E-Governance at Village Level Administration (In Rural India)

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Abstract

As we have seen the world changing from the days of sending mails through the hands of a postman till the days of sending mail from our own rooms through an email within seconds. E-Governance is part of the new evolution that has played an important role in this new competitive and fast paced development of the world. We live in the world of 21st century and have seen the development of urban areas, but still there is a ??? Over the enigma of rural area competence with that of other developed urban areas. Centralization of industries in urban areas has suppressed the growth and development of rural areas which constitutes a major part of any developing country.

Many new changes have taken place in the world of technology which played a crucial role in giving a new shape to the existing earth. The above cited example was only one of the millions of changes that have taken place to prove the power of technology. Internet technologies can be taken as a weapon for fighting against the under-developed conditions in the rural areas. It can be taken as platform for exchanging information, providing services and transacting with citizens, business modules and other arms of government. As a result it improves the efficiency and the delivery of public service for the people living in rural area. Some of common examples can be given as online payment of taxes, online tender system, keeping record of assets and meetings, decisions.

There are several parts of the work of the Gram Panchayat i.e., the basic unit of administration at village level in rural India. This project supports all the functionality of those modules as well as supports for the certificates validation e.g., birth certificate, death certificate etc. It also supports for the money transaction, report submission to block development office. The technology surmounts human life. Directly or indirectly technology has become an important point in our daily schedule. The power of technology is so vast that we need to cope up with its tenability by our contribution to the society.

Keywords: E-Governance, Gram Panchayat, Panchayat Raj, Rural Governance etc.

Introduction

“Panchayat Raj”- a self governing system in India which was built for the empowerment of rural people. “Gram Panchayat” is the unit of this government system which governs at village level administration in India. Most of the population of India lives in villages so the development of these Gram Panchayats is nothing but the development of the India! E-Governance is nothing but use of internet technology as a platform for exchanging information, providing services and transacting with citizens, businesses, and other arms of government. Since the foundation of Panchayat Raj there are so many changes adopted for the
better governance and administration but still there is need to reengineer the existing system. On studying it was found that web applications are more adoptive to existing governance than the other architectures.

Benefits of E-Governance are mainly transparency, speed, reliability etc. in village level government. In some remote parts it is hard to carry and forward documents to respective authorities due to non availability of transport facilities, even in some parts country the information doesn’t reach up to the common man whom the advantage is to be given. The proposed system overcomes such limitations. There are many E-Governance applications on different levels such as states and districts but very rarely implemented on villages. This proposed system supports all the activities and governance modules of Gram Panchayat.

**System architecture**

This is a web application having different modules which are similar or exactly same as the administrative modules of Gram Panchayat like meetings, property tax, planning, etc., privileged access is given to different kind of users such as citizens, administrators, governing body, staff, etc., e.g., A citizen is given limited access to system to view only his information and not any others while administrators has access over entire system.

The system is connected to other information systems if possible over the internet, e.g., a system is connected to MIS of district level, state level systems for better communication among the different government organizations. The Figure 1 shows a basic view of architecture of system. The web application is hosted on “WebSphere Application Server Community Edition” (IBM) which is connected to database on “DB2 copy” database software (IBM). User can interact with system by means of a GUI which is built in HTML and JSP.

![Figure 1: Architecture of Gram Panchayat Budget Management System.](image-url)
When a user demands or requests a query to system over GUI, first the request goes to web server. The web server analyses it and if necessary does some database operations and again gives result back to user in the form of webpage showing what it has done.

**Working of System**

The web application is built in JSP and HTML as frontend i.e., GUI. In each module there are four different operations in which user can interact with database through GUI. With the help of these services a user having privileges can insert a new record, update existing one, delete existing record and view specific records in the application. It also takes care of exception handling of invalid operations in system.

In addition of above discussed points, the web application also helpful for day to day activities of Gram Panchayat e.g., generation of monthly report is very tough work in traditional method, while on one click the administrator can generate the report with the help of proposed system. Now days, by “Right of Information Act” citizens can demand the information from various departments of government. An administrator can provide sufficient information to villagers without consuming a lot of time.

![Figure 2: Working of Web Application and Proposed Interface.](image)

Figure 2 shows the working of our proposed system interface with web application.

Currently, the software project has interaction with citizens of particular Gram Panchayat, administrators but in near future it is going to be implemented with systems interaction with MIS of Districts and Panchayat Raj Departments. Mostly visited content like discussions, news contents, articles, and help information is provided on web pages along with related modules. The administrators can change this content dynamically.

**System Functions:**

**Water Tax:**

This is the section of the Gram Panchayat in which all the villagers are supposed to pay the tax for the water. The entire information of all the villagers who have paid the tax or the villagers
with due of payment can be maintained very easily. Also all the transactions can be made with security and can be easily managed by Gram Panchayat.

Figure 3. Display Record from Database.

Figure 4. Insert Record in to Database.
**Property Tax:**

It is the most important section, because the entire important information of the money, taxes is tracked here and the report which is to be submitted to Block Development Office is prepared and maintained. And this can be very sophisticated to do this using software, so that no mistake is committed and security of capital investment as well as information of all the transaction of all the villagers can be managed.

**Registration and certificate:**

All people are always in need of the documents such as Birth certificate; marriage certificate, etc., which are provided by the Gram Panchayat. It should be provided with checking validity of the person. It is a hectic and cumbersome process manually which can be done by the software easily.

**Planning:**

Using the software, it is easy to keep the entire database for the planning, survey of work and many similar tasks like working muster, working order, planning sanction demand.

**Human Resource Development:**

Here the information about the employees, new employee reporting, recruitment, attendance register, salary register, change in designations can be managed using the software rather than manually.

**Meeting:**

Maintaining all the information of the meetings held in the Gram Panchayat and related areas is the important task. It can be done very well using the software. Each meeting discussion, decision and the subjects of each meeting can be recorded so as to be used by the next time or whenever required. The software does all these information maintenance.

**Furniture and Dead stock:**

Assets are to be managed very carefully, a smallest mistake can cause a disaster, so any type of record maintenance and handling of assets, if done by the software with least chances of mistakes.

**Discussion**

**24 x 7 availability of information –**

As the system extols the benefits of rural people by giving them consistent service, it should serve them 24 x 7. But also the system needs to be maintained and backup should be stored. Hence the system is inaccessible between 2:00am to 4:00 am. In addition the system should be
given power backup of UPS for more than 8 hours to avoid power failure and unnecessary loss of data.

**Saves Time and Money –**

As we know that, time and money are important day to day aspects. The system should give high performance in less time than the traditional way of working. It is pretty important to see how difficult to retrieve some information from a vast record, while it is very easy to search for a record from stored information on system.

**Simplify the work of Gram Panchayat –**

The traditional system is somehow thwarting the purposes of “Panchayat Raj Department” due to less speed and complexity. But this system will simplify the work of Gram Panchayat but also boost the performance.

**Aware rural people about technology –**

The system is fructuous for creating awareness in rural people about technology. The people in rural area do not know much about technology, this is nothing but truth about rural attitudes towards technology. The system will create awareness in minds of people about simplicity and ease of working with computers.

**References**


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