

An Empirical Study of E-Government Barriers in Pakistan

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Abstract: E-Government initiatives help in providing governmental services to citizens at their doorstep. Different financial, organizational, and political constraints hinder in successful adoption of such initiatives. As a result E-Government adoption is not uniform in every country resulting in digital divide. In this article we examine the E-Government implementation barriers in Pakistan. In order to understand the hindrances in adopting E-Government initiatives in Pakistan we carried out an empirical study. In our study we found that in Pakistan mainly E-Government services are used for information broadcasting, whereas transaction based services are scarce. We have discussed different governmental barriers and present some guidelines to solve these obstacles in local context.

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1. Introduction

Modern information and communication technologies have revolutionized governance practices. Now, governmental institutions interact with the customers using E-Government frameworks (Howard, 2001). E-Government infrastructures are quite efficient and reliable but they require heavy investments and trained staff. In order to be useful in practice e-government infrastructure should be highly usable (cf. Saeed et al., 2013) and designed according to work practices of end users (cf. Saeed & Reddick, 2013). In literature many models have been proposed to optimally adopt e-government frameworks (cf. Layne & Lee, 2001; Reddick, 2004; Grant & Chau, 2005; Al-Adawi et al., 2005; Andersen & Henriksen, 2006). Developed countries realized the importance of such initiatives and invested heavily to benefit citizens. However, developing countries did not thrive on this opportunity resulting in digital divide. Diversity of users provides new challenges for e-government implementation. Establishment of trust is one of the main challenges need to be tackled by e-government providers to indulge citizens in using these infrastructures (cf. Welch et al., 2005; Parent et al., 2005; Torres et al., 2006; Kolsaker & Lee-Kelley, 2008).

In order to successfully foster e-government initiatives organizational processes need to be re-engineered. Political, legal and financial constraints affect this re-engineering process. Similar to other developing countries, Pakistan is also facing similar challenges in implementing e-government projects. Government of Pakistan has established Electronic Government Directorate to overlook e-government initiatives in Pakistan (EGOV, 2013). However, government has not achieved anticipated success of

e-governance. This fact can be seen from United Nation e-governance ranking where Pakistan has slipped to 156th position in 2012, as compared to 146th in 2010 (UN Ranking, 2012). In literature one can find many contributions focusing on E-Government perspective in Pakistani context (cf. Shahzad, & Sandhu, 2007; Ahmad, 2008; Arfeen & Khan, 2009; Kazmi, 2010; Rehman & Esichaikul, 2011) but these contributions have presented end users view. In this paper we focus on government officers and explore their point of view. We identify some barriers and discuss the possible solutions. In order to collect empirical data we mainly adopted quantitative approach. A questionnaire comprised of fifteen questions was prepared. The questionnaire was distributed among 114 different federal government employees.

2. Empirical Study

In our survey we found that out of 114 respondents, 54.8% wanted to have an authority status for the e-government implementing institution, as shown in figure 1.

Since decision making in governmental institutions is not consistent, so this kind of organizational status will help in running the programs in an independent way. Similarly, availability of permanent technology staff also helps in improving the pace of e-government initiatives. In our survey 67 out of 114 employees agreed that permanent IT staff should be present to run such projects, as shown in figure 2.

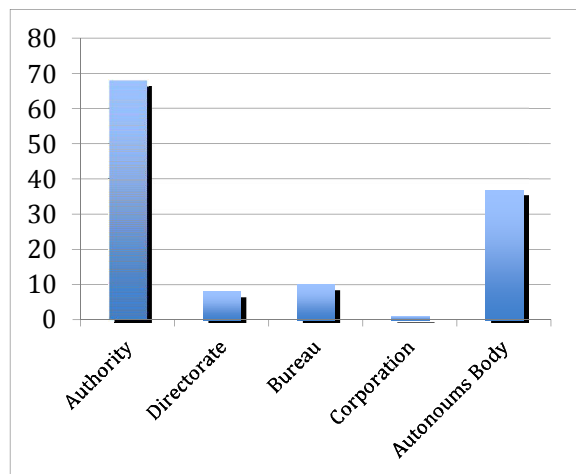


Figure 1: Status of E-Government Implementing Authority

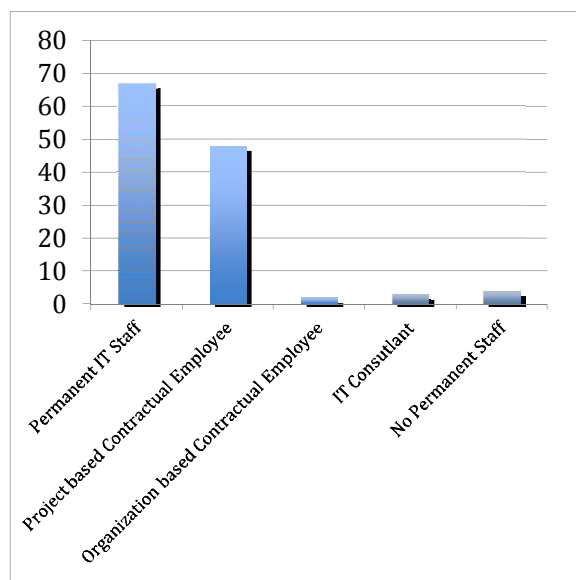


Figure 2: Nature of IT Employees

Normally incentive mechanisms are designed for users and employees to foster successful usage of e-governance frameworks. However in our survey 63.7% respondents said that along with incentive mechanisms, organizational culture needs to be improved as well. Every successful initiative requires that it gets strong backing from top-level management. In our survey 86% respondents feel that political support is vital in order to have successful e-government, as shown on figure 3. As the technological involvement in our everyday life is increasing, new legislation support is important to optimally deal with different diverse situations. It has been observed that developing countries also lack in implementing relevant legislations to support e-government.

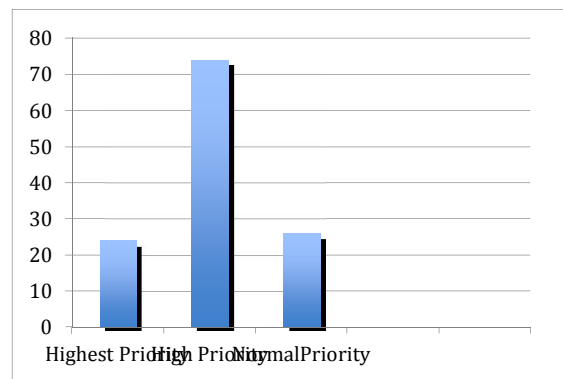


Figure 3: Political Support for E-Government adoption.

In our survey we found that 93% of the respondents believe that there is a strong need for legislation to support e-government initiatives, as shown in figure 4. It has been observed that product champions play a crucial role in acceptability of any product in general public. Government agencies can adopt same approach to increase e-government usage by citizens. In our survey we observed that 85% of respondents believe that role of champions will help in promoting e-government in Pakistan, as shown in figure 5.

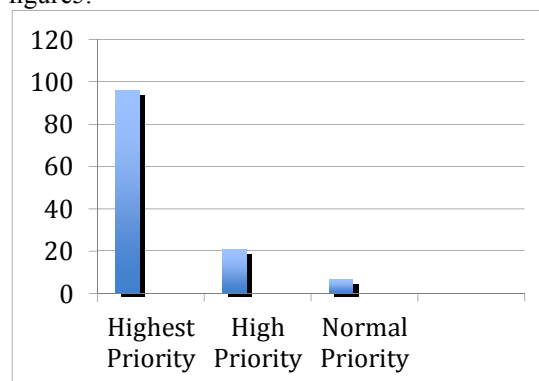


Figure 4: Need for new Legislation

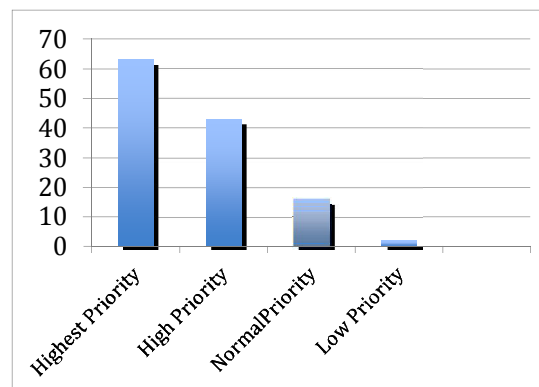


Figure 5: Role of Champions in E-Government Promotion

In collaborative work success is dependent on effective communication. Implementation of e-government plans is a huge undertaking and in order to be successful it requires effective communication among stakeholders. In our survey 92% respondents highlight the need for chalking out an effective communication plan, as shown in figure 6. Such a plan will help in overcoming ambiguities among stakeholders.

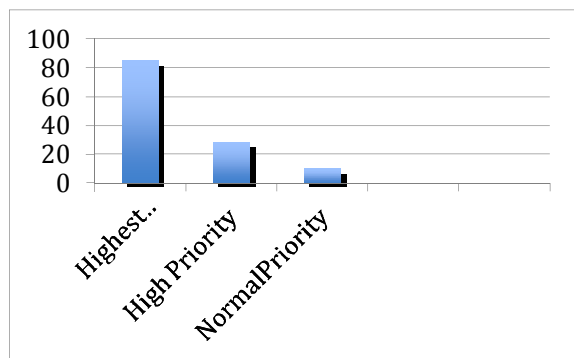


Figure 6: Importance of an Effective Communication Plan

Another common problem faced by different governmental organizations is lack of interoperability among data at lower levels. Mostly governmental offices have established different Enterprise Resource Planning applications in their domain, but interoperability among data and these applications hinder on fostering an effective e-government system. In our survey 80% respondents described that this lack of interoperability should be removed (figure 7) and these applications must be connected with each other to act as a knowledge base for future decision making by government.

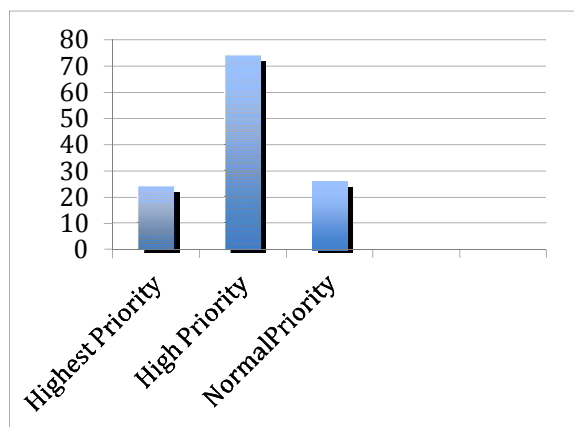


Figure 7: Lack of Interoperability among E-Government Applications

Availability of technology is also very important to enable e-government initiatives. In our survey we found that only 13% rated provision of infrastructure as normal priority task, whereas remaining respondents rated it as high or extremely high priority tasks, shown in figure 8.

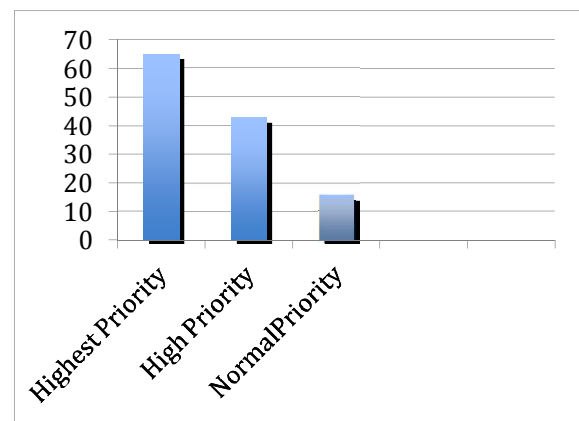


Figure 8: Priority of IT infrastructures

3. Conclusion

There is need for strong measures to improve the current 156th e-governance ranking of Pakistan. As a result of this survey we found some high level findings. We observed that there is a need for strong political support for successful adoption of e-government frameworks. Leaders, employers and organizations are main components for successful e-government implementation. In order to improve the political support, there is strong need to highlight importance of e-governance, and educate key political figures. A centralized authority should be responsible to chalk out and implement e-government strategies. It was observed that distributed nature of planning and implementation initiatives hinders in successful e-government initiatives. Involvement of too many stakeholders' results in severe coordination problems. Similarly there is also need to increase the financial budget for e-governance in Pakistan. New provisions related to e-governance frameworks need to be included in the Pakistani law to guide in problematic situations. In order to minimize the impact of digital divide citizens should be educated to use e-government websites.

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