

Cost effective solution for effective e-Governance - e-Panchayat

(Example of Exemplary Leadership and ICT Achievement of the year)

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Abstract

There are various models and solutions of e-Governance in the World. However a cost effective solution is always preferable. An electronic knowledge based system titled ' e-Panchayat' with the active involvement of the stake holders at lowest administrative level was successfully designed developed and being implemented successfully in Andhra Pradesh. Several states such as Uttar Pradesh, North Eastern States, Rajasthan , Maharashtra , Tamilnadu etc., the same project is going to be replicated after due customisation. As the project involves e-Governance right at the grass root level i.e., village level and offers a very cost effective solution. The methodology adopted for implementing the system is novel, cost-effective and self-sustaining. To achieve high efficiency the system harnesses the state-of-the-art Information and Communication Technologies which are highly efficient.

Keywords : E-governance, Knowledge Management, local bodies Empowerment and Result Oriented Governance.

1. Introduction :

The Governments all over the world are interested in enhancing the quality and quantity of services to the citizens in a cost effective manner. The total cost of ownership for all the stake-holders should be minimum during the entire period of services/ ownership of the system. Another major problem the Governments facing today is to create more employment opportunities for its citizens at least cost. The system proposed shall address these issues also very effectively with a well defined strategy.

2. Institutions of Governance in the field:

The state Governments have created several Panchayat Raj institutions to ensure grass root level development. At village level the Gram Panchayats are there, these are grass root level institutions. At the intermediate level, i.e., Tehsil/Block/Mandal level there are nodal executive authorities, they coordinate the implementation of welfare schemes and services. In the case of Andhra Pradesh, there are Mandal Parishads. Similarly at the District level the common nodal administrative authority exists, in Andhra Pradesh at district level there are Zilla Parishads. Some places there are Divisions. At the state level there is state level Administration to prepare policy guidelines and ensure the smooth functioning of the Panchayat Raj institutions.

3. ICT application at grass root level for e-Governance:

How to streamline the administrative processes and avoid delays and conserve resources in the country. Is there a feasible solution for this problem. How to implement the solution in a cost effective manner. Answer to several such questions was e-Panchayat. The main idea is if the administrative processes are streamlined and resources are conserved and citizens are empowered with efficient and responsive local administration at every village, then it results in development of districts, states and subsequently the entire nation. So grass root level problems were taken up for ICT application under the e-Panchayat project.

4. EKPANCH Architecture & Features :

EKPANCH's architecture is web-based n-tiered. It functions like Applications Services Provider for all Panchayat level digital services to all the stake-holders. The state holders are Citizens, Elected Representatives, Grampanchayat officials, the Government and the Knowledge Workers. At panchayat level an ordinary client with internet access is sufficient to implement e-Panchayat. Most of the computation is done locally, the reporting and association communication takes place through available network for a very brief period of time. Thus field level units can conserve a lot of communication cost and at the same time ensure the uniformity and quality of a e-Governance services.

The EKPANCH Application Server Software has four main modules.

1. Administration Module
2. Management Information System Module
3. Citizen Services Module
4. Elected Representative Module.

The Administration Module is going to help the GP officials in executing their duties and responsibilities delegated to the Grampanchayat officials. The MIS module with a few hundred reports is envisaged to facilitate the state level Gram Panchayat , Planning, Finance and Revenue Dept officials. The Citizen module with a few hundred applications is going to be the one-stop and non-stop provider of all the services to the citizens. The Elected representatives module is going to render services to the elected representatives. The multi-media based information dissemination software, the bio-metric based attendance monitoring software etc., are also part of this EKPANCH to facilitate empowerment through simplicity, morality, accountability, responsiveness and transparency (SMART) at the Panchayats.

5. EKPANCH Implementation Model

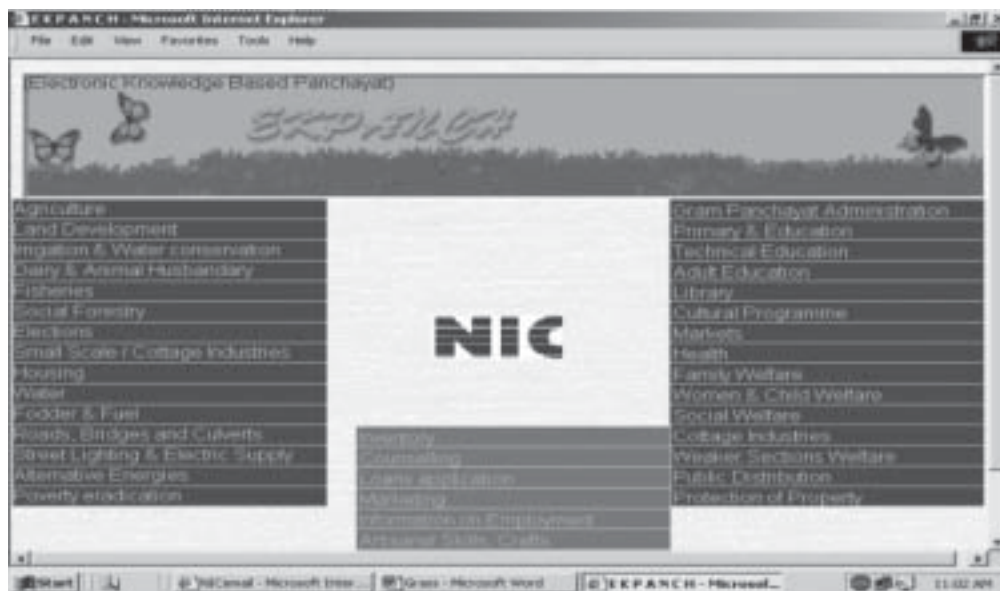
The main issue is how to ensure successful implementation of EKPANCH in all the Panchayats, in shortest possible time with least amount of resources and overheads by the Government.

The following strategy is suggested . The Commissioner Panchayat Raj & Rural Employment need to buy only the servers. At Grampanchayats, on Build Own and Operate (BOO) basis the systems can be facilitated through a self-employment generation scheme. So that in each village one or two families shall able to get their livelihood by rendering services to the Citizens and the GP officials by operating and implementing EKPANCH. For

Sl. No	Normal Model	BOO Model
1	Govt. has to procure the systems.	Govt. need not buy systems. It is entrepreneurs responsibility. Govt recommends a soft loan through Bank or through Govt's economic upliftment welfare schemes.
2.	Govt has to prepare site.	Govt need not prepare site.
3.	Govt has to arrange for internet connectivity.	Govt need not arrange for internet connectivity.
4.	Maintenance is Govt's responsibility.	The village level entrepreneur's takes care of the system, as it is the means of livelihood for him/her.
5.	Citizens may or may not get prompt response.	Citizens get prompt response, as every transaction is chargeable, at the rates fixed by G.P.
6.	May get requests from non-serious users.	Non-serious users are eliminated.
7.	Systems may fail frequently, as sense of responsibility is low. Thus whole system may come to a standstill.	Systems failure rate is less, as a person is there to take care of it 24 hrs.
8.	The Gram Panchayat secretary or other officials may have to feed the reports to the central server. The existing staff may not be willing to operate and feed the data, as they may have to attend to other duties. Even if a person is posted, he may be on leave, or may learn and resign or may not respond properly, perhaps due to lack of motivation or may render services to selected persons only, who have power.	The data will be collected and fed by entrepreneur, as for each report entered and sent, he gets a fixed amount of revenue. So from villages reports come to Govt. Entrepreneur has to do business with every one and has to keep everyone happy. So he will serve all sections of society. Based on the size of panchayat, the GP may decide about the number of self-employed entrepreneurs to be given licenses to operate e-Panchayat in the village.
9.	GP has to bear the overheads of system maintenance and communication and stationery and consumables charges. It will be difficult to monitor the expenditure on consumables.	GP need'nt bother about the recurring expenditure and need not keep track of the associated expenditure.
10.	Operations may be slow, timely reporting may not take place.	Operations shall be faster, as GP can remove slow and non-responsive entrepreneurs. Or if load is more, may issue license to additional entrepreneurs and thus create competition.
11.	Difficult to encourage and create competition.	Prompt services results in quick revenues and thus speed and promptness are encouraged. And Scope exists for creating a healthy competition for operating and utilising the EKPANCH system.

12.	Gram Panchayat has to incur expenditure.	GP may also may get a share of revenue.
13.	Revenues may not go up as all payments may not be accounted.	Revenues go up as all accounts are recorded, even otherwise, people shall demand a receipt from a powerless businessmen for the amount paid rather than a powerful Govt servant.
14.	Takes time to implement in all the villages, due to overheads.	Implementation can take place simultaneously in all villages, as overheads are almost nil for the Govt.
15.	Difficult to sustain the model.	Easy to sustain the model, so runs for longer time.
16.	The Govt shall be under pressure to ensure successful implementation, as overheads are more and expenditure is involved.	Govt shall not have any pressure, as there is no expenditure for the project implementation in the field from the Dept. The pressure is distributed to all the village level entrepreneurs. So problem is getting divided and solved.

rendering the services, the service charges can be fixed. It will be the entrepreneurs responsibility to collect and feed data, and generate reports. The amount of data fed and the number or reports generated are monitored through software and accounted for making payment. The system maintenance, procurement, internet connectivity and associated logistics shall be taken care by the entrepreneur. Following is the comparative chart of BOO model and normal model.



The image shows a screenshot of a web browser displaying a form titled "EKPANCH HEALTH COMMUNICABLE DISEASES". The form contains the following fields:

- Gram Panchayat code: (Numeric only)
- Date: Date (DD) Month (MM) Year (YYYY)
- Disease Name: [Text input]
- Disease Synonyms: [Text input]
- Place of Occurrence of the Disease: [Text input]
- Number of Persons Affected: (Numeric only)
- Number of Deaths occurred if any: (Numeric only)
- Relief Measures taken: [Text input]
- Reported by: [Text input]
- House No: [Text input]
- Street: [Text input]
- Village: [Text input]
- Telephone Number: (Numeric only)

At the bottom of the form are "Submit" and "Reset" buttons. The browser's address bar shows "http://get.ap.gov.in/...", and the taskbar at the bottom indicates the user is logged in as "Gnan - Microsoft Word" at 10:39 AM.

A model in the similar lines is successfully functional in West Godavari District. The software is developed by NIC and the central server infrastructure is created by the State Government and the field level resources are facilitated on lines similar to the BOO model.

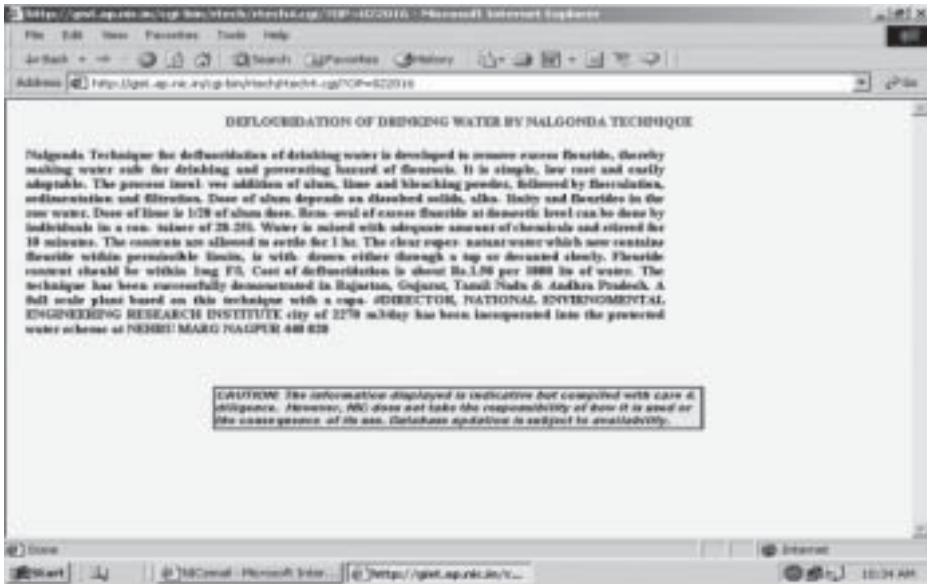
6. Features of EKPANCH Software :

The main features of the various software modules of E K P A N C H - (Electronic Knowledge Based Panchayat) are :

1. Bio-metric attendance Monitoring
2. Below Poverty Line - Enumeration
3. Village Level Planning
4. Meetings Management
5. Self Help Groups related information management
6. Monitoring Attendance in GP Meetings
7. Managing Information related to the Meetings at Mandal/ District Officials
8. Managing Information related to the assignments of the Superior Officers related to the Village.
9. Managing the information related to the GP Property.
10. Managing Information related to the Weaker section Housing Program
11. Encroachments related information Maintenance.
12. Managing Information related to the Atrocities against Women & Children (if any)

13. Gram Panchayat Registers Computerisation
14. Communicable Diseases related information management.
15. Tax demands , receipts generation , revenue accounting.
16. Anti Malarial Spraying related information management.
17. Crops related information management.
18. Anganwadies, Balwadies related information management.
19. Generation of Ceritificates for citizens.
20. Tree Plantation & Protection related information management.
21. Maintain Sanitation related information.
22. Maintaining information related to the atrocities against SC, ST (if any)
23. Planning & Implementation related information management.
24. VTDA related information maintenance.
25. Relief & Rehabilitation related information management.
26. Untouchability Eradication Programmes related information maintenance.
27. Assistance to AP TRANSCO related information maintenance.
28. Enrolment related information management.
29. Minimum Wages Act voilation related information maintenance.
30. Maintaining information for organizing Literacy Classes
31. Birth - Death Registration related information management.
32. Crop Coverage Information management.
33. Marriage Registration information management.
34. Extension Information management for dissemination.
35. Grama Sabha - Beneficiaries Information management.
36. Managing land Information for Azmoish of Crops
37. Property Details information maitenance.
38. Maintainance of Agriculture Statistics
39. Managing Information for Serving Legal Notices (as and when required)
40. Maintaining information to ensure up-keep of Display boards & Assets
41. Managing information related to village level events to Inform Public.
42. Maintaining information related to Black Marketing of Inputs for reporting.
43. Managing information to assist in Loan Recovery.
44. Maintaining Weavers Information for reporting.
45. Maintaining information related to Panchanamas conducted.
46. Managing information for generating and issuing Dependency Certificate to Weavers
47. Managing information to ensure safety of Govt Attached Property.
48. Managing information to ensure better Co-ordination among various Agencies operating in the village.
49. Managing information for performing Election Duties
50. Managing information related to Govt. Programs for public participation.
51. Maintaining information to inform Police about unlawful incidents.

- 52. Managing the information related to village Teachers for better liaisoning.
- 53. Managing Information to Organize Meetings for Community work
- 54. System to Report Accidents immediately to higherups.



55. System to ensure Co-ordination among all Departments right from hamlet level to the state level.
56. Manage Information related to the Old age Pension Scheme.
57. Maintenance of information to ensure Clean and Green
58. System to report Epidemics Out break in time.
59. System to provide Marketing Services
60. Managing information related to the Community Welfare & Development
61. Other information, Counselling, Transaction Processing (including payment), certification, authentication, grievance redressal etc., services are included in EKPANCH.

7. Current Implementation Status & Conclusion :

For sustainable socio-economic development at the grass root level, a wide involvement of the communities and businesses would need to be ensured. This would automatically warrant forging of sound business relationships based on transparency, mutual good will and benefit. NIC's e-Panchayat offers a unique opportunity for establishing inter as well as intra stakeholders partnerships at the grass root level. Realising this fact the Government of Andhra Pradesh has decided to implement the e-Panchayat system in all the major Gram Panchayats in the Andhra Pradesh. It went one step ahead and to ensure e-readiness of the Panchayats, training, procurement of hardware etc., resources were allocated. To ensure sustainability, the RajIV operators were also being involved in the implementation of the e-Panchayat. (The village level entrepreneurs owning a computer, obtained through District Administration and internet connectivity are called RajIV operators in Andhra Pradesh)

The e-Panchayat implementation initiates the process of building partnerships systematically at every panchayat. The extent of success of e-Panchayat in a village panchayat depends on the E-needs of the potential partners as well as their e-readiness to an extent of connectivity available to them, penetration of digital culture as well access to the internet by village level members of these organizations. The Government has to act as a catalyst for creating a cooperative and friendly e-climate for achieving and sustaining the success, rather than a purchaser of hardware / outsourcing agency.

NISG has come forward to fund the replication of e-Panchayat in Uttar Pradesh.

