

# ROLE OF IT SERVICES AND IT INFRASTRUCTURE IN GOVERNANCE: A CASE OF PUBLIC SECTOR IN PAKISTAN

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**Abstract:** After establishment of new Islamic republic state of Pakistan, there have been developmental processes in different public & public sectors. Since the creation of Pakistan, numerous problems have been the big hindrances for diffusing the latest technology in every domain of life due to the insufficient resources, inappropriate policies & plans and poor governance. For upholding the good governance in Pakistan, IT infrastructure & IT services play vital role in all public and private sectors. Launching the latest IT infrastructure & IT services is indispensable to boost up the productivity, efficiency, functionality and practicability of all institutions of Pakistan at public and private level. In the epoch-making era of technologies, good governance of the institutions of Pakistan can't be sustained without implementation of infrastructure & IT services, based on advanced technologies.

The application of File-Tracking System, the main module of IT infrastructure & IT services can bring revolutionary changes in sustaining good governance so significantly. The author introduces this File-Tracking System in different organizations of Pakistan to evaluate the effective measures on the good governance and performance with the utilization of this file-tracking system. By deploying file-tracking system within IT infrastructure of the organization, the capacity, functionality, potentiality, productivity and practicability of the organizational workforce can be augmented to optimum level and desirable results of upholding good governance of organizations can be achieved successfully.

Key words

**Keywords:** Governance ,IT infrastructures , IT services

## Introduction

### 1.1 Governance

Good governance is considered as backbone of any country to sponsor the progress & prosperity, equality of human rights, accountability of law-enforcement agencies, human resource development process, efficiency of policy-makers and technocrats. Without good governance, it is indispensable to tackle with the multifarious state affairs efficiently. In Pakistan, good governance has never been visible due to the weak political and democratic system, frequent enforcement of martial law, impracticability of legislation, corrupt and incompetent political leaders, ineffective state policies and strategies, sluggish decision-making process, poor educational and health infrastructure, inadequate development in every sphere of life without any strategic future planning, lack of responsibility and proficiency for utilization of natural and

financial resources in the context of wellbeing of nation-state. Debasement is one of the biggest obstacles for the sustainability of good governance

## **1.2 IT Infrastructure**

(Wali, 2013) lays emphasis upon the well-developed IT infrastructure which is considered the most essential part of organizational development. In all developed countries, IT infrastructure has been established on the basis of the latest technologies and tools but the developing countries like Pakistan and Philippines have no sufficient financial and technical sources to develop IT infrastructure successfully. Most of the developing countries have not been well-equipped with all necessary technological and experimental expertise, apparatus and IT-based infrastructure along with telecom advanced set up. Since last ten years, Pakistan has been striving hard to establish advanced IT infrastructure in almost all fields of life in order to survive in IT world competitively. With the sponsorship of Pakistani government, the public and private organizations, IT industry has been developing progressively on national as well as international level. Nowadays, the latest information technology has brought a great revolution in IT industry of Pakistan with the appropriate investment and sponsorship (Shaukat, 2009).

The good governance can be retained in the following different ways:

1. With the enhancement of transparency, accountability and up-to-date information
2. Exclusive decision-making and policy-making process with contribution of populace
3. Improvement in delivering the public goods & services efficiently

## **1.3 IT Services**

In the age of globalization, information technology services (IT Services) has crossed the organizational as well as national boundaries so limitlessly for supporting the economic, social and political actions, there is a significant socio-technical uprising in the developing countries particularly in Pakistan. In the technological era, IT services offered by different multinational IT organizations have boosted up the national and international business activities by developing and managing the all possible fields of organizations in the developing countries. IT services offers innovative techniques for building the techno-organizational structures by shifting the advanced technologies in the developing countries (Avgerou, 2008).

## **Objectives**

- Resolving E- Governance related issues at public sector organizations.
- Instituting suitable IT Services/IT infrastructure solution to overcome E-Governance related issue in IT organizations.
- Determining the role of file tracking in achieving the transparency and visibility at organization level
- Maintaining & track the movement of each document throughout its lifecycle.
- Elimination of all the bottlenecks of manual process.
- Improving government performance and efficiency.
- Reducing costs.
- Enhancing the competitiveness of government.
- Ensuring transparency and visibility.

## Review Of Literature

ITI speaks to the IT assets that encourage business applications. In the 1980s, IT was getting to be known not firms raise section hindrances, build dealing potential with suppliers and clients, and offer new items and administrations (Bhatt and Emdad, 2010).

In the 1990s ITI was being characterized as shared, substantial, innovative assets including stage advances (i.e., equipment and working frameworks), systems and telecom advances, information, and programming applications (Xianfeng, Boxiong, and Zhenwei, 2008).

ITI is outlined as the base supporting particular IT applications which make business forms conceivable. The framework establishment envelops the mutual mechanical components, or building pieces, similar to equipment, programming, correspondences, and other bolster vital for business (Earl, 1989; Xia and King, 2004).

ITI sharing capacity alludes to how ITI can proficiently give homogenous administrations to clients from inside and outside the organization. On the off chance that information/applications are not shared, it is a business choice outcome as opposed to innovative ability (Duncan, 1995).

ITI Service Capability is the ability to meet a company's business requests, while concentrating on current capacities' adequacy, and can be distinguished from the various types of IT administrations. Weill and Vitale (2002) notice nine sorts of business related IT administrations:

application base, correspondence, channel, information and IT administration, security, design and principles, IT examination, advancement and instruction. A business has the decision to give the alluring administrations, not as a matter of course all, as per its special setup.

IT framework comprises of IT design, procedures and abilities (Papp, 1995). IT engineering involves programming, equipment, systems, information, applications and information administration that a firm uses to maintain its IT and business procedures. The second parts of IT base are the procedures which allude to the upgrade of particular IT practices and exercises that representatives may do to oversee, create and keep up IT applications and, thusly, enhance IT base. The last segment is IT abilities, which is identified with the human asset exercises to upgrade IT. This incorporates contracting and preparing hones, worker abilities and compensations, and the IT society and its associated standards.

Byrd and Turner (2000) gave an intensive meaning of data innovation framework, they characterize it as the common data innovation assets comprising of a specialized physical base of equipment, programming, correspondences advances, information, and center applications, human segment of aptitudes, mastery, abilities, responsibilities, qualities, standards, and learning that consolidate to make data innovation benefits that are normally extraordinary to an association.

Great administration wins when the legislature oversees open foundations in a proficient and responsive way and when natives participate with governments in the quest for commonly valuable financial, social, political and social destinations (Chibambo Marion, 2003).

IT foundation can be a significant obstruction or empowering influence in the pragmatic alternatives accessible to arranging and changing business forms (Grover et al., 1993; Wastell et al., 1994). The backing of empowering advancements and stages is an imperative giver to fruitful business process change (Caron et al., 1994; Furey and Diorio, 1994).

## **MATERIALS AND METHODS**

This research is qualitative research so the data is taken through interviews. A questionnaire is design for interview. For data collection I took interviews of some main organizations like SUI GAS, FESCO, WASA, COMMUNICATIONS MEDIA, FAUJI FERTILIZER etc.

### **Interview of employee of SNGPL**

60 to 70 percent SNGPL (FSD) is IT based .Store system and procurement system is now next step to online. Staff are also skillful. System training are also done but people are afraid of using system (may be it is corrupted).Financially a very strong organization so a huge amount is given every year in budgets.

### **Interview of employee of FESCO 1**

Filing system in FESCO is not only traditional but also having some issues regarding transparency and status knowing.

ERP has somehow altered the way of Filing process free of corruption and formalities but yet 10-15 % area has been covered in this regard.

### **Interview of employee of FESCO 2**

From filing point of view FESCO is quite lacking behind. Approximately 90 % filing system is traditional. Only 10 % has converted in to IT infrastructure .Only NEW CONNECTION FILE and some of the HR department's features are put into IT structure.

### **Interview of employee of SAMMA TV**

60 % of filing system of SAMAA TV is manual and 40 % uses the mail server to send their file but there is no transparency and visibility of filing system.

### **Interview of employee of GCUF**

The filing system of GCUF is totally manually. There is no transparency and no visibility of file and also not the status of file where was being my file and now where it is .A lot of important files were losing due to no record and no proper filing system

### **Interview of employee of WASA**

While investigations, author observed that currently there are many systems, which are operated manually. One of such systems is filing system. Such system has high significance in importance in day to day official operations. It has been observed that there is no transparency, confidentiality in such system.

### **Interview of employee of FAUJI FERTILIZER**

We are seriously thinking to deploy proper file tracking system to track down important files immediately without bothering for finding files from heaps of files manually. We consider File Tracking System is significant to boost up the efficiency of official workings in no time in the modern era that's why we want to launch in our organization.

### **Interview of employee of IMAGE GARMENTS**

We have custom developed FTS to organize official data of the organization efficiently. Without proper filing system, we have to face problems in tracking the files and our organizational system is affected badly as it reduces the efficiency of working system.

Certainly, there should be FTS to track down significant files instantly. Yes, definitely, I think file tracking system is significant to boost up efficiency of official workings

### **Results And Discussion**

As this paper identify that the filing system in all public sector organizations are partially IT based. And identify filing related problem such as transparency, visibility, corruption. In result I am able to make a supporting application to solve this filing related problem. Which overcome the visibility and transparency related issues. This system calculated the each user uses the login time and logout time

This application has been divided in to four modules

- 1) Administration module
- 2) Department module
- 3) Client module

#### **Administration module:**

In admin module u have all access to create user, update user, delete user. You can create a file, update a file, or delete a file. Every file has given a unique tag no same as a person CNIC. The file is tracked with its tag no, you can check the status where is being the file is, if the file is lost, you can easily identify the responsible person, you move your file anywhere in the organization. Complete records of every person is record. The admin check anytime the sender and receiver .

- In this module Administrator will add users to work with files.

- He can check exact status of the files and he receives completed files from other departments.
- Administrator can delete the files from database after processing of files. Administrator can see the pending files list.

### **Department Module:**

The users are

- Clerk
  - Superintendent
  - Deputy secretary
  - Additional Secretary
  - Secretary
  - Ministry
- All the above users receive the files from other departments to be processed.
  - He can accept or reject the files from other departments.
  - After completion of process they dispatch the file to any other department.

### **Client Module:**

- Client can check the exact status of the file in which department it is processing.
- If the file is rejected he can see the reason for the rejection.

From the above discussion it should be clear that good governance is an ideal which is difficult to achieve in its totality. Very few countries and societies have come close to achieving good governance in its totality. However, to ensure sustainable human development, actions must be taken to work towards this ideal with the aim of making it a reality.

Conclusion “Governance” opens new intellectual space. It provides a concept that allows us to discuss the role of government in coping with public issues and the contribution that other players may make. It opens one’s mind to the possibility that groups in society other than government (e.g. ‘communities’ or the ‘voluntary sector’) may have to play a stronger role in addressing problems.

The central conclusion is that a universal set of principles for defining good governance can be fashioned and that the strength of their universality rests to a large extent on the body of international human rights and laws. In addition, these principles can be usefully applied to help deal with current governance challenges. When they are applied it becomes apparent that there are no absolutes; that principles often conflict; that the 'devil is in the detail'; that context matters. Finally, the nature of governance – both the means and the ends – needs to be understood. Only then does it make sense to elaborate the principles in order to create a meaningful analytical tool.

I have concluded by this research-oriented study that IT infrastructure and IT services are indispensable for good governance in the organizations of private and public sectors. I have achieved target of good governance in X.Y.Z organization by implementing all tactful knowledge and skills related with IT infrastructure & IT services. I have observed in X.Y.Z organization where I have conducted experimentation of multifarious components of IT infrastructure and IT services to maintain good governance in the organizational operations. After my research-oriented surveys and interviews from the officials of IT departments of different organizations, I identified the main issues of upholding good governance, encountered in the organization is the file management system which is done manually in the most of the organization. I have implemented the file tracking application in X.Y.Z organization and achieved success in managing all filing system by using this application of file tracking system. In Pakistan, most of the organizations and institutions are handling filing systems manually, reducing the efficiency and functionality of working capacity in the organizations. I have experimented with my supportive application of file tracking system in some organization and attained success for managing all official data efficiently. File tracking system is one of the components of IT infrastructure & IT services which help to improve the quality, functionality and efficiency of the filing system in the organization. Just by using this single component of IT infrastructure & IT services, I have been successful to some extent to retain good governance in the organization but this success has not been achieved 100% by conducting my experiments via supporting application of file tracking system. I am ensured that by implementing all possible components of IT infrastructure & IT services, the 100 % good governance can be maintained in efficient manner.



I have conducted interviews in different organizations including FESCO, Sui Northern Gas Pipelines Ltd., Sama TV Network, FojiFertiizer Company, WASA etc and identified the problem within the organizational set up that the filing system of all organizations are not handling properly which causes inefficiency, sluggish working process and wastage of time. I have estimated by these interviews and survey reports that if the file tracking system application is deployed in the organizations, the administrative and clerical staff of the organizations can track down the files easily and efficiently which may enhance the quality of governance and efficiency with good outcomes in the different organizations of Pakistan.

In the technological era, there is need of shifting the organizational set up towards the IT infrastructure where all components of IT services should be implemented to enhance the work capacity, efficiency and good governance of the organization. It is advisable to ensure the good governance of the institutions and organizations by employing all interfaces and applications of IT services and developing IT infrastructure of the organization on basis of the latest technologies and equipment, applications etc. That is my perceptive approach by conducting this research work to highlight the basic problems of the organizations with accurate solutions system for upholding good governance via utilization of IT services.

## **Future Work**

This study only gave the solution of one module of IT services. As file management system is in proper working state it will increase the transparency, visibility and this visibility and transparency increases the good governance and also increase the E-governance. But if u want E-governance you should gave the proper IT solution of all modules.

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