

**SAMVIDA [SYSTEM FOR APPOINTMENTS OF CONTRACTUAL /VOLUNTEER
SERVICES IN DISTRICTS OF BIHAR]**

**NAME OF CATEGORY- 'SPECIFIC SECTORAL AWARD for 2014-15:
SKILL DEVELOPMENT AND EMPLOYABILITY'**

1. Coverage – Geographical and Demographic :-

(i) Comprehensiveness of reach of delivery centres,

1. 38 (Thirty Eight) districts of Bihar
2. 534 (Five Hundred and Thirty Four) Blocks of state of Bihar
3. 8463(Eight Thousand Four Hundred and Sixty Three) Panchayats
4. Departments such as Rural Development Department, Irrigation Department, Planning and Development Department, Rural Works Department, Panchayati Raj Department, Revenue and Land Reforms Department etc.
5. Citizens of Bihar State and Other State through Web Site <http://eservices.bih.nic.in/>

(ii) Number of delivery centres

1. 38 (Thirty Eight) districts of Bihar
2. 534 (Five Hundred and Thirty Four) Blocks of state of Bihar
3. 4044(Four Thousand and Forty Four) CSCs
4. Large Number Of private Cyber Café across state

(iii) Geographical

- | | |
|--|----------------|
| (a)National level – Number of State covered | - One |
| (b) State/UT level- Number of District covered | - 38 Districts |
| (c) District level- Number of Blocks covered | - 534 Blocks |

Please give specific details:-

(iv) Demographic spread (percentage of population covered)

This covers most of the districts and blocks of the state of Bihar.

2. Situation Before the Initiative (Bottlenecks, Challenges, constraints etc with specific details as to what triggered the Organization to conceptualize this project):

The current system of recruitment in state government was designed to serve the needs of a Public Service that was smaller and complex and which provided services to a citizenry whose needs were simple. As the size of the society increased, so too did the

quantity and complexity of the demands they made on the State apparatus. Besides Bihar Public Service Commission, there exists Bihar Staff Selection Commission for recruitment of regular posts. However, due to complex procedures and inter-dependence among departments, the process is delayed for years-to-years. In addition to regular posts, there are many temporary and contractual posts, part of various schemes, in which qualification and number of posts vary depending upon current needs. Recruitment of such posts cannot be taken up by Public Service Commissions.

In order to benefit and implement government schemes, there are needs to recruit manpower for various state and central schemes like NREGS, IAY, Horticulture Missions, and Accredited Statistical Volunteers (ASV) etc. In addition state government has also to undertake lots of surveys and in absence of trained manpower teachers were being used for this purpose resulting in closure of schools. The Public Service itself is enlarged to cope-up with government needs; however, systems and procedures to support increased demands for staffing within the organization have not been upgraded in proportion either to internal needs or to the needs of citizens seeking employment.

The challenges thus encountered include:

- Time-consuming procedures in traditional processes resulted in frustration among users of the system and possibly loss of qualified entrants;
- delays in the recruitment of new staff adversely affect the ability of a Ministry/Department to provide promised services to its citizens;
- delays in the receipt of approvals for recruitments which affected individuals' remuneration and the organization's ability to effectively plan its future activities;
- difficulties in appointing qualified retirees into the Service
- recruitment of large number of volunteers needed for various schemes.
- filling non-traditional positions is frequently constrained by the rigid structures that are applied to traditional areas of employment

3. Scope of Services / Activities Covered (Level of education services possible, Processes covered, application used, Number/Type of Services, Extent of enablement in terms of number of services computerized, Extent to which steps in each service have been ICT– enabled#)

SAMVIDA, popularly known as **online contractual recruitment/volunteer services portal**, is the practice of using ICT technology and in particular Web-based resources for tasks involved with **finding, attracting, training, assessing, interviewing and hiring new candidates/personnel under various schemes of state and central government**. The purpose of online recruitment is to make the processes more efficient, effective and economical. Online recruitment can reach a larger pool of potential employees and facilitate the selection process in transparent manner. **SAMVIDA is a recruitment management system which is an**

integrated product suite or portal that streamlines and automates the entire processes involved.

WORKING OF SAMVIDA SOFTWARE :

SAMVIDA portal is being used by various departments for selection of candidates for surveys, contractual appointments, short term appointments etc. This facilitates unemployed youth to register to the website for getting services and alerts. Depending upon necessary eligibility criteria registered users automatically get sms and email for applying for suitable vacancies. The software provides facility for registering a person to the website by entering personal credentials. This allows departments to publish any advertisement for recruitment of volunteers or contractual appointments. This provides easy and effective method for and alternate methodology of recruitment. *With most of public service commissions overloaded and delayed with regular employment state government has decided to use alternate method of employment/volunteer selection process.*

A much simplified method has been adopted for selection of manpower after process re-engineering. The applicants are allowed to fill an on-line form as per eligibility criteria. **Only eligible candidates can fill for one post from one district.** In case the department seeks to collect application fee from candidates then it can be done through **RTGS facility** in banks. The applications are then processed and **draft merit list is published as per criteria and reservation rules.** Candidates are asked to submit their claims/grievances if any over some specified period. The grievances are first resolved along with a system of proper intimation to the complainant which is followed by publication of final merit list for verification of documents. In order to assist district administration during verification various in-process documents are also generated through the software itself. The software facilitates parallel recruitment process across state. After verification of documents the candidates are offered employment. ***In case of volunteers there is also provision for written test, training, evaluation, certification list etc. generated through the system.*** The software is a comprehensive solution for facilitating fast and effective mechanism for selection of large number of persons as contractual employees or volunteers. This brings transparency in the system and the recruitment process is completed within very less time.

Software also incorporates sms and email integration so that alerts and information can be shared to the registered users at regular interval. Fund collected as part of application fee can be used for maintenance, manpower support and further enhancement.

Number of Processes/Activities Covered :

1. Formulation Of Recruitment Process, eligibility criteria, merit list, grievances redressal, joining process etc.
2. Uploading Of advertisements
3. Registrations by applicants
4. On-line form submission
5. Preparation Of Draft merit list
6. Submission of Documents by applicants
7. Preparation of Checklist for Verification at districts/blocks
8. Preparation of final merit list
9. Schedule for Training of selected candidates at Blocks
10. Hall Tickets preparation and distribution to candidates
11. Examination and result preparation of ASV etc.
12. Information to candidates through SMS, alerts etc.
13. Allotment of candidates to respective places.
14. Joining Report of candidates
15. HRMS for Contractual Employees/Volunteers.

4. Strategy Adopted

(i) The details of base line study done,

The current system of recruitment in state government is designed to serve the needs of a Public Service that is smaller but complex and provides service to citizen whose needs were very simple. There was need for recruitment of manpower for various state and central schemes like NREGS, IAY, and Horticulture Mission etc. In addition state government has to undertake lots of surveys and in absence of trained manpower school teachers were being used for this purpose resulting in closure of schools for very long time. The process of recruitment through regular channel is so cumbersome that even recruitment of administrative officers was taking lots of time. **There was need to evolve alternate system of recruitment with ICT intervention.**

(ii) Problems identified,

The existing system had following problems:

1. Redundancy:
Manual records tend to contain data which are redundant.
2. Inconsistency:
Because of redundant data, there is no consistency in the data.

3. Time Consuming Process:

Maintaining each students and employees data with a number of fields is a tedious process and takes more time to retrieve back.

4. Improper Validation of Records:

There are many cases where validation is to be performed between the existing data and yet to be entered data. Also, an applicant can apply for any post from more than one district leading to many complications during recruitments.

5. Tedious to maintain Updates:

An organization data base goes through many numbers of updates each day which is hard to maintain in registers.

6. Management staff

In order to maintain the information of all the applicants who applied for different jobs requires special group of employees, which ultimately tends to the wastage of resources.

(iii) Roll out/implementation model,

In these years the public service recruitment practices have progressed from the maintenance of an emphasis on permanent and pensionable employment “from cradle-to-grave” to a mix of **permanent and contingent employment and the recruitment, on contract, of professional and technical individuals**. Strategies have been developed for making the most effective use of personnel from within and outside of the state to provide the services needed at this stage of the State’s development. The strategies developed are intended to facilitate the management of this process of recruitment and will have to undergo continuous refinement to maximize their potential for effectiveness and, at the same time, to minimize the possibility of abuse of the system. **To ensure equity and transparency, the application form and recruitment process has been standardized and the processes have been devised for automating entire recruitment process.** With the exception of persons seeking entry into the higher Class, competitive interviews and/or examinations determined suitability for selection.

The software has been already been implemented in following departments of govt. of Bihar.

1. Rural Development Department
2. Planning and Development Department
3. Rural Works Department

4. Agriculture Department
5. Revenue and Land Reforms Department
6. HORTICULTURE MISSION

The implementation strategy includes approval of steering committee, positioning of funds, notification of procedure for selection, involvement of field formations, and technical feasibility report submitted by NIC. The project is likely to be notified for implementation in all department through CENTRE FOR GOOD GOVERNANCE, in state of Bihar. The software has scope to be implemented in most of the departments and societies of Govt. of Bihar

(iv) Communication and dissemination strategy and approach used.):

1. Public notice through Advertisement in newspapers.
2. Website of Public Relations Department
3. Official Website Of State Govt.
4. Official Website Of Department
5. E-services Website.
6. SMS to Registered Users of the Website.
7. Email TO Registered Users of the Website.

5. Technology Platform used-

(i) Description,

H/W and Software Specification	Name of H/W and S/W
1. Servers & Desktop	High End Blade Servers, Local servers, Desktops
2. OS	Windows 2008, Windows 7 & XP
3. DBMS	SQLSERVER 2008
4. Framework	.net Framework 4.0
5. IDE Software	Visual Studio 2010, Java Script
6. Reports	Crystal Reports
7. SMS	NIC SMS Gateway
8. Mobile App	Android based Java Application

9. GIS/GPS Mapping(Spatial Data)	Silver Light, ARC GIS Server
10. Unicode Support	Indic IME, Google API
11. Video Player	Adobe Flash Player

(ii) Interoperability

Interoperability standards available for government frameworks have been followed and the data generated are directly used for HRMS software. Software has been developed using **open standards**.

(iii) Security concerns

All measures have been taken to make application **secured from unauthorized access** and data is also protected. **Logs are maintained** and proper **backup** mechanism is being followed to ensure protection of data from losses.

(iv) Any issue with the technology used

Mobile app is being developed to allow detached access to applications and improvements are being done time to time as per need and suggestions of the department. **Reusability of data** is also given highest priority.

(v) Service level Agreements(SLAs) (Give details about presence of SLA, whether documented, whether referred etc. #)

There is proper **agreement** between stakeholders and it is governed by MOU signed between NIC and departments. Separate Roles and Responsibilities have been defined for stakeholders.

6. Citizen Centricity (Give specific details on the following#)

(i) Impact on effort, time and cost incurred by user,

- Proven to reduce cost per hire
- No need for temporary staff
- System cost affordable for most departments
- Management information enables better tracking of recruitment effectiveness
- More efficient recruitment = increased transparency in processes
- Today's generation of applicants expect speedy response
- Data at your fingertips

(ii) Feedback/grievance redressal mechanism,

A multi-layer grievance redressal mechanism has been formulated to address various grievances received. On an average 8000 to 10000 grievances are being addressed before finalization of results. The emerging and the fast-evolving paradigm of *good governance*, in conjunction with the increasing tendency towards *decentralization*, presents pressing challenges for reinventing governments and reengineering governance processes – at all levels – in order to meet the expectations of the citizens. Essentially, thus, an institutionalized systematized mechanism for accepting grievances, processing them quickly and disposing them by taking necessary action has been setup for this purpose. A grievance redressal mechanism should, in fact, has been an integral part of the machinery of any administration. In fact, the grievance redressal mechanism of an organization is often the barometer to gauge the efficiency and effectiveness of administration as it provides valuable citizen feedback on the working of the administration. A comprehensive and coherent management system for grievances handling that not only integrates the established principles of good grievance redressal, but also painstakingly operationalizes them will work best to achieve the most important objectives that underlie good governance and people-centric public service delivery. The complainants are able to know about improvements made as a result of their complaints and about the recourse to further appeal / action if they are not satisfied with the manner in which their complaint is disposed. A good complaints system has created an encouraging environment for citizen to approach the system with their complaints / grievances and assure them that their complaints / grievances will be dealt with impartially, objectively and professionally; and that citizens should have no fear that they might receive adverse treatment because they have lodged complaints.

(iii) Audit Trails,

Maintaining a complete audit trail for each transaction throughout its lifecycle is important not only for internal analysis and process optimization, but also for compliance with industry standards and regulations. Following procedures have been adopted for audit trail records:

- Maintain a complete record of every action that takes place to a database throughout its lifecycle
- Streamline compliance with industry quality standards and regulations
- Protect organization in legal situations with a proven record of the actions executed on a given database
- Filter the audit trail display to search for specific activities to database
- Export the audit trail records for archival purposes or reporting purposes

(iv) Interactive platform for service delivery,

The application is accessible on internet through a web application. Registered users can access the website. The merit list along with application details are made available for the public for transparency purposes. Information is also being communicated through pull and push SMS service configured for this purpose. Citizen can access the services through website or by sending sms to specific number. SMS/email is being widely for communicating large number of people.

(v) Stakeholder consultation

Stakeholders for the Project include:

- Students
- Unemployed Youth
- Departmental Heads
- District Administration
- Block Administration
- Citizens
- Survey Agencies
- Panchayat Functionaries

Following activities have been performed for stakeholder's consultation

1. Formulation of plan for training persons
2. Establishment of procedure for selection OF PERSONS
3. Preparation of content of training
4. Online Application FROM Candidates
5. Preparation of Merit List
6. Verification of Documents
7. Offer letter for appointments/certificate for training and certification.

Effective ICT led governance in the skill development and recruitment encourages better decision making and the efficient use of resources and strengthens accountability. Effective governance is characterized by robust scrutiny, which provides important pressures for improving performance and tackling corruption. Effective governance can improve management, leading to more effective implementation of the chosen interventions, better service delivery, and, ultimately, better outcomes.

7. Efficiency Enhancement (Give specific details about the following #)

(i) Volume of transactions processed,

The system has processed following transactions

Name of Posts	No. of Posts	Transactions processed
Accredited Statistical Volunteer [Planning AND	80,000	12,00,000

Development Department]		
Block Development Officer	534	6,000
Circle Officer	534	5400
Online examination system for board of revenue	12,000	65,000
OMBUDSMAN for NREGS	38	300
ACCOUNTS officer of Rural Works Department	300	2550
Various posts under Panchayati Raj Department	200	12,000
IAY sahayak, IAY Engineer, Accountant	9770	6,70,000
PRS, Accountant, JE	5400	7,00,000
SELECTION of Retired persons for RD. DEPTT.	350	56,000
JE for NREGS	2290	8,600
Various Posts of BRDS	1600	30,000
Various posts of Horticulture Mission	2,000	In Progress
Selection OF Mate OF Nregs	80,000	In Progress
Kishan Salahkar	534	In Progress
Various Post Under Agriculture Department	4,500	In Progress

More-and-more departments are requesting for SAMVIDA implementation.

(ii) Coping with transaction volume growth

NIC Data centre equipped with multiple servers has been used for application hosting and databases have been used for hosting the application. A dedicated team of programmers continuously monitors the site along with other services. A cluster of servers have been created so that response time of application does not degrade during peak hours. Various transaction management schemes have been adopted for utmost service delivery. Around 40,000 concurrent users are accessing the services. Separate database servers have been hosted to support operations. Transaction logs are maintained so that in case of failure data can be recovered through the same. High speed 10 gigabits internet link connectivity is available through NKN for delivering services. In order to facilitate availability of services parallel links are also available so that in case of failure alternate links can be used. Response time of server has been by and large most effective.

(iii) Time taken to process transactions,

Transactions are processed as and when it is posted to the server. There is no delay time for server processing. Delivery of sms is through NIC sms gateway does take some delay as they are shared services and depending on load on the gateway there can be some delay in delivery of sms. Response time of on-line server is good enough for delivery of services at remote locations.

(iv) Accuracy of output,

The accuracy of output has been given the highest priority otherwise this may lead to legal complications. There has been only very few court case due to non-communication of grievances by department but same has been quashed by the courts. Till this date no major problem has been recorded through the department and its efficiency and service delivery has been well recognized by most of the stakeholders.

(v) Number of delays in service delivery

8. Ease of transaction (Give details about method deployed to educate user on how to avail service, security of data shared by user(if applicable), completeness of information provided, Linkages for financial processes (if applicable) etc. #)

1. Online website with operating manuals
2. Training of field functionaries through video conferencing
3. Master trainers programme at state HQ
4. Mock test site

The system also provides facility to amend data of applications until it is finalized by the applicant. After finalization in case the applicant notices any discrepancy then an e-mail account can be used for requesting for service. The project management team then allows the applicants to make corrections and information regarding this is sent through sms. Application fee for some departments are submitted through RTGS.

9. Innovation (Give details on Extent to which the initiative/ project is unique in purpose/goal, compared to other common e-Governance projects in the Health Care, any use of new and emerging technology, impact on number of steps required, identification and removal of bottlenecks/ Irrelevant steps etc. #)

Online recruitments have revolutionized the recruitment landscape for both employers and job seekers and largely increased the efficiency with which hiring decisions can take place. Today, with this medium tried, tested and proven to be true and more importantly indispensable, government departments are rely on job portals as a primary source of professional talent both on a stand-alone basis and in some cases to

complement traditional hiring methods. ***There has been a paradigm shift in the management process thanks to the efficacy and ease-of-use of today's sites and with internet penetration levels ever skyrocketing, geographic boundaries blending when it comes to professional mobility and the quest for talent at fever pitch in booming regional economies, this medium is definitely here to stay.***

Online recruitment allows for immediate real-time interaction and 24x7 hiring/job search activity. The posting typically remains active for as long as 30 days and continues to receive applicant CVs immediately as job seekers come across it. This is in comparison to traditional methods where a newspaper ad may take appear a week later and only for a day, or a recruiter has to wait till month-end to reap the benefits of an ad in a monthly industry or geography-specific publication. Typically, ***e-recruitment hiring is on average 70% faster than traditional hiring methods and the recruiting cycle is speeded up at every stage from posting, to receiving CVs to filtering to managing the contacts and workflow.***

10. Appropriateness of context and degree of localization (Give details about degree of localization i.e. local language interface, database support etc. relevance of content, etc. #)

Most of the reports and data are available in Unicode so that people are able to access the services in local language. Software is most effective in providing complete details about various processes, monitoring day-to-day operations, reporting from each district/block through SMS and transparently posting persons through standard operating procedure established by departments. This increases faith of stakeholders and enforces guidelines of department. Conducting free and fair procedure is a challenge to all stakeholders and ICT driven process help to improve quality of decision making both by functionaries. A high-end database configured to support large number of concurrent users has been established.

11. Accessibility (Give details about how following has been enhanced with automation: user accessibility, transparency in system, single-window resolution, ease of navigation; impact on service response time, number of visits required for accomplishing the task before and after automation etc. #)

User Accessibility:

1. Citizen can access services from CSCs or internet Kiosk.

2. Online application form is available for addition/deletion.
3. Most of the Forms are Online for downloads
4. Online Enquiry and Grievances Monitoring.

Transparency

In recruiting strict adherence to guidelines that promote transparency in the appointment process is necessary. The basic guarantees of transparency are in the application of the following:

- Publicly disclosed selection criteria for positions;
- A documented process of selection through equitable, assessment of applicants against the relevant selection criteria, with reasons provided for decisions to employ or not to employ;
- A procedure for open and equitable resolution of any complaints in selection processes.

Transparency will be further enhanced by a genuine public invitation for applications for employment.

Ensuring transparency in recruitment will create some additional workload in soliciting applications, screening the applications, and then conducting a proper selection process.

The most compelling benefit of transparency in recruitment is that it promotes public confidence in the impartiality and skill of voting operations officials and it assists the effective selection of the most qualified available staff.

Transparency is also necessary to ensure that: the appointment process is not manipulated

Single-window Resolution

Helpdesk and Kiosk based service has been enabled so that anyone can enquire election related information round the clock.

Impact of Service

1. Simplification of selection process of contractual and volunteer services
2. Large scale employment for unemployed youth

3. Fast and effective selection cycle.
4. Low cost solution.
5. Less involvement of departmental employees.
6. Flexible employment opportunities.
7. Automated transaction management
8. Digital delivery of services
9. Standard operating procedure across state.
10. Effective management of resources

12. User convenience (Give specific details about the followings #)

(i) Service delivery channels (Web, email, SMS etc.)

Around 5000 Common Service Centres have been trained to access the application. In addition Block, Sub-division and district functionaries are able to access application at regular interval. In order to make application reach to masses local language interface in Unicode has been added so that information so provided can be used by large set of people. Applications are accessible both for citizen and for government functionaries as per needs. Application has been hosted on internet site making it accessible from any location i.e **<http://eservices.bih.nic.in/>**. Easy navigation facilities, help files make it accessible to larger audience. The application is also accessible to departmental users for closed access on certain information. System has been made flexible and integration of most of MIS data has been carried. User can access any application from any Common Service Centre/information kiosk situated in Gram Panchayats. Updation of data is only through specified user and password provided to users.

Access Delivery Channels:

Panchayats:: Common Service Centres - 6000 Common Service Centres have been established in the State for providing citizen centric services. This application can be accessed from panchayats. This adds revenue to earnings of local entrepreneur. In addition there are many cyber café available for accessing the services in each Panchayats.

Block Site:: ICT infrastructure has been provided through Block Centre/Executive Assistant established across the State on HOH(Hardware on Hire Basis) connectivity is being provided through Internet Data Card/SWAN Node. Block level Officers have been trained to operate the system.

District Site:: ICT infrastructure has been provided to all the districts for day-to-day operation. Officers/Staff have been trained to enter on-line data and prepare various kind of analysis reports.

State SAMVIDA Portal :: <http://eservices.bih.nic.in/> This has been hosted in State Data Centre of NIC which provides 24 x 7 services and a high speed link for internet backbone. The data centre is connected through 10G link of NKN.

Site is accessible through internet and measures have been taken to support around 40,000 users at a time. Web Application is integrated with sms and e-mail facility so that stakeholders are informed through regarding transactions and events in the system.

(ii) Completeness of information provided to the users,

(iii) Accessibility (Time Window),

The application becomes available after announcement of dates and remains active till entire process is completed. The application is accessible 24 X 7 to the citizen. Citizen can get registered to the site to get alerts on new employment and training. The software has been integrated to inform to the stake-holder through e-mail various activities during election process. Entire internal communication between field formations is through e-mail. SMS integration has been done for both PULL and PUSH service for enquiry as well as reporting purposes. Online interface has been created for grievance monitoring and on-line tracking of applications given to departments.

(iv) Distance required to travel to Access Points

Application is accessible from CSCs or any Cyber Café available at Panchayats/Villages. Only after selection the candidates need to visit Block/District Centre for physical verification of documents. Those applications in which applicants need to submit fee then it has to be done through RTGS in Banks.

(v) Facility for online/offline download and online submission of forms,

Entire process has been integrated as work flow system and is accessible to various stake holders at panchayats/villages, blocks, districts as well as state HQ. APPLICATION FORMS can be submitted on-line and merit-list can be verified on-line. Acknowledgment for application receipt, application progress, selection, rejection, Queries are provided through sms and E-MAIL. There is also integrated system of enquiring through sms.

(vi) status tracking

Application provides facility to track status of application through web interface and sms. User can log on to the server to access details of application and interact with the application as it becomes necessary. Progress related to application processing is also informed to the registered users through sms and email. Both push and pull services are being used for various kinds of alerts being generated through the system. Status of application, draft merit list, selection lists etc. are being made available through website so that it becomes easy for any citizen to verify the application status and progresses made as well as grievance status.

13. Scalability (Give details about sufficiency of back end support framework institutional support, technology support e.g. availability of bandwidth, means adopted for disaster recovery (backup of data/ backup server); etc. #)

Security and confidentiality standards

Role-Based Access Control (RBAC) is based on modeling organizational-specific access control policies. The main components of RBAC are users, roles, permissions, user-role assignments, and role-permission assignments. Access control is enforced in terms of roles. Intuitively, when initiating a session, a user may activate any roles that he or she has been assigned to and use the union of corresponding permissions. Based on practical considerations, such as ease of implementation, database support, and processing needs, we have developed a model that allows view-based access control. Users of the database system are able to access predefined sets of views, based on their authorizations. Views are built from a multi-level database and may be updated, according to the users' privileges. Any update is then propagated back to the multi-level relation. Users of the database system are the non-GIS users, having direct access needs to some of the SQL Server database items, accessing the database through the GIS application. These users have different access requirements according to the role they are using in a given scenario. We take advantage of SQL Server's support of role-based access control has implemented security administration based on the users' roles in the system. Beside user roles, SQL Server allows application a role where accesses to the database depends on the application the user is using.

Strategy planned for Disaster Recovery and service continuity

Backup and recovery when a data center is intact is one thing, but what if we lose access to the data center, or the data center itself? DR must provide a method for recovery in the event of site loss. Some assume the answer is storing a copy of data offsite using backup to tape or similar media. But how current is that data and how quickly can it be recovered? Replication technology provides protection against site loss,

yet remote replication is one of the most frequently required but least implemented technologies today. With the right replication technology snapshots can be replicated continuously between sites, synchronously or asynchronously, to ensure data is current. The right solution should be reasonably simple to deploy, manage and test. The fact is, for one reason or another system goes down, and for many organizations this means lost revenue or the inability to serve customers. The site has DR site at Hyderabad connected through 34 MBPS leased line and it is also planned to create near DR centre at Patna itself.

14. Sustainability (Give details about relevance; building; Cost effectiveness, Financial viability of initiative etc. #)

1. Project has been funded through Govt. Of Bihar with technical support of national informatics centre, Bihar.
2. The project has scope for implementation in every department as most of the departments are now looking for contractual appointments.
3. A dedicated project team has been constituted to support the processes.
4. A team of officers from concerned department is nominated to look into administrative issue arise out of the project. The project is supervised by top administrative structure of the department.
5. Project is part of e-service delivery framework accepted by state government.
6. Project has very less capital expenditure and recurring expenditure is borne by it department and concerned department.
7. The process is a cost effective mechanism of handling lakhs and lakhs of applications which arise during advertisement.
8. CSC operators and kiosk operators have become well versed with the system and is now one of the most accepted and transparent system in the state.
9. In some cases applicants need to submit a nominal fee though banks so that expenditures related to manpower and other expenditures can easily be met through these costs itself.
10. Simplicity, alternative system of employment, transparency, fast and effective mechanism makes it most sustainable for longer period across state.
11. With more and more schemes of state and central government promoting for volunteers and contractual appointments such system provides an alternative system for recruitments across country.

15. Extent to which the Objective of the Project is fulfilled-(benefit to the target audience i.e.G2G, G2C, G2B, G2E or any other, size and category of population/stakeholder benefited etc):

G2G

1. List of applicants in different categories for various posts
2. Posting of advertisements

3. Communication to the applicants through sms and email
4. Issue of hall tickets
5. Training schedule and model syllabus, model question papers
6. Publication of examination results
7. Publication of draft merit list
8. Information to district administration for schedule and candidates
9. Checklist for verification of documents
10. Final merit list
11. Allotment of district/block/panchayats to successful candidates
12. Job offer letter to candidates
13. Maintenance of HRMS for contractual employees
14. Grievance redressal
15. SMS alert

G2C

1. Registration of new candidates
2. Alert on new vacancies to suitable candidates
3. Submission of application for contractual appointments/volunteer
4. On-line enquiry of status
5. Merit list
6. Online submission of document of short-listed candidates.
7. Online grievances monitoring
8. Offer letters and joining

G2B

1. On-line filling of Application by CSC or Private Kiosk Operators
2. On-line enquiry of applications and Grievances.

16. Adaptability Analysis

(i) Measures to ensure adaptability and scalability

Usually good software is robust – it can tolerate some deviations in the environment. For example, if user presses character keys while entering numeric data the software can be designed to ignore such incorrect key presses. While robustness to the software can be added at the design or even the implementation stage, adaptability requirements cannot be added at such late stages. Adaptability differs from robustness in the scale of environment change – adaptable software can tolerate much larger deviations in the environment than a robust one. Adaptability can be enforced only if it is considered at the architecture development stage.

(ii) Measures to ensure replicability

The application is a generic software for skill development, training, survey, recruitment for contractual appointments. In current scenario of scheme based appointments such

practices not only reduce load on the department but also simplifies the entire process. Most of the departments are facing problem of recruiting skilled people on contract basis. In addition different departments carry out various surveys and monitor schemes at village and panchayat level. The application has been developed keeping in view large number of such employments in the departments and societies. This application completely simplifies the process and makes the process extremely transparent. The application has already been implemented in seven departments making it replicable in other departments and societies.

(iii) Restrictions, if any, in replication and or scalability

There exist no restriction in replication and scalability. With more and more state and central government schemes opting for contractual manpower and volunteers such system facilitate fast recruitment process and simplifies the processes. The application has every scope for implementation in every schemes in various states.

(iv) Risk Analysis

The project completely depends upon availability of internet connectivity to the data centre. To support the project state govt. Funding is necessary at regular interval. Proper functioning of server infrastructure during advertisement period is necessary. Application also depend completely on NIC sms and email services. Proper formulation of selection process, non-intervention by authorities is key for success of the project.

17. Result Achieved/ Value Delivered to the beneficiary of the project-(share the results, matrices, key learning's, feedback and stakeholders statements that show a positive difference is being made etc):

(i) To organization

1. Automated Processing of 30,00,000 transactions.
2. Generation of in-process documents needed processing
3. Faster and effective communication between field formations.
4. Preservation of records in digital form.
5. Implementation of Standard Operating Procedure
6. Centralized control of processes and events in the organization.
7. Single view of transactions to all stakeholders.
8. Reduction in time cycle for processing transactions.
9. Cost effective solution and alternate employment opportunities.
10. Automatic Deployment of manpower for large scale persons.
11. Validation Of processes and eligibility criteria.
12. Centralized control on processes so that deviations can be controlled.
13. Online verification of records
14. Cost saving and fast processing

(ii) To citizen

1. Automatic ALERT for new opportunities, training, employment
2. Online Submission of application forms
3. Online tracking of application
4. Online enquiry
5. Online Grievance Redressal
6. Sms and email ALERTS
7. Transparent Processes and Participation
8. Analysis Reports
9. Single sign On system
10. Cost saving and Service at door step.

(iii) Other stakeholders

1. Reduction in Overall Activities
2. Standard Operating Procedure
3. Revenue generation by means of online applications entry and Search Services.
4. Easy communication and information dissemination system
5. Transparency in processes
6. Better document management

18. Comparative Analysis of earlier Vs new system with respect to the BPR, Change Management, Outcome/ benefit, change in legal system, rules and regulations

PARAMETERS	Earlier System	New System
1. BPR AND CHANGE MANAGEMENT	1. Recruitment only through BPSC/SSC 2. Time consuming 3. Suitable for permanent regular posts 4. Long joining time 5. Less flexible	1. Fast and effective for contractual or short term appointments through alternative methods 2. Process of recruitment has been simplified 3. Even retired persons can apply. 4. Large of volunteers need

	<p>7. Suitable for small no. Of persons</p>	<p>to be selected who are not govt. Employees.</p> <p>5. Mate in NREGS is skilled labor who can assist in day-to-day operations.</p> <p>6. Suitable for short term scheme based appointments</p> <p>7. One person can apply from one district against one post.</p> <p>8. Complete automated process for recruitment on</p>
2. Outcome/benefit	<p>1. Through verification of records including police verification</p> <p>2.high quality people getting selected through multi layer selection process</p>	<p>1. Most suitable for post which are temporary in nature.</p> <p>2. Fast and effective process. Processes are completed within two months</p> <p>3. Past records are criteria for selection.</p> <p>4. Simplified selection process.</p> <p>5. Candidates can be trained and then can be recruited for survey works</p> <p>6. Parallel recruitment process across state</p> <p>7. Low cost process</p> <p>8. Less involvement of</p>

		manpower in the process.
3.Change in legal system	1. Strict rules of recruitment and established processes	1. Contractual and ad-hoc recruitments are guided through contracts signed between two parties which can be terminated at any point of time based on performance
4. Rules and regulations	1. Complex rules	1. Simplified rules which are designed to suit current needs and customized as per requirements.

19. Other distinctive features/ accomplishments of the project:

1. Selection of more than one lakhs persons (Contractual and volunteer Services) already accomplished through the system.
2. System has provided regular employment to large number of CSC operators and kiosk operators
3. Registered youth gets automatic alert on new posts and schemes at regular intervals.
4. Qualified volunteers working at remote places supplement in various kind of survey being conducted by different departments at regular interval.
5. The project has greater acceptability in different departments.
6. Project funding through fee collected as application fee.
7. Alternative method for employment of large number of persons with varied qualifications and experiences.

This is just an indicative list of indicators. Applicant can add on more information based on suitability of the project nominated.