E-Government towards Good Governance: A Framework for Digital Governance.

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Abstract: *The application of ICT in the public sector organizations of the developing countries is greatly used as one of the essential tool for bring the improvement in the governance of the county. The research study is aimed to evaluate the effect of ICT in improving the good governance of the public organization in Pakistan. The research paper has discussed the application of ICT in the public sector organization in developing countries and highlighted the essential factors which need to be addressed for making effective adoption of e-government technology in the public sector organization that consequently enhance the good governance of the public organization. The study has focused it study on those public organizations where e-government technology has been used for the purpose of improving good governance. This research has proposed a framework for enhancing the good governance of the public organization and finally has provided policy, action and research recommendations.*

Keywords: Good Governance, ICT, e-Government technology, Public organizations, Good Governance Framework.

1. Introduction

In this "Information Age" of the 21st century, governments worldwide are facing the challenges of technological transformation and the need to reinvent government systems to deliver efficient and cost effective services through information and communication technology (ICT) to their stakeholders (McLean and Tawfik, 2003). ICTs offer concrete opportunities for local and national governments to improve their performance in terms of transparency, participation and decentralization. The application of ICT in planning and design of development strategies helps to strengthen the establishment of efficient, effective and transparent governance systems. The online tools can significantly improve the rendering of services and information flows from administrations to their constituencies (Batista, 2003). It also stated that evidence from a number of projects and initiatives worldwide started with the help of UNESCO and shows that ICT provides new possibilities for important governance efficiency, new ways of citizens' engagements and their more proactive participation in policymaking, rebuilding trust and transforming the relationship between government and citizens (Batista, 2003).

This research study has recognized that, generally, ICT use in the public sector is a three-phase process. The first phase includes the introduction of computers in public management, particularly in internal services. The second phase is related with the implanting e-government technology in the organizations. The third phase is related to the utilization of ICT to improve good governance. ICT introduction represents a decisive step in the process of democratization of public information, and in the interaction between citizens and government, assuring the provision of services by government that meets the public's demands and priorities (Batista, 2003).

E-Government is considered to be a useful tool for governments in providing public services to main stakeholders, where there is a scarcity of resources and where a country is gripped with the challenge of a large population. The emergence of the Information Age has changed the ways people work, study and live (McLean and Tawfik, 2003). The influence of information globalization and the rise of the digital economy have pressed governments to "reinvent" themselves to meet new expectations and priorities of citizens and businesses. These dynamics are compelling many governments to create a new vision for their relationships with businesses, organizations and citizens, and bring about closer collaboration between the different levels of governmental organizations, as well as to create a new organizational structure to fulfill its mandate. E-Government can fulfill the mandate of government by formulating a new vision of how governments view their citizens, employees and businesses, and builds a citizen-centered, service-oriented, public-participative government with an efficient, accountable, and transparent government system. IT based online service is the most democratic and unbiased service system. It offers equal opportunity to all races, genders, and ethnic groups (Backus, 2001).

E-Government technology breaks down geographical barriers and makes the government's services easily accessible to all citizens including those domiciled at village level, who may not be connected by roads and opens for them many opportunities (Ahmad, 2008). e-Government is deemed as a key instrument for modernization and reforming government organizations. Today, governments, especially those

of developing countries, are facing continuous pressure to increase their performance and adapt to the information society. Currently, many developing countries are planning or implementing e-government technology projects in public organizations. There is a growing need to understand how these projects can be successfully managed to obtain the maximum benefit from e-government technology and measure the impact on the performance of public organizations (McLean and Tawfik, 2003).

The research has been done those public organizations where e-Government technology has been used since last decade. The information has been collected from those related organizations. The author has studies eight public organizations where e-government technology is being used for the purpose of enhancing good governance of the public organizations.

2. E-Government and Good Governance

> ICT is an enabler of efficient and effective functioning of government. E-Government can be linked to good governance as defined by the World Bank;
> "E-Government is the use of information and communications technologies (ICTs) to improve the efficiency, effectiveness, transparency and accountability of government. Simply, the e-government is perceived as moving citizen's services online, but in its broadest sense, it refers to the technology-enabled transformation of government. The governments' best hope to reduce costs, while promoting economic development, increasing transparency in government, improving service delivery and public administration and facilitating the advancement of an information society (WB, 2006a)".

Haldenwang confirms this relation by identifying certain conceptual and theoretical linkages between the two concepts. He indicated that both concepts share the same objectives of administrative efficiency and quality of public services. Democratic participation is the core principle of both. He explained underlying the reason behind such a relationship of e-government's dualistic approach to state modernization. The e-government is a means for the realization of good governance because it changes both the back office (government internal operations and relations) and the front office (government relations with citizens and other external stakeholders) in a way that makes the different components of good governance a reality. After comprehending and recognizing this potential, e-

government has become part of the developmental agenda in a range of multilateral development oriented institutions of developing countries (Haldenwang, 2004).

The research study on "ICT and Good Governance" was conducted through a survey of the conditions for the use of ICTs in five countries: Brazil, Uruguay, Peru, Ecuador and Mexico (Batista, 2003). The main task of the research project was to explore the link between ICT use and improvement of the local governance in Latin America. The answer to this question involves the study of alternatives and possibilities of increasing good governance based on ICT use. One of the proposals derived from this research is the formulation of a training program directed to personnel who will use ICT having in mind the improvement of good governance at the local level. In. Good governance is safeguarded as long as governmental process is transparent; individuals organize themselves, express their priorities, and make demands to government offices (Batista, 2003). This research study explored the potentials of ICT to enhance local and social development, improve relations between government and citizens, and foster overall capacity building in developing countries. It stated that with the rapid spread of ICT, new opportunities have been opened for a revival of public discourse and improved governance efficiency (Batista, 2003).

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the provision of services by government that meets the public's demands and priorities (Batista, 2003).

Good governance as an exercise of economic, political and administrative authority to better manage the affairs of a country at all levels. ICT can connect government, citizens and businesses to support and simplify the process of governance in a better manner. ICT is a vital tool in achieving the objectives of good governance .The application of ICT could be helpful to connect important stakeholders of government to provide better governance. According to the research studies undertaken on e-government in the developed and developing countries, it has been found that e-government is one of the potential tools in establishing good governance in developing countries. The research has founded that most of the developing countries understand the enormous potential of ICT not only as a tool for improving governance and creating more jobs but also, more significantly, as a means to enhance the standard of living of the people. The increased application of IT in all occupations enhances the industrial base, creates a robust state information infrastructure, and creates human resources for IT. The application of ICT differs from country to country. The experience of application of ICT for good governance in developed countries such as Singapore, United States of America (USA), Australia, and Malaysia shows that the application of ICT could be helpful in providing good governance in developing countries too. E-Government has emerged as one of the principal tools by which administrations can improve their governance arrangements both internally, for improving efficiency and effectiveness and externally, for improving relations with stakeholders. This is because the introduction of e-government has a broad and cross-cutting affect across policy sectors and government procedures (Basu, 2004).

The applications of ICT to existing organizations will by themselves not only modernize government, ICT can be used to improve government structures and processes and change how the culture of public administration can be renewed in order to make the most of these changes (Ebrahim and Zahir, 2005). e-Government can develop the strategic connections between public sector organizations and their departments, and make a vibrant communication between various government levels (e.g. central, city and local). This connection and communication improve the cooperation between them through facilitating the provision and implementation of government strategies, transactions, policies, and better use and running of government processes, information and resources (Atkinson, 2000).

Magno and Serafica's (2003) research study on "Information Technology for Good Governance" in Manila has assessed the role of IT in promoting good governance. They raised the question of how IT can raise the quality of governance. They surveyed various efforts exerted by national and local government units to integrate IT in the implementation of policy and administrative reforms (Magno and Serafica, 2003). They found that IT promotes good governance in three basic ways:

1) by increasing transparency, information and accountability
2) by facilitating accurate decision-making and public participation
3) and by enhancing the efficient delivery public goods and services.

Many government agencies use IT facilities to tell the public about their accomplishments, achievements, programs and plans. Information about the government is a basic requirement in fostering transparency in governance. Furthermore, the used of IT reduces the quantity of paper used in the government working by using updated information and database systems. The cost of administration maintenance is reduced as the documents and processes become digital. The adoption of IT in government's business operations affects all aspects of the organization. It affects policies and procedures relating to hiring of personnel, human resource deployment, budgeting, financing, procurement and others. The government is a big organization, and each of its separate agencies conduct functions that may seem fragmented and piecemeal, and the creation of e-government will require the effective management to orchestrate IT efforts (Magno and Serafica, 2003).

E-Governance holds enormous potential in terms of improving delivery and efficiency, better response to business and citizens' needs and provision of affordable government services. It has provided a thorough look into e-government development around the globe highlighting the importance and potential of e-government technology towards governance. Ghayur describes the initiatives of three leading countries (Singapore, Australia, and USA) in their efforts in e-government development. Ghayur also discusses the e-government efforts taken in Pakistan and India in the context of Asian countries. The paper mentions various e-government models applied by developed and developing countries in the development of e-government. It also presents an e-government ranking order of these countries alongwith developing countries such as Pakistan and India. The research concluded that developing countries need to tap the vast potential which the ICT sector offers in order to bring greater transparency and ease. The utilization of the surging potential in the ICT sector is crucially linked with transforming governmental functions to the e-governance, although through phases and with pilot projects. A functioning of e-government is

feasible, and its adoption does not require complicated process (Ghayur, 2005).

e-Government is one of the important elements that can contribute to the promotion of an information society. In the European Action Plan of 2002, it was targeted that by 2012 all basic services will be made available online, such as eight services to businesses and 12 services to citizens. A survey of 10,000 service providers revealed that centralized services have a higher rate of online delivery than services provided by local agencies (Barrero, 2003).

e-Government is perceived as an alternative for better delivery of government services in the 21st century. It offers its services in three ways:

      1) offers opportunity to achieve open government

      2) helps to provide a personalized public service

      3) contributes towards increasing efficiency and productivity

As an open government form, e-government is helping democracy to function better as decision-making becomes more transparent. Today, executives worldwide and the managers of public organizations are increasingly deploying e-government strategies to improve the quality of government (Barrero, 2003).

The multinational research study "New Models of Collaboration for Delivery of Government Services"

examined various partnerships in place around the world. The study found that government organizations have formed cooperative alliances with other organizations to support design, implementation, operation and maintenance of e-government services. The collaboration of these public organizations has built partner-based outsourcing relationships with service providers. It states that high level of information sharing, good communication and well-orchestrated co-ordination are necessary to success. The interviewed managers and executives lament the challenges of e-government and limited in-house capabilities to develop or adopt innovative approaches quickly for delivery of government services online. ICT has helped to deliver more modern services for citizens and businesses, stimulate the Information Society and emerging new economy, driven public sector transformation, and helped governments prepare for future pressure on public administrations (Finger and Pecoud, 2003).

The e-Government system also involves some level of coordination and communication with almost every functional unit of the organization where working relationship among the employees are constrained by new and old processes and complex layers of institutions norms and practices. The success of e-Government depends on how well public managers can leverage its technology, organizational and human resources in coordination with their collaborating partners (Ho, 2002).

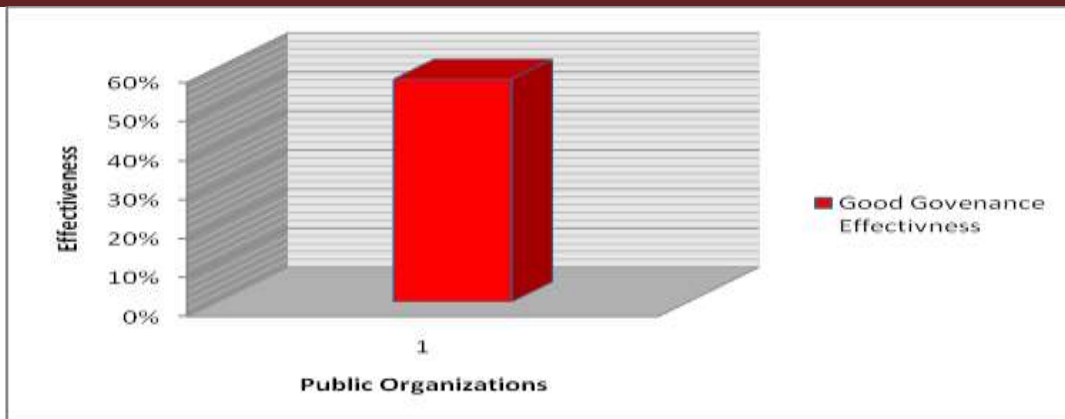### 3. Enhancement of Good Governance in Public Organizations

In order to know the overall impact of e-Government technology on the good governance of public organizations, the research study has analyzed overall enhancement in good governance in all e-government sector organizations. It has been found from the analysis that e-government technology has enhanced a moderate level of good governance in all e-government sector organizations. The following table shows the total effectiveness of good governance in overall e-government organizations.

Table 1. Total Enhancement of Good Governance

The table that e- | | above shows

Good Governance Indictors		Overall Enhancement in Good Governance
Accountability	62%	
Transparency	64%	
Efficiency	66%	**57%**
Responsiveness	48%	
Rule of Law	49%	
Participation	48%	
Strategic Vision	62%	

government technology has enhanced 57% level of good governance capability, since e-government technology has been implemented in the various public organizations. The following figure is derived from table 5.2 and demonstrates the overall effectiveness of good governance in the public organizations.

Figure 1. Total Enhancement in Good Governance

The red bar in the above figure signifies the overall enhancement in good governance of the public organizations that are using e-government technology. It is concluded from the figure that e-government technology has enhanced 57% level of effectiveness in the good governance of the public organizations. According to the good governance's scale of measurement, 57% enhancement is at the moderate level of enhancement and it requires more effort and commitment from the government leadership to bring it to the good and very good level of enhancement.

4. **Good Governance Framework**

The following figure demonstrates the proposed framework for enhancing the good governance capability of public organizations. The following framework has been developed for enhancing the good capabilities of the public organizations with the application of e-government technology.
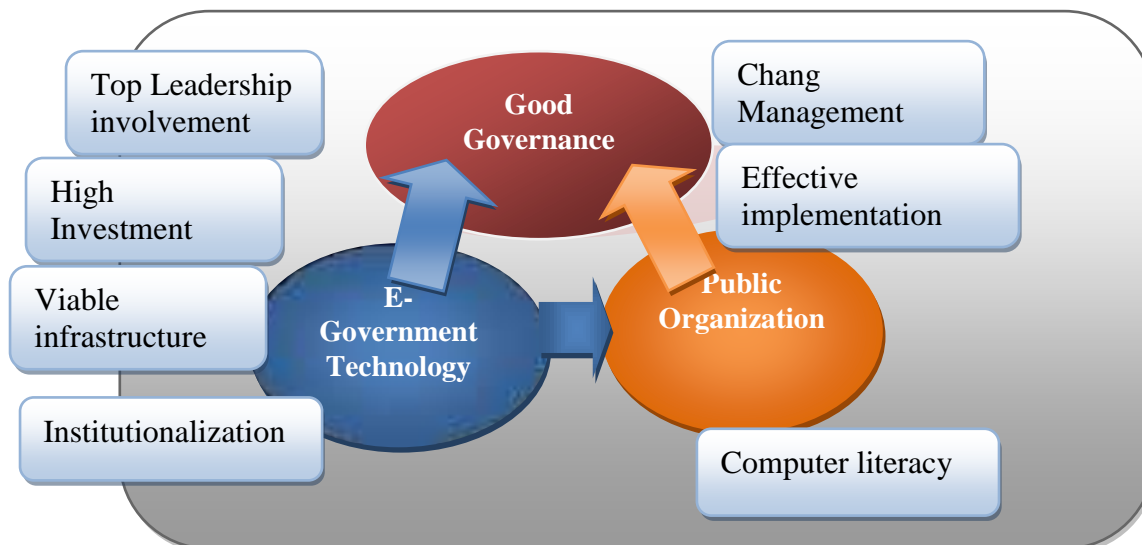
Figure 2. Good Governance Framework

The framework displays a traingular relationships between e-government, good governance and public organizations. The proposed framework has highlighted critical hindrances that have affected the good governance capability of the public organizations. The research outcome concludes that the use of e-government technology in the public organization can enhance the good governance capability of the public organizations. The above framework shows the six factors which are of essential importance to overcome them for creating a viable enviroment to reap the benefits from the application of information technology. These factors have been diagonized from the informal interview with e-government managers of the public organization. These are illustrated in the following manner.

Top Leadership involvement: Top leadership involvement plays an important role in bringing the change and effective adoption of the change in the organization. In the public organization the resistance of bureacracy to change has been a commonly observed phenomenon. In the e-government adoption process, the public organizations are prone to the resistance of bureaucracy. This unneccessary resistance observed because of increasing transparency and accountabilty in their job functions by the

applicatin of e-government technology. Bureaucrats routinely show their relutance to reforms and changes in organizations in order to protect their weakenesses and loophooles. Therefore, they create hinderances in the adoption process of change which may increase transparency and accountability of the bureaucracy.

Change Management: The change management is the discipline of IT service management. Change management theory also plays a critical role in the adoption process of change in the organizations. Change management is the strutural approach of transition from the current state to the desired state of organization. It is observed that there is serious lack of commitment from the top management in bringing the positive perception for application of e-government technology. There is a need of structural changes in the organization for bringing the substaintial improvement in the organizations.

Viable IT Infrastructure: For transforming the organization from the current state to the desired state of organization there is a need for high involvment of top management and high investment in development of viable IT infrastructure and the provision of education for changing the mindset, and training employees to use IT effectively.

High Investment: Pakistan as a developing country facing the hardships in the of investment for the development of e-government technology infrastructure. During the formal interviews, the e-government managers suggested the need for substantial investment in the development of e-government technology for enhancing the good governance capability of the public organization. For exploring the real benefit of e-government technology, it is essential that there should be viable IT infrastructure for providing the e-service to the stakeholders of the government.

Institutionalization: The institutionalization is related to the organizational structure of the organization. Currently, the EGD is working under the control of the federal Ministry of Information Technology. The e-government managers suggested that EGD should be made an autonomous institution, which directly works under the supervision of prime minister.

Computer Literacy: It is has been also analyzed from interviews sessions that most of government employees show their reluctance in accepting e-government technology due to major two reasons; first ignorance of using IT in performing their functions and second fear of increasing the accountability and transparency in their job functions. Therefore, it is

essential that the bureaucracy should be educated to change their perception about the use of e-government technology and they should be provided training to use IT for increasing their functional efficiency and productivity of the public organizations in the best interest of country.

Effective Implementation: The ineffective implementation of e-government technology in the public sectior has been observed as the major cause in obtaining the real advantages of e-government technology. It is observed from the formal interviews of the e-government managers that there area massive flaws in the effective implementation of e-government technology in the public organizations.

5. Recommendations

The research study has found that the application of e-government technology has improved some extent governance capability of public organizations. Thought it has brought a moderate level of enhancement in the good governance capability of public organizations but there is a poor level of improvement in the rule of law, responsiveness, and participation. According to the assessment liscale of good governance effectiveness, the moderate level of enhancement requires more effort and commitment for further enhancement of governance capability of public organizations. The recommendations have been framed out of the information derived during the informal interviews of e-government managers and are based on the outcome of survey research conducted from the public organizations.

In Pakistan, e-government is considered as a solo subject of IT, however, the reality is that e-government is all about good governance and IT is used as a tool to obtain the objectives of good governance. In this regard, the research presents the following three types of recommendations.

Policy Recommendations
1. The Government of Pakistan should give due diligence to the development of e-government and its effective implementation in the public organizations.
2. The EGD should be declared independent institution working under the highest office including Prime Minister's Secretariat.
3. For effective adoption of e-government, the leadership of the public

organizations should be held responsible for the effective implementation of e-government.

4. Top management should be involved in the process of adoption of e-government technology in the public organization.

Action Recommendations

1. All officials of public sector organizations should be directed to be quickly responsive to the queries of citizens, business organizations or other government departments, and strictly following the rules and regulations of the organization.

2. To overcome the resistance of bureaucracy, bureaucrats should be educated and informed about the potential benefits of e-government technology.

3. Develop a viable IT infrastructure to enable citizens and businesspersons to readily access government information.

Future Research Recommendations

1. Resistance to the adoption of e-government technology and leadership commitment has been the most critical factors in the public organizations.
2. The future research can be undertaken into how to enhance good governance of public organizations by application of e-government technology.
3. How e-government technology can improve the responsiveness, rule of law, and participation of citizens and business organizations.

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