

Web Services: An E-Government Perspective

Monika Pathak
 Research Scholar

Gagandeep Kaur
 Research Scholar

Sukhdev Singh
 Research Scholar

ABSTRACT

The e-Government is increasing its popularity through number of web services. The web services in e-Government are aimed to provide services to citizens, businesses and government agencies. The e-Government web services provide relevant government information in digital form to the citizens in a timely manner and cost saving manner. The numbers of web services are available on web maintained by different departments of government. The aim of the current paper is to provide exploratory research which explores latest advancement in e-Governance through web services. The different types of web services are available such as Agmarknet, Bhuiyan, Examination Results Portal, JUDIS, Passport Website, Value Added Tax (VAT), etc. The study is also analyzed the problems and challenges are being faced by the service providers.

Keywords

E-Governance, Web Services, Web Portal, Agmarknet, Bhuiyan, Judis.

1. INTRODUCTION

The information communication & technology is widely used in providing the government services which results in new technological service platform known as e-Governance through web services. Moreover with the increase in internet users and mobile connections, the people are now well aware through web services about information related to government services. In the early stage of e-governance in India [1], it was focused to develop application for economic monitoring, planning, managing data of census, taxes. Nowadays, e-governance services are almost everywhere, all the government functioning is highly influenced by the e-Governance. Where, the term e-Governance is used to describe government services provided through means of ICT (Information Communication & technology).

The web based service is one of the initiatives that have been taken under the umbrella of e-Governance [2]. The study is aimed to explore different web services for citizen, businessman and analyzed difficulties being faced by the services providers. The objective of web service is to reach to all section of people in respect of distance and language. The web services are usually provided in the form of web portal, where information of different government services is provided. For instance, passport portal as web service is being used as tool to file application for passport [3, 4]. The different web services are considered for study some of them are discussed in this paper in detail. Its purpose is to provide government services in more transparent manner so that everybody who so ever is eligible to avail the service should have equal chance to available it. It is has been seen through literature survey[8-10] that the challenging tasks for any government service provider is to involves lot of efforts in terms of man power and money. The study is aimed to explore different issues related to success and failure of web services.

2. WEB SERVICES THROUGH E-GOVERNANCE

The web services are not only source of information that is gathered and stored at one place but it need to organized such as manner that it can access with ease. The web portal [4] is not systematic arrangement/classification of information but is dynamic in nature and provides user interaction. If the information of the government is gathered at one place without any arrangement or management, it would prove difficult for the users to find the required information. The managing information is an important aspect of e-Governance which requires technical skills. The web service is platform where user can access important information and can available other useful services. On the base of literature review [5-10], we have listed some of the popular web services which are available in the form of web portals.

Table1: Web services in e-Governance

Web services	Functions
Agmarknet (For Agricultural Information Portal) http://www.agmarknet.nic.in	Its function is to share information related to production of agriculture and wholesale markets in the country. The portal has been developed to strengthen the interfaces among government and non-government organizations. It acts as a platform for the communication among farmers, traders, exporters, policy makers and academic institutions etc.
Bhuiyan (For Land Records) http://cglrc.nic.in	This web based application is for the online retrieval of land information. These details of land are generally required for loan purposes and sale/purchase of property. The application facilitates the easy retrieval of these details. Other than this, under admin access one can view the abstract of Khasara, Khatauni, Area wise details, Farmer wise details, Revenue collection details of a particular land.
Results Portal http://results.nic.in	The online results of various academic entrance and recruitment examinations conducted by the various government agencies are available on portal "results.nic.in". This portal also includes results of CBSE, State Education

	Boards, Various Universities, Professional Institutes (Engineering, Medical, MBA, CA, etc.).
Judis http://www.judis.nic.in	Judis is comprehensive online library of caselaw that contains all reportable judgments of the Supreme Court of India and various High Courts of India.
Passport Website http://passport.nic.in	This site provides the information about passport visa and other related information.
RuralBazar http://ruralbazar.nic.in	This site is aimed to provide the business opportunity for poor people. Products manufactured by rural and poor people are sponsored and sell with this site.
Value Added Tax http://megvat.nic.in	The application is being used by the Taxation Department to monitor the revenue generated by the state government in the form of collecting taxes and monitoring of the sales returns from the commercial establishments in the state. The major functions are registration, challenges, way bill, transit documents, etc.

3. CHALLENGES FACED TO IMPLEMENT THE WEB SERVICES IN E-GOVERNANCE

It has been observed that the lots of efforts are being used in the development of various web based services and in the

field of e-governance. The technical infrastructure is developed to provide availability of web services. In spite of various efforts, the current system is facing various challenges like lack of IT literacy, lack of information technology infrastructure; some of them are listed below

Table2: Challenges faced to implement the web services in e-Governance

Challenges	Description
Lack of ITC literacy	It has been observed that in spite of availability of web services most of people are not able to access information due to lack of IT literacy. The web services require working knowledge to access internet services which require training about computer and internet.
Awareness regarding benefits of web services	There is general lack of awareness regarding benefits of e-Governance through web services. There must be awareness programmes regarding the facilities being provided through web.
Lack of existing ICT infrastructure	The lack of ICT infrastructure is one of the major problems. The country like India which is facing problem of poverty at great extends and availability of ICT infrastructure for large population is a great challenge. On the counter part, sometime with high performance system, the under utilization of the computers in terms of their usage is another issue that needs to be addressed.
Attitude of government servants towards adopting new technology	The psychology of government servants is quite traditional and they are still stick to traditional working style. The attitude of government department is pathetic and non-serious, most of official web site are not updated daily basis and consistent.
Lack of coordination between Govt. department and solution developers	There is lack of communication between government organization and solution providers which results in inadequate application like web services. The government authority has little knowledge about the technical issues and solution providers fail to understand the requirements of the customers.
Resistance to digitalize the information and its online availability	Successful implementation of web services depends on availability of digital information. Moreover the digital information and more the rate of success of web service. But unfortunately, most of the government institutions are not willing to provide information in digital format. The authenticity of information is another problem being faced. Therefore the content as is collected or maintained by various e-Governance portals is unreliable or full of gaps. In such a scenario, it's difficult for any e-Governance solution to achieve its intended results.
Lack of infrastructure for sustaining e-Governance	The web services under e-Governance are required lot of infrastructure in the form of network, ICT devices, software and manpower.

4. CONCLUSION

It is evident from above analysis that web service is one of the devices of e-governance which is available to the large population by internet. The objective of the web service is to overcome geographical barriers and provide equal opportunity to all to avail the government services. It is an instrument to transforming india. The complete transformations require people of Indian to come out of tradition psychological mindset and move forwards to provide appropriate information. It requires fundamental change in work culture and goal orientation. Foremost of them is to create a culture of maintaining, processing and providing updated information to web portal which will be provided to the people in timely manner.

5. REFERENCES

- [1] Gilbert, D., Balestrini, P., & Littleboy, D. (2004). Barriers and benefits in the adoption of e-government. *The International Journal of Public Sector Management*, 17(4/5), 286-301.
- [2] Wong, K. F., Tam, M. K. W., & Cheng, C. H. (2006). E-government—A Web Services framework. *Journal of Information Privacy & Security*, 2(2), 30-50
- [3] Jack A. Nickerson , Barton H. Hamilton , Tetsuo Wada Market Position, Resource Profile, and Governance. (2001). “Linking Porter and Williamson in the Context of International Courier and Small Package Services in Japan , Strategic Management”, 251-273.
- [4] Singh G. Pathak R. D. Naz R. (2010) “Service Delivery through E-Governance: Perception and Expectations of Customers in Fiji and PNG”, *Public Organization Review*, 1566-7170, pp 1-14, Springer Science Business Media, LLC.
- [5] Nikita Yadav, V.B. Singh (2012), “E-Governance: Past, Present and Future in India”, *International Journal of Computer Applications*.
- [6] Mrinalini Shah (2007), “E-Governance in India: Dream or reality?”, *International Journal of Education and Development using Information and Communication Technology*, Vol.3, Issue 2, pp.125-137.
- [7] Sanjay Kumar Dwivedi and Ajay Kumar Bharti. (2010), “E-Governance in India—Problems and Acceptability”, *Journal of Theoretical and Applied Information Technology*, pp.2005-2010.
- [8] N.S. Kalsi, Ravi Kiran and S.C Vaidya. (2009), “Effective e - Governance for Good Governance in India”, *International Review of Business Research Papers*, Vol No. 5, pp.212-229,
- [9] Jamal A Farooque, (2011). *International Journal of Humanities and Social Science*, “A Review of E-Government Readiness in India and the UAE”
- [10] Anu Paul, Varghese Paul. (2014), “A Framework for e-Government Interoperability in Indian Perspective”, *International Journal of Computer Information Systems and Industrial Management Applications*, pp.582-591.