e-Gyankendra

Seeding Digital Learning And Community Empowerment

An Initiative By:

District Administration, Jhalawar

Implemented By: Moinee Foundation

e-Gyankendra: Overview

- Open Media Server based e-Gyankendra is a knowledge center to facilitate and empower the community through e-Learning and e-Governance.
- It is an initiative to digitally lightning the village/community without the dependency on internet.
- It is a place of learning for everyone in village.
- It is to provide free and open access to best of the knowledge base from internet at lightening speed that too offline, hence it will be always free.

Media

Access informational content without the Internet

Connectivity

WiFi access, so other devices can connect

Administration

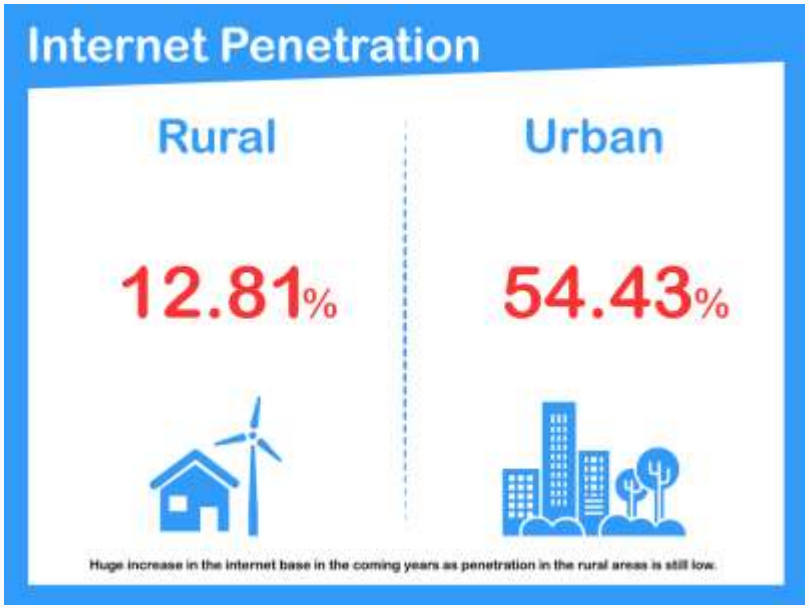
Simple interface to manage e-Gyankendra

Accountability

Regular monitoring and reporting of usage data

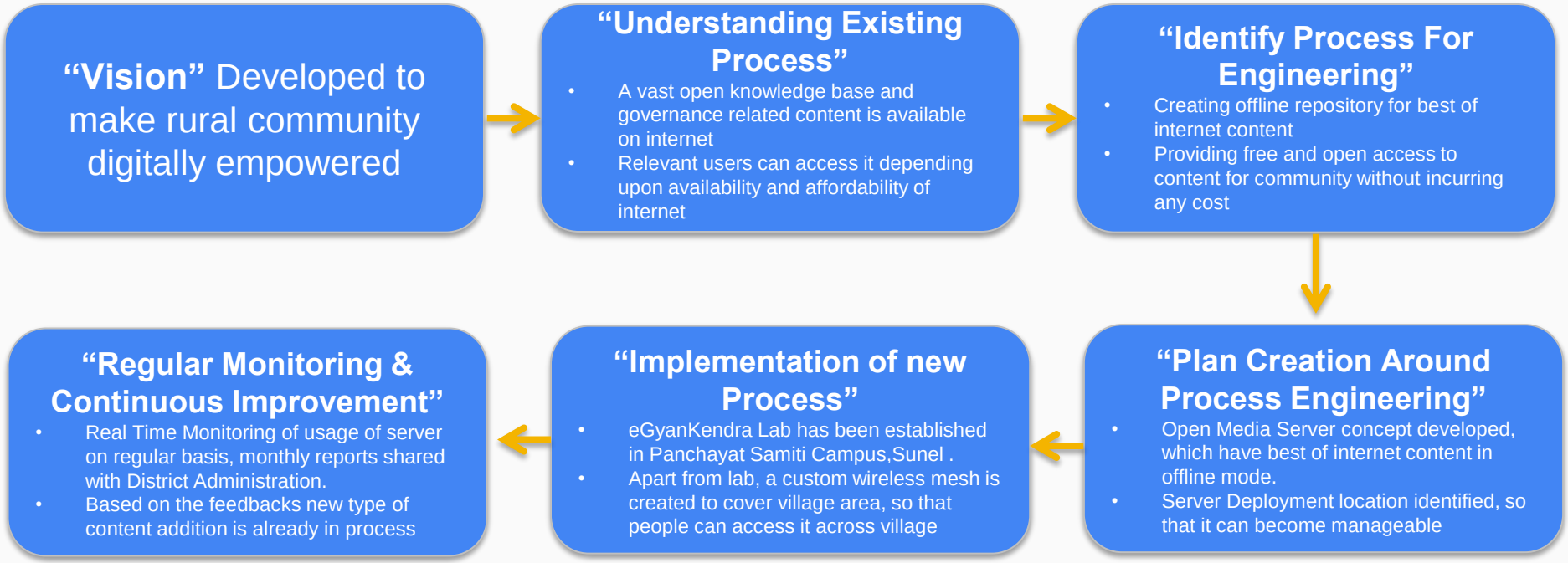
Problem Statement
[How and why was it conceived]

- Majority of our villages are still deprived of power of internet for learning empowerment due to limitation of internet access (availability/ speed/ cost etc.).
- In the present era of digitization, relevance and importance of internet cannot be underrated but affordability, availability, security and consistency is also key aspect.
- There are valuable things to learn and do on the internet. (Educational Resources, Guides, Application Form etc.)



Process Engineering

- e-Gyankendra is conceptualized and developed under the guidance of District Administration of Jhalawar by Moinee Foundation as open media server based knowledge center to facilitate and empower the community through e-Learning and e-Governance.



e-Gyankendra - Key Activities

e-Gyankendra Setup Initiation Activities

Successfully established e-Gyankendra at Panchayat samiti parisar Sunel

Formal inauguration and endorsement by Honorable Chief Minister of Rajasthan

Empowering accountability of B.D.O. of Panchayat Samiti for regular operation

e-Gyankendra - Key Activities

Students of local areas continuously visits the e-GyanKendra

Regular awareness by Local elected representatives M.P./MLAs/Pradhan/Sarpanch

ई-ज्ञान केंद्र की राह खुली

Community awareness campaigns by local volunteers at important places of village

News coverage and regular updates through local print media and social media

विद्यार्थियों को ई-ज्ञान केन्द्र की दी जानकारी

पत्रिका न्यूज नेटवर्क
rajasthanpatrika.com

सुनेल. राजकीय आदर्श उच्च माध्यमिक विद्यालय में शनिवार को विद्यार्थियों को ई-ज्ञान केन्द्र ओम सर्वर वाई-फाई नेटवर्क के बारे में जिला समन्वयक प्रहलाद नागर, प्रोजेक्ट समन्वयक गौरव शर्मा ने जानकारी दी। जिला कलक्टर के निर्देश पर पंचायत समिति परिसर में प्रदेश के पहले ई-ज्ञान केन्द्र की स्थापना की है।

सुनेल के राजकीय आदर्श उच्च माध्यमिक विद्यालय में शनिवार को ई-ज्ञान केन्द्र के वाई-फाई की जानकारी लेते विद्यार्थी।

जिससे बिना इंटरनेट की निर्भरता से ई-गवर्नेंस से संबंधित सुविधा प्रदान होगी। यह केन्द्र मोहनी फाउंडेशन जयपुर के तकनीकी सहयोग से स्थापित किया है। इसे मोबाइल, टैबलेट, लैपटॉप, कम्प्यूटर आदि से ई-ज्ञान कोष पर उपलब्ध डिजिटल कंटेंट को बिना इंटरनेट के देख सकते है और डाउनलोड कर सकते हैं। वहीं पंचायत समिति परिसर में स्थित ई-ज्ञान केन्द्र पर ही 5 टेबलेट लगाए हैं। कार्यक्रम में प्रधानाचार्य प्रमोद कुमार बलसोरिया आदि ने विचार व्यक्त किए।

(पत्रिका संवाददाता)

Innovative use of available resources

Best Of Knowledge Base

- Wikipedia (multilingual)
- TED Talks
- Worldwide maps (Open Street Map)
- Project Gutenberg (45000+ books)
- Khan Academy (KA Lite)
- NCERT resources (multilingual - through the NROER project)
- Arvind Gupta - Toys From Trash videos
- “Project Utkarsh” Study Links
- QuizAcademy offline RBSE class 9 and 10 applications.

Empowering Governance

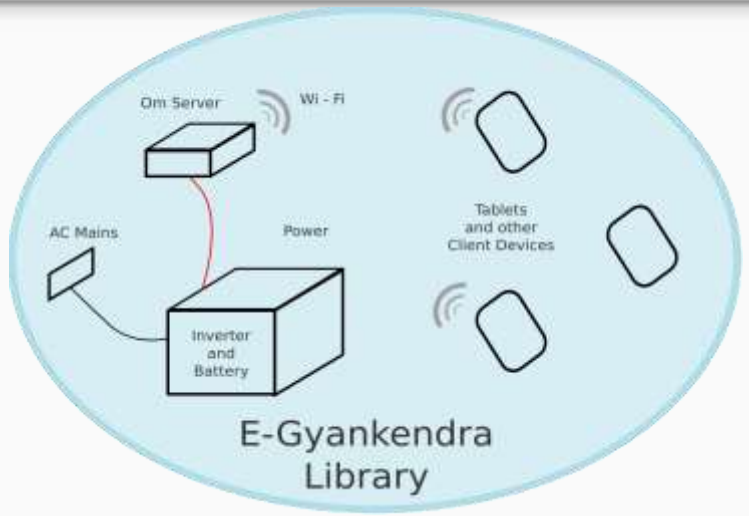
- Various Application Forms, Scheme guidelines, Orders, Circulars, awareness content are important aspects of “e-Governance”
- Effective utilization of near by government ICT schools labs for eLearning.
- Optimal utilization of available infrastructure and man power at Panchayat Samiti.
- Initial Setup Cost covered through CSR Support/MP-MLA LAD.

Community Engagement

- Volunteer engagement for program awareness and execution.
- Promoting local culture / artists performances by hosting on eGyankendra content server.
- Updates and awareness through various mediums like social media (WhatsApp or Facebook), local print media etc.

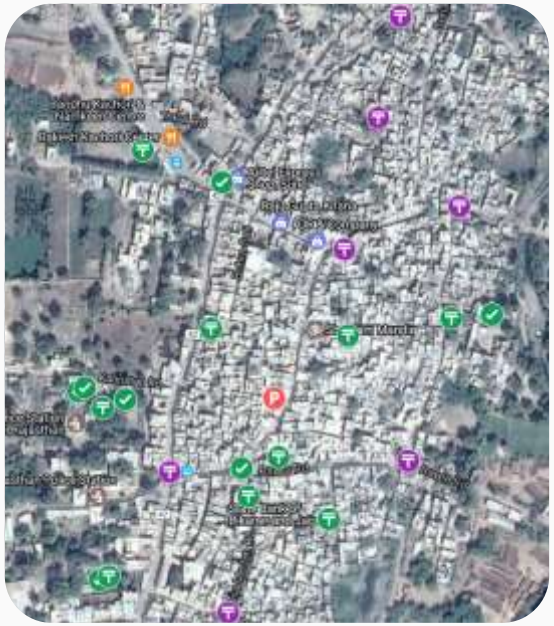
e-Gyankendra Lab: Typical Setup

- eGyankendra Lab having open media server having 1TB of open source Knowledge Base content which creates local WiFi hotspot
- Apart from that server 5 tablets are also there which are connected to this server for free to use

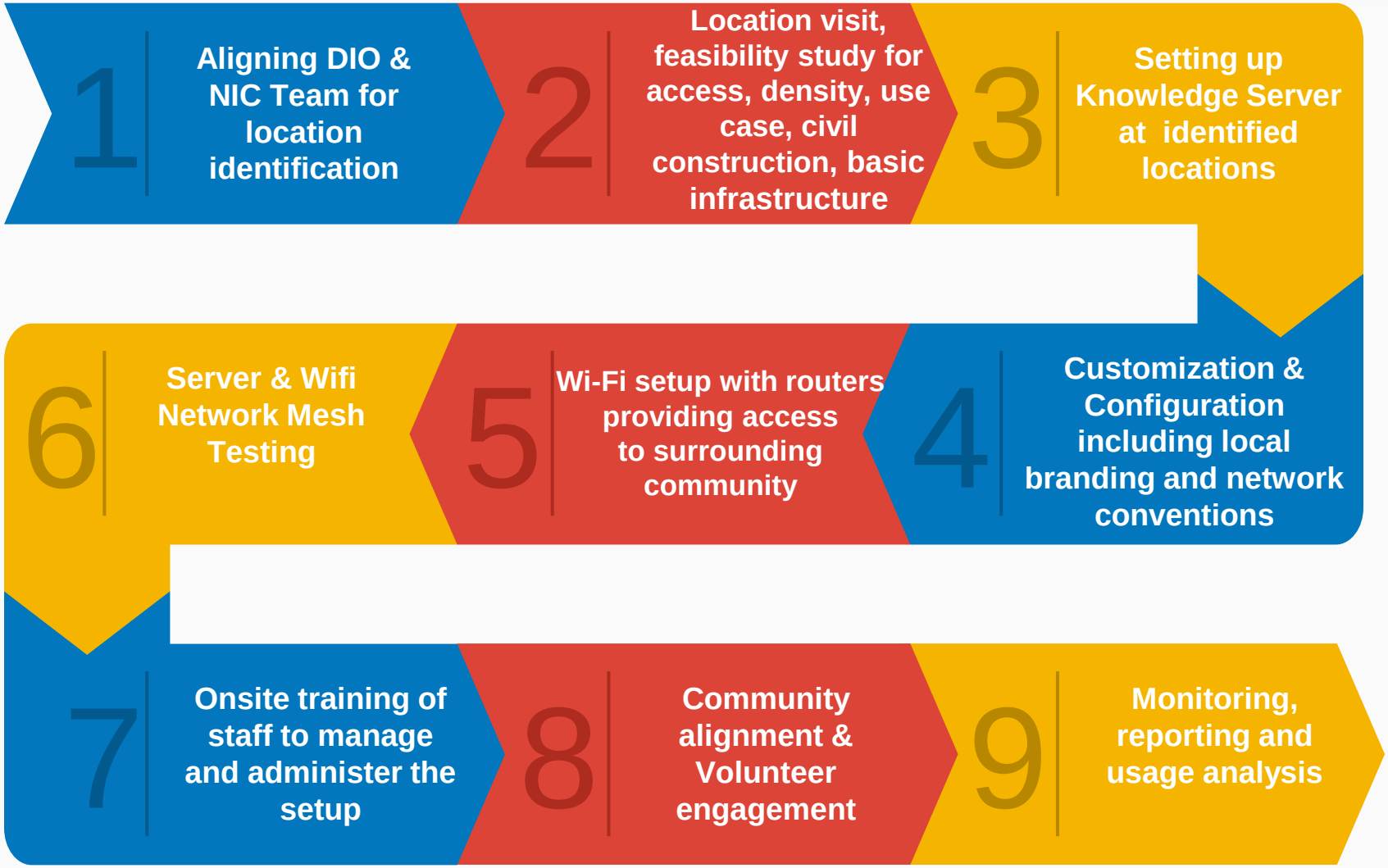


e-Gyankendra Village WiFi: Typical Setup

- To Increase the signal strength of server hotspot in near by areas of village, 7 routers has been deployed
- Custom wireless mesh is created to cover village area, so that people can access it across village



e-Gyankendra Setup- Key Steps involved



e-Gyankendra- Key Features

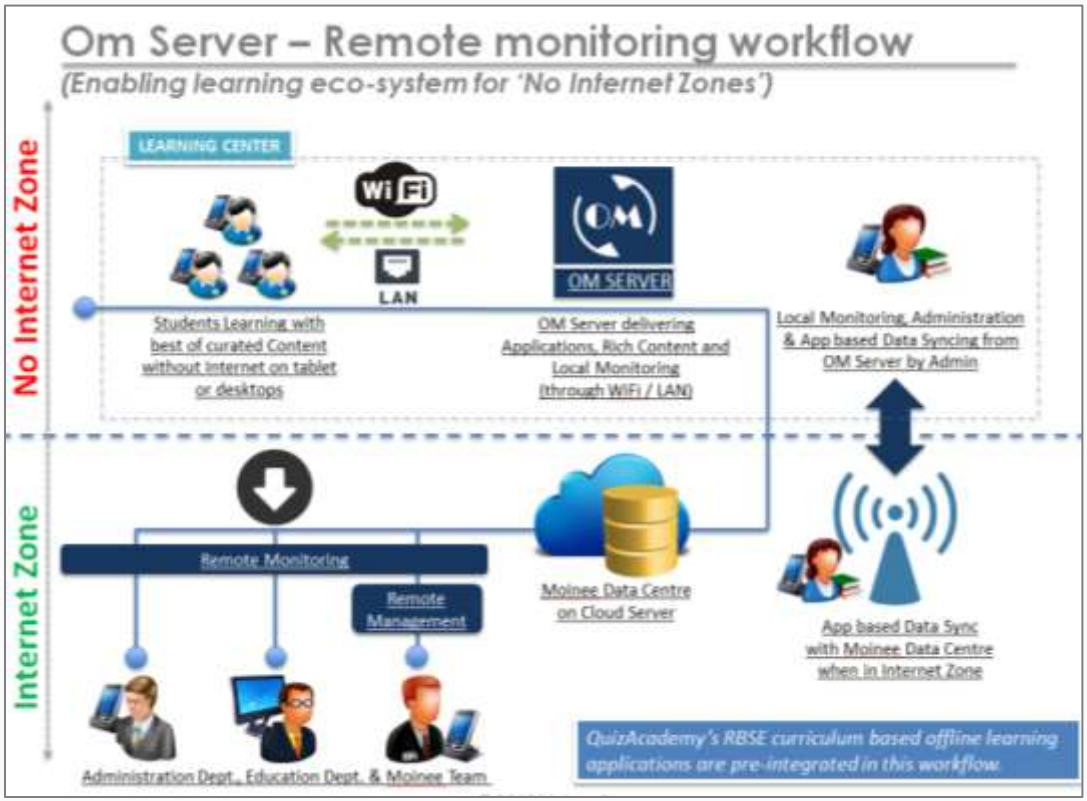
- No Dependency on Internet
- Providing free and open access to best of the knowledge base from internet
- Support high concurrent users on the Wi-Fi network, with the ability to extend that number in the future as required.
- Provides a path for digital Value Added Services (VAS), for example:
  - Information Centre for latest Govt. Schemes through Electronic information brochures
  - Facility Centre to avail benefits provided by State Government
  - Knowledge Hub for various learner and intellectual group
- Curated Content developed in Local Language (HINDI).
- Content updation as needed
- Monitoring & Usage Analysis

Transparency and Accountability [Remote Monitoring]

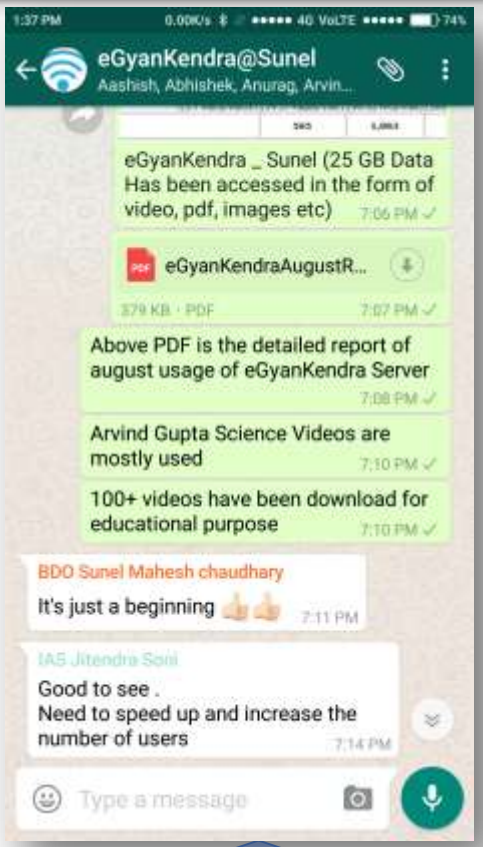
One of the most important lever for effective & SMART governance is seamless monitoring and access to ground measurements. It helps our administrators and system designer in deriving the metrics as desired for better data driven decision making apart from a regular validation without physical visits.

Our partner teams in implementation and technology solution are constantly taking the feedbacks to increase the effectiveness of initiative.

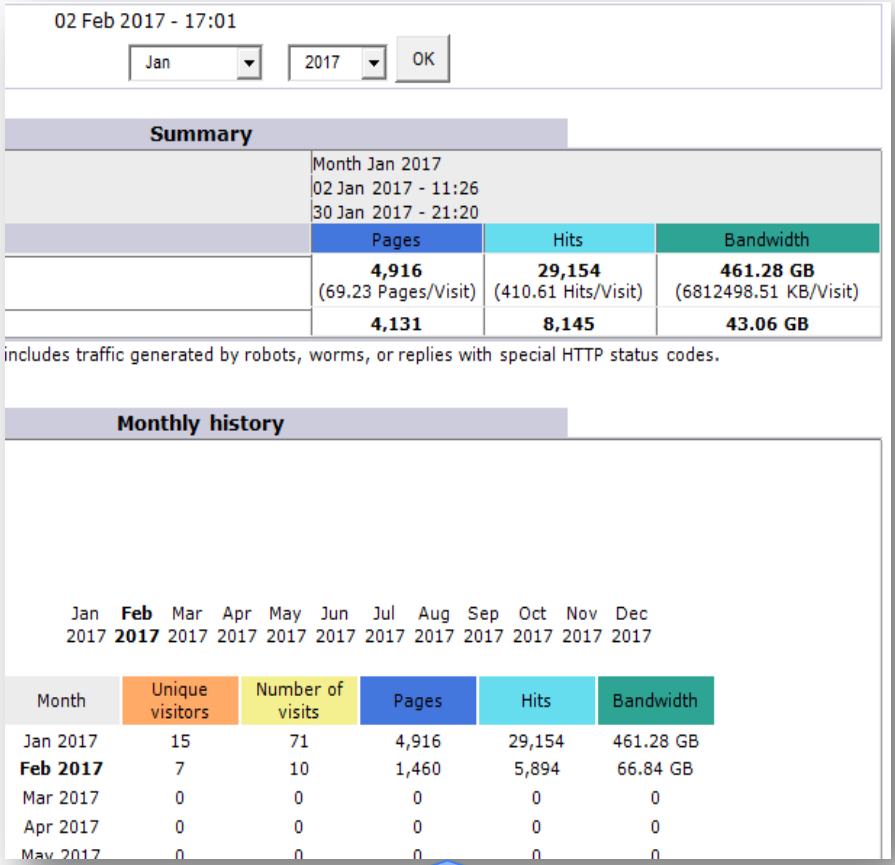
Remote monitoring workflow in “No Internet Zones” is one of such upgrade becoming available as part of eGyankendra.



Transparency and Accountability [Remote Monitoring]



For transparency, accountability and administrative rigor, regular progress updates and exchange of views are done on whatsapp group.



Usage data is captured, monitored and shared regularly with stakeholder.

Benefits To Various Stakeholders

Students

- Student can access important content of their course curriculum e.g. NCERT Books, QuizAcademy content, Science Video and simulation, Khanacademy etc.
- Wifi network provide access of e-Gyankendra content in ICT lab of nearby 2 Govt. ICT Schools where students can get direct benefit and students of other school access it through their personal Wifi device or visit e-Gyankendra lab established in Panchayat Samiti campus.

Local Community

- Local resident of Sunel village can access e-Governance in important public area through Wifi device without using internet bandwidth
- They can also visit e-Gyankendra lab to access infromation through tablets.

Career Aspirants

- Young generation planning career in Govt jobs, higher study etc prepares for competitive exams leveraging e-Gyankendra specially NROER content, NCERT books, TED talks, QuizAcademy etc.

Local Administration

- It directly supports to contribute in Central Government initiative “Digital India Mission”
- It smoothens the e-Governance process by providing all information about Govt. Schemes (e.g. Mukhyamantri Jal Svavlamnan Abhiyan, Swachh Bharat Mission, e-Mitra related information) and various forms and application.

Impact-Outcome

Factor	Description
Reach	• Important places of Sunel Village have been covered through creating hotspot zone to ensure maximum coverage • Local residents of Sunel (mobile users) and students of nearby 20 schools are leveraging it.
Usage	• Around 8000 GB data used till date • Everyday unique visitors increased from 3 to 15. • Average time spend by unique visitor is one hour+
e Governance	• Major Schemes of Central & State Government Included. • 3000+ GB data used to access e-Governance section which is more than 40% of Total Usage
Smart Class	• Smart-Class workflow started in nearby 3 ICT enabled schools benefiting 500+ students of that area • Students started applying learning of Arvind Gupta's video in creating science models.
Milestone for expansion	• Inspired by the success of Sunel e-Gyankendra, Local elected representatives of other blocks came forward to establish same kind of setup in their blocks. • Establishment of e-Gyankendra in Aklera, Manoharthana, Asnawar and Khanpur already confirmed. • Some religious and charitable trust also come forward to support this initiative.

Way Forward

Expansion	➢ e-Gyankendra will be established in each block of Jhalawar District starting with Aklera, Manoharthana, Asnawar, Khanpur in first phase throgh MP/MLA LADS. ➢ All the Model Schools, Government Colleges will have customized setup with the local CSR support ➢ Mini version will be created for Smart-Class workflow to cover Tribal Hostels & Schools, Remote area schools and Govt. ICT schools.
Content Enrichment	Extra curriculum content to learn music, dance, foreign languages, games etc, will be introduced.
Technical Enhancement	➢Remote monitoring in zero internet connectivity ➢Customized cost effective version to cater the need of different users
Digital Value Added Services	➢Offline version of Important website of Central and State Government hosted on NIC/DoIT can be included ➢ Facility of Virtual guide and virtual tour for important tourist places can be introduced.
Reward & Recognition	➢e-Gyanmitra award will be given at District Level to best performing e-Gyankendra operator. ➢ Award will also be given to Block/School for best e-Gyankendra

Promoting awareness and stakeholder participation

- Volunteer engagement
- Local Community Engagement through art and culture performance inclusion
- Orientation around this in various government campaign at Panchayat Samiti campus.
- Exhibition during Republic Day, Suraj-Pradarshani, Deendayal Upadhyay Shivir, Ratri-Choupal etc.
- Orientation of students at school level

ई-ज्ञान केंद्र पर दी टेक्नोलॉजी से जुड़ी जानकारी

Convergence with existing schemes of Government of India

“Mann ki Baat” by Honorable Prime Minister

- Repository of all episodes available
- Can be accessed anytime without internet

Swachh Bharat Abhiyan

- Important messages, videos, advertisements are available
- Local level progress can be regularly uploaded.

Digital India Mission

- Promote digital literacy without internet dependency specially in rural area
- Valuable contribution in Smart City through Smart Citizen
- Helpful in achieving vision of Digital Village Programme

Rashtriya Madhyamik Shiksha Abhiyan

- Best of Knowledge content of internet availabe at e-Gyankendra
- ICT lab built under RMSA can leverage it for e-learning without internet
- Monitoring of ICT infrastructure usage is also possible.

Convergence with existing schemes of State Government

Mukhyamantri Jal Swavlamban Abhiyan

- Important videos, messages, presentations are available
- Area wise progress in form of images, videos, graphs can be uploaded

Rajasthan Tourism Development Corporation

- Useful to promote local art & culture
- Important platform for virtual tour and guide

e-Mitra services

- All the forms and applications of e-Mitra services are available
- It can be a digital platform for Value Added Services

Project Utkarsh – Smart Classes in Govt. ICT Schools

- Smart-Class and e-Learning workflow can be run in ICT schools without internet
- Remote monitoring at student/School/Device level is possible

Sustainability

Economic Viability	• One time setup cost can be managed through Local CSR support or MP/MLA LADS • Recurring cost (electricity) is nominal so it can be easily afforded by Panchayat Samiti/ Department/School where setup is done. • There is no major Operation & Maintenance cost • e-Gyankendra can be smoothly handled by Panchayat Samiti staff/ school teacher.
Social Impact	• Useful in community empowerment through Digital Literacy • Create ecosystem for Smart-Citizen • Useful for Different stakeholders of the society (Students, Teachers, Residents, Elected representatives, bureaucrats)
Capacity to deliver	• Methodology and components of e-Gyankendra are very simple, modular and allows to scale the idea very easily • Physical setup can be emulated easily as well a central monitoring and remote management can be enforced to ensure desired outcomes • Any offline open source curated digital content in any format can be delivered.
Adaptability	• Day to day operations require no technical skills • Curated and regularly updated content in Hindi Language with user friendly interface supports smooth adoption. • Community alignment and volunteer engagement is also helpful in smooth adoption.

Replicability of the initiative

- Though, the e-Gyankendra is an ambitious project in it's vision and objectives to achieve; at the core, it is created with methodology and components which are very simple, modular and allows us to scale the idea very easily.

- The modularity of components allows us to adapt the context in which a new e-Gyankendra is to be setup e.g. location of setup, spread of population, custom needs of a locality etc.

- As part of replication of the initiative, not only physical setup can be emulated easily but also a central monitoring and remote management can be enforced to ensure desired outcomes

- Day to day operations require no technical skills but certain precautionary facility control measures, which can be budgeted upfront or can be community driven based on the scaling approach.

- It is designed for worst case scenario hence practical risks with replicating this initiative are very low. (No internet, No power, No tech skills with locals etc, localized content)

e-Gyankendra In Action

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