stop shop should be available for the citizens in case of residency change, updating of new address on a driving license and in health services. eGovernment can help build trust by enabling citizen engagement in the policy processes, promoting open and accountable government and helping to prevent corruption. Policy makers cannot stand aloof from these trends, as they are forced to implement innovations as well as to explore new opportunities. New possibilities offered by ICT give government chances to rethink ways of working and providing services for citizens and businesses (Verdegem & Verleye, 2009; Bekkers & Homburg, 2007; Heeks, 2003; and Prins, 2001).

The role of ICT policy for adoption of eGovernance for CMIS in federal government agencies has been very limited. For example, during the early stages of infrastructure development, there was no policy on technology standards such as email policies being outlined. This led to confusion in the government agencies and delays in implementation. According to one respondent, there was no policy that all government buildings (including in the plan of those under construction) must have the minimum network infrastructure according to the required standards. A common policy, such as one call center for all federal government agencies, for example, would result in a common understanding by everyone that a CMIS is necessary to them. Then, another policy would follow such as centralised federal data center policy for all government agencies. It is acknowledged that this is a daunting task, as it involves the 'powerful' policy makers, but eGovernance should be seen as a platform to shift the traditional government to a more responsive one in terms of eGovernance policy. The policy makers should have realised that current ICT policy has failed to reduce the poor diffusion of ICT in the government agencies. Poor policy communication resulted in the lack of awareness and sense of ownership by everyone on eGovernance for redressing the public grievances.

4 EGOVERNANCE IMPLEMENTATION MODEL

This study now proposes an eGovernance implementation model which is based on the empirical findings. This model provides the opportunity for eGovernance initiatives in the government organisations to highlight important areas that may have been overlooked by the literature. eGovernance in the federal government agencies deals with governance issues (see Figure 4). Once a concrete and feasible aim to adopt eGovernance has been identified, a focal person in every FGA must be appointed as a driving force for the whole process. The presence of a strong leader (focal person) can overcome the resistance and inertia in the federal government agencies to adopt eGovernance for redressing the public grievances. Centralised, decentralised and hybrid are three possible approaches to the management of eGovernment initiatives (Heeks, 2006). The absence of top-level political commitment to adopt eGovernment would also cause the various committees to degenerate to a forum for recording events rather than taking decisions. This is evidence in the case of EGD in Pakistan which has little power in influencing the eGovernment initiatives because of working as attached department under the federal Ministry of IT. Furthermore, allowing the IT people to lead eGovernment in Pakistan resulted in purely automation of processes and the purchase of irrelevant technologies. In a country like Pakistan where there is federal government, centralised eGovernment with hybrid approach is favourable as implementation should be easier to manage and align.

There must be citizen centric approach for improving the e-services otherwise to achieve the desired results is impossible. Today, governments recognise that eGovernment is a key tool to support and enhance government functions and processes as a lever for new approaches to service delivery. Governments are turning their attention to this broader view rather than focusing on the tools themselves. They are shifting from a *government-centric* paradigm to a *citizen-centric* paradigm, putting more attention on the context (*e.g.* social, organisational, and institutional factors) in which eGovernment is developing and on the outcomes for users (OECD, 2009). There is no connection between goals and means in the ICT Policy and e-Government Strategy. Hence policy setting and formulation must be conducted through a meticulous process of consultation with various stakeholders in the government agencies, educational institutions, private agencies, citizens and other stakeholders. While formulating Policy, the organisational, operational, technological, economic and social issues must be identified and prioritised together with future requirements or anticipations on the political, social and economic environment of the country. There should be detailed implementation guidelines, and strategies to overcome the identified challenges for change and barriers of eGovernance to redress the public grievances in the federal government agencies of Pakistan.

Strong R&D capability is crucial in eGovernment initiatives. This can be achieved by building strategic linkages with universities, and software industry. Miles (2001) stated that historically the public sector has often been the vanguard innovator for major new technologies and the driver for enabling research in academia. In other words, collaboration and coordination between various government agencies and stakeholders must be stimulated for a better cross fertilisation of ideas, solutions and knowledge (Ndou, 2004). Investment in national R&D resources must be done to strengthen the higher education and research system to improve human capital in strategic areas of importance. Furthermore, R&D funding schemes must be formulated to promote strong interest from academia and industry.

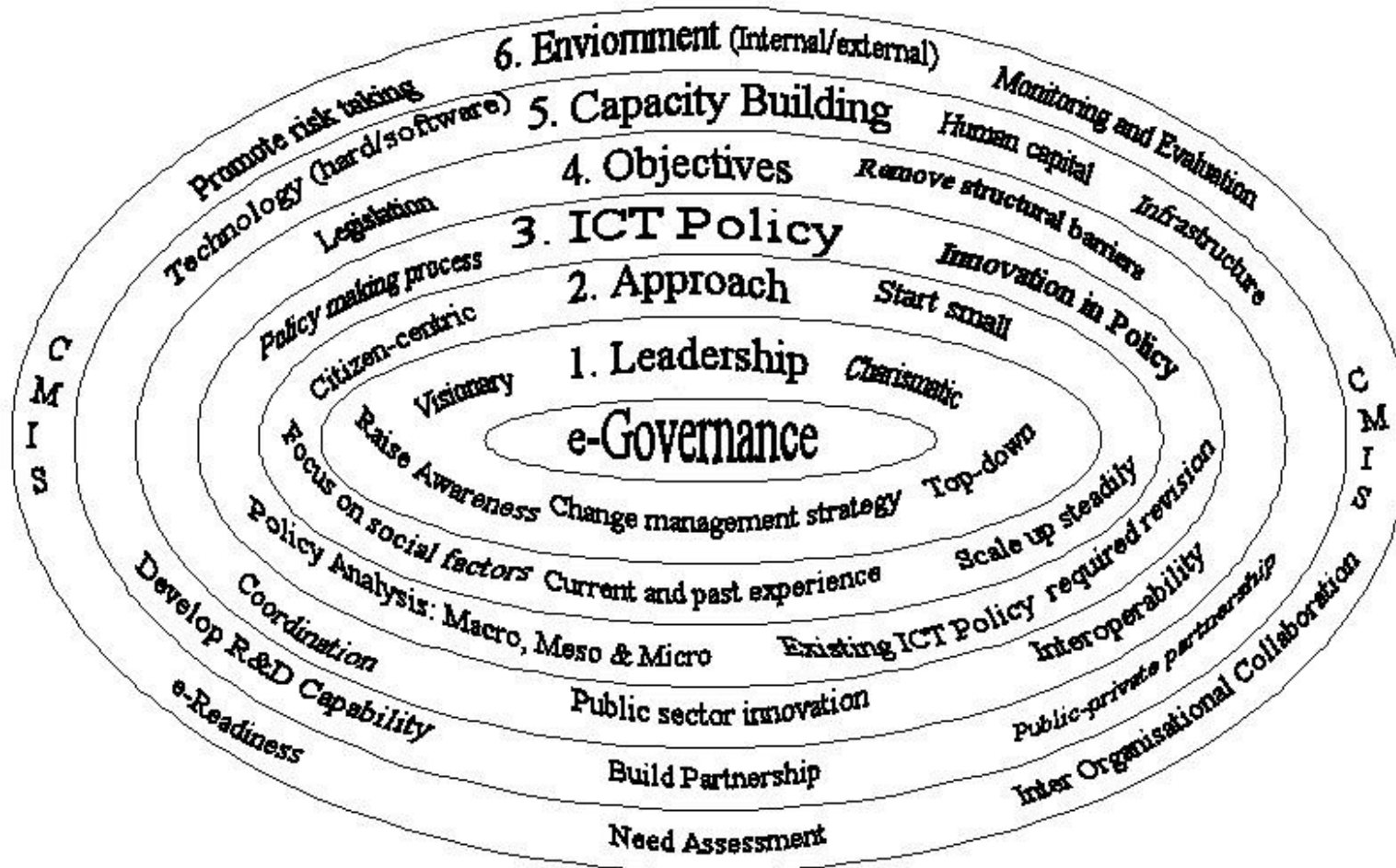


Figure 4. eGovernance Implementation Model

Complaint management system requires strong human and technological base. It is somewhat sensible not to embark on eGovernance before these two important capabilities are strengthened. In the case of FGAs, this study proposes that the eGovernance has a 'cooling-off period' where infrastructure (computerisation of government agencies and building database) and human capacity building (IT skills and software engineers) are expanded before the implementation of CMIS.

The eGovernance implementation model is derived from the combination of the evidence from FGAs. Important features such as problem identification, capability assessment, identification of policy options, and consistent evaluation process have been included in the eGovernance implementation model. Most importantly, the model also goes beyond the rational policy-making process model. Other features such as leadership, building partnership, scanning the environment, human capacity building, incorporation of good practices, the promotion of risk taking environment and complaint handling systems have been included to certify the eGovernance implementation model as an ideal conceptual model that can act as a useful reference before embarking on an eGovernance journey for redressing the public grievances.

5 RECOMMENDATIONS

All federal agencies should provide link on their web interface for lodging complaints. CMIS of Federal Ombudsman is not as user-friendly as they are claiming in its website. The complaint tracking system and CMIS need to be user-friendly for citizens. All federal agencies must have comprehensive CMIS for effective handling of the complaints. Federal agencies should ensure that their complaint handling system is effective and is easily accessible to all so that citizens can make online complaints conveniently.

- **Interactive Web pages of Federal Ombudsman and Federal Agencies:** The webpage of Federal Ombudsman needs to be made interactive with the web pages of all federal agencies. It means that the web pages of all federal agencies should provide a link for registering a complaint with Wafaqi Mohtasib. Similarly, Wafaqi Mohtasib's webpage should provide links for registering complaints with all federal agencies. This will be a very useful feature to help citizens to register their complaints and will make it a one-stop shop for complaint handling information.
- **Including SOPs in ICT Policy:** The ICT Policy and Action Plan of the Ministry of IT are the most important documents to set direction for all other federal government agencies. The standard procedure for complaint handling system should be included in the revised version of ICT Policy.
- **Improving Infrastructure for ICT:** Building infrastructure for eGovernance is the basic step in its practical adoption. It is time consuming, costly and requires high technical standards. It implies investment in huge networks providing highways to connect different federal agencies together and also to enable internet access to citizens. Hence more attention should be given to improve infrastructure for ICT.
- **Transfer of Technology:** The comprehensive application of CMIS already developed and being used by some federal agencies like NADRA may be replicated by other federal agencies so that heavy investments on the development of new software for resolution of complaints could be avoided.
- **Standardisation of Complaint Handling Mechanisms:** FGAs need to build up networks to redress public grievances in a coordinated fashion. For this purpose, Pakistan government web portal can provide websites basic framework to ensure interconnection among FGAs to standardise the complaint handling mechanisms of all federal agencies.

- **Establishment of Complaint Management Institute at Federal Level:** Establishment of Complaint Management Institute would overcome the deficiency in the existing Complaint Handling Systems of Federal Government Agencies. It can improve overall efficiency and effectiveness of FGAs. There is a need to make it mandatory for government officials to attend redress public grievance courses to improve overall government complaint handling mechanism by providing them real case studies. It will help to improve public satisfaction level with federal agencies.
- **Launching of eGovernance System as recommended by UN:** An international task force on e-government indicators was established by the United Nations⁶. Task force prepared draft list of core e-government indicators where public grievance system is transformational indicator. Thus it is essential for government of Pakistan to launch comprehensive eGovernance systems which handle citizens' complaints against the government agencies. In this way, Pakistan can improve its ranking in the forthcoming e-Government Survey.
- **Adopting Best Practices:** It sometimes seems that only the first half of 'Think Global, Act Local' gets remembered. Designers seeking quick fixes try to pull eGovernance solutions off-the-shelf from other advanced countries. So there is often a large design—reality gap when trying to introduce in country X an eGovernance system for redressing public grievances designed for country Y. The frequent result is complete failure. While adopting the best practices of other countries, we should keep in view our own environment and circumstances. Instead of adopting best practices of other countries blindly, we should make adjustments in them according to our needs.
- **Start Small:** Most of the time attention is given to technology as well as the governments' tendency to start all too often from existing ways of working (Van Deursen et al., 2006; Ebbers et al., 2008). eGovernment portals that are not available in the national and local languages (speaking by significant majority groups) are not going to be used by a critical mass of citizens: one can only assume that much, or even the vast majority of the population may be unable to comprehend the information and services provided (Davison et al., 2005). Indeed there is also evidence that eGovernment is for the educated minority in developing countries like Pakistan. This would be truly unfortunate situation, since it is often the less educated that have most to gain from online initiatives that empower them to make decision based on what is in their best interest, and would stand in stark contrast to the presumably universal principle of government: serving all citizens.
- **Soft factors to dominate hardware:** Implementation of eGovernance is often conceived in terms of machinery, rationality and objectivity. Many eGovernance systems for complaint handling get designed according to hardware. CMIS is dominated by 'soft' factors: people, politics, emotions and culture. While preparing our software for complaint handling systems, we should not be dominated by hardware.
- **Constitution of eGovernance Advisory Committee for CMIS:** An Advisory Committee under the supervision of Federal Ombudsman should be established in order to improve and monitor the implementation of comprehensive complaint management systems in all federal agencies.
- **Joint Session:** Joint session should be conducted with other federal agencies to understand their complaint handling system and to improve overall coordination among federal government agencies.

⁶ UNKB - Nations E-Government Development Knowledge Base (2010), "*e-Government Survey 2010*", Department of Economic and Social Affairs, Division of Public Administration and Development Management, New York.

- **Change Management Strategy:** A change management strategy is crucial as technology does not only require the government officials to equip themselves with new technology, but also to prepare them in accepting new changes to work practices, processes and cultures. Training of complaint handling officers in change management should be a continuous process in all federal agencies.
- **Suggestions and Comments to have ICT-enabled Complaint Systems:** ICT based complaint management system must have integration with all functional units in the government agencies. No agency should be working in isolation. In this way, agencies can improve their productivity and be able to improve the satisfaction level of citizens. It is essential to enhance ICT knowledge of the workforce. In this way, they would be able to implement proper CMIS at all tiers of the agencies so that proper complaint handling/ tracking is possible. As suggested earlier, all federal agencies should provide interface for WMS to monitor the complaints.

6 CONCLUSION

It has been observed that there is inordinate delay in resolution of complaints by these agencies causing public dissatisfaction and frustration. Implementation of eGovernance, using latest technology, can bring transparency, efficiency and accountability for redressing the public grievances in the Federal Government Agencies. Presently, NADRA is ahead of most of the federal government agencies as far as the use of modern technology is concerned. However, automation alone is not sufficient to improve the Complaint handling systems. The IT skilled human resource is equally important. It is better and cost effective for the government agencies to replicate the best practices of the agencies like NADRA. In this way, they would be able to make their complaint handling system more efficient and effective. A key conclusion of the study is that eGovernance initiatives for redressing the public grievances require establishing of citizen-centric approach, which helps a lot in shifting FGAs' focus towards the citizens needs and their satisfaction with public service delivery.

6.1 Limitation of the Study

This study has some limitations. The empirical findings focused only at selected federal government agencies of Pakistan. The analysis on adoption of eGovernance in the government organisations of Pakistan was concentrated mainly on eGovernance initiatives which have generated data and valuable findings. The eGovernance analysis could not look into the more advanced government service delivery stage due to slow nature of eGovernance implementation in Pakistan.

6.2 Opens New Avenues for Further Research Studies

This research opens new avenues for research studies to be carried out in this field in future. In the future, further research work can be done on a mathematical representation of the model which will assist in defining the best combination of all onion ring layers in order to come up with the best set criteria for successful adoption of eGovernance in the public sector organisations. Future research in eGovernance initiatives should take place in the same public sector organisations elsewhere in the world both developing and developed countries. In this way, comparative analysis and perhaps confirmation of the findings by this research study can be done.

Note

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