STRUCTURAL DESIGN OF CLOUD DATABASE FRAMEWORK FOR E-GOVERNANCE STRATEGIES IN UTTARAKHAND USING JAVA APPLICATION

Hina Hashmi[1], Rajeev Kumar[2]

[1]College of Computing Sciences & IT, Teerthanker Mahaveer University Moradabad, (U.P.) – India
[2]College of Computing Sciences & IT, Teerthanker Mahaveer University Moradabad, (U.P.) – India

Abstract

In this paper we have to discussion with the ever-increasing complexity of public organization, the use of Information and communication Technology has to become central services for effective governance and electronic Governance is an emerging trend which can re-invent the way the Government works. But experience has shown in India that the success of initiatives depends on the political will and commitment of bureaucracy. The new possibilities offered by ICT in the area of e-government just like online services for communication, superior transparency, civil society participation, e-trade facilitation are to be closely looked at in this context for better services. By focusing on activities that generate noteworthy savings of public sharable resources, governments have been able to broaden their legitimacy base for e-government interventions, while strengthening the principles of democratic governance through enhanced interactivity and engagement with citizen and civil society. In Government decision makers in Uttarakhand were found that to be prone to planning, which prevents them from anticipating the long-term potential of e-Governance. Ultimately, this research delivered a proposed framework for adoption, detailing causes, effects of the critical factors and recommendations for the adoption and diffusion of e-initiatives in Uttarakhand.

Keywords: Cloud Communication Network, e- Governance Strategies, ICT, Java Application, e- Governance Services.

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1. INTRODUCTION

The use of technology is gradually increasing in government departments especially with the use of Information and Communication Technology a new form of governance has been discovered known as e-Governance. In e-Governance the services of government offered manually now by the digitized documents, on line services, on line transactions of funds which gives a better experience to the user. These technology leads to greater benefits as in cost reduction, enhanced work culture outcome and also in protection of user by complex government procedures and the use of papers. Using Information and Communication Technology the government can offer different type of services to citizen, business, employees or to other government departments, The implementation and delivery cost is high if we are using traditional Infrastructure but some new cost effective trends are now in use like ICT [1, 2] is one of them which provides the service oriented computing platforms and greater flexibility in accessing and delivering resources over the network. As the ICT provides the way to access the on line service and can deliver the documents across the world, so it can be used in government institutions for delivering the many day to day services to common man and sharing of the resources will possible among government departments . E-Governance can offer many G2C (Government to Citizen) services using ICT facility, in that the end user can access the contents and other materials as per use. The SaaS model of Information and Communication Technology is there to offer G2C service provide to all the citizen of a country. [3, 4]

2. LITERATURE REVIEW OF CLOUD DATA FOR E-GOVERNANCE

e-Governance is not about implementing a new IT system only, but rather it aids to enhance and re-engineer work processes and systems for greater productivity.[5] The Organization for Economic Co-operation and Development (OECD) described ICT thus: "ICT needs to be incorporated into a package of modernization, organizational change and related reforms that challenge public governance frameworks" .[6]

In this emphasizes the importance of ICT measuring in society's e-readiness as part of a government's. And to construct a profile of those segments of the community that are more likely to be able and willing to use online systems.. In addition, continuous e-Governance monitoring is crucial to identify minor defects before they can cause a major failure. Government policy makers measure e-commerce and e-Governance performance worldwide.

3. RESEARCH METHODOLOGY FOR PROPOSED FRAMEWORK

The preliminary findings will help to set and refine the study's aims, possibility and the research optimized questions. A more focused prose search will be carried out

after studying the e-Governance framework models to as applied in India and other Western countries. [7, 14] The e-Governance experiences form end users and trainers will be scrutinized in order to identify possible. In this corresponding, an faltering case model study of the other many e-Governance system model and Information and communication technology project have to done by the researchers and to analyze the point to which the barriers and solutions drawn from literature apply in e-Governance domain, A related aim of this study is to development a working, socio-technical e-Governance framework, with ICT technology, which might be used to funnel the accomplishment of the future e-Governance initiative in a country or particular state. The essence of this study will be a proposed e-Governance framework and other solutions to offer this with ICT model. [8, 15]

4. ANALYSIS FOR ICT CLOUD BASED E-GOVERNANCE FRAMEWORK IN UTTARAKHAND

The Governments in the region of the world are promoting for the provisioning of the most advantageous services and practices to achieve its day-to- day actions and particularly in the government agencies communicate directly to the services and that have to direct interface with citizens for communication services. The exploitation of the latest and advanced technologies is crucial to reduce the cost and time required by processes to the minimum services, aiming at improving the associations with citizens by providing more effective and efficient services [9].In a recent study, Burroughs [10] found that about 77.4% of general people looking for government information and communication services, and first uses of online resources sites such as Google, Yahoo, or other commercial search engines for communication.

On a global scale, the exponential growth of online web-based applications has enhanced the ability to provide e-services for customers in both public (such as e-Government) and private sectors (such as e-Business) [11, 14]. The high expense of IT investments poses an imminent setback to implement such solutions for many developing countries, consequently adopting ICT technologies is driven by the potentials to reduce the capital expenditure and delivering scalable IT services at lower cost [12, 15].
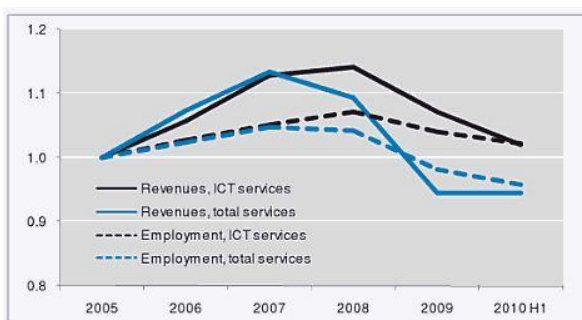

Fig 1: OECD [13] based on Spanish national institute of statistics

5. REIMBURSEMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY CLOUD - BASED SOLUTIONS FOR E-GOVERNMENT

There are many predictable reimbursement of Information and communication technology in the e-Government system segment which include but not limited to:

- Rapid Elasticity
- Maintenance and Technical Support
- Cost Effectiveness
- Disaster Recovery
- Green ICT Eco-Friendly Systems

6. RESULT OUTCOMES USING JAVA APPLICATION WITH CLOUD FRAMEWORK MODEL

In this proposed framework e-governance model for Application Engine system used by the Java, Servlet and java server pages for creating web applications and different type of mobile applications because mobile is the best way to transact the application and it is communicate to easily. In this framework we have to use the Applications as servlet classes, Java Server Pages, static files and data files. And the Java virtual machine that runs in a secured and fast "sandbox" environment to isolate and communicate your application for service and best security for our applications. In this Application Engine platform provides the scalable services for cloud and all that application can use to store the persistent data and communicate the data for communication, in data access resources all over the networks, and different other tasks as manipulating for providing the better services to the different type of cloud data.
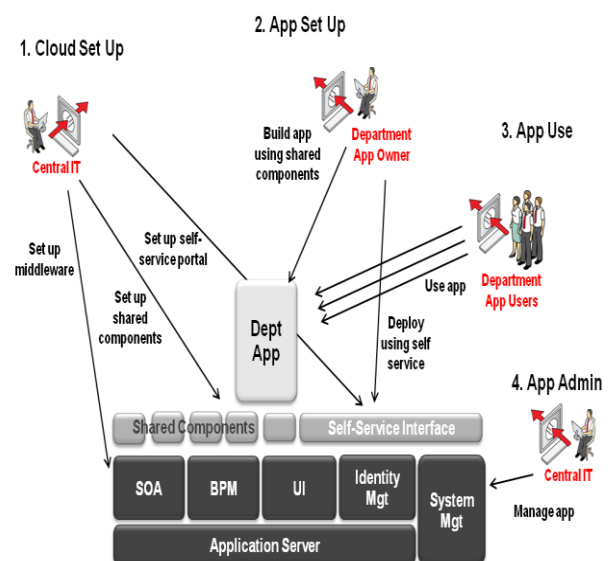

Fig (b): Essential ICT architecture of cloud framework

7. ARCHITECTURE OF CLOUD MODEL APPLICATION IMPLEMENTATION FOR E-GOVERNANCE

In figure 2 we have to show the framework model for implementation the physical infrastructure as includes the client, application servers, legacy of systems such as mainframes, system mgt, integrations, and database resources as cloud information data. Which is used for our framework as communication of all lowest layer of software to this is operating system as lower level to high level and may or may not include virtualization technologies for such as the VMware Virtual Machine hypervisor.

8. CONCLUSION

In this paper we used empirical studies to crosscheck of our findings and solve the problems. In empirical study, we have used three Information and communication technology based e-Governance solution for vendor's websites as our sampling and empirical for experimental research. In these companies have to published their product details clearly on their websites and transactions. So we have to find our answers for our questionnaires from the all published data of those empirical websites for better solutions. We have to show that the information and communication technology based e-Governance system is more reliable, flexible, cost-efficient, self-regulated because in this process we manage all transaction and communication electronically. It has some mechanisms to guarantee the teaching and learning activities, the quality and the running of the system. All Universities have to begin to adhere to this basic initiative of expenses and there are to proofs that the basic indicated significant decreasing of expenses due to the implementation of Information communication technology solutions are to be represent of the empirical research.

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