



Bhamashah the benevolent

Bhamashah Scheme draws its name from a remarkable character in the history of Rajasthan. Bhamashah was an aide of Maharana Pratap of Mewar.

At one point, during constant wars against the invading Mughal army, Maharana Pratap was left with no state resources to carry on the war. This meant an inevitable defeat – that too for no lack of will or valour.

Bhamashah stepped in and did the incredible. He donated his entire wealth to the state so that his warrior king could continue his campaign and the people could live, their head held high.

Bhamashah went down in history as an icon of philanthropy & benevolence.

Building a New Rajasthan

To build a better society, empowerment of every woman is imperative because empowerment of the woman is empowerment of the society and thus the State.

The Bhamashah Scheme envisaged by us in the year 2008 with this aim, even before the Aadhaar programme was thought of, is the first of its kind direct benefit transfer scheme in the country.

The objective of the Scheme is financial inclusion, women empowerment and effective service delivery. It is the first of its kind direct benefit transfer scheme in the country.

Bank Account and Bhamashah Card to be made in the name of the lady of the house that empowers her to be the decision-maker for the family, for effective use of all cash and non-cash benefits under various public welfare schemes of the government.

The Card to be used for transferring of all cash benefits directly to the bank accounts of the beneficiary and also for transfer of non-cash benefits of various government schemes.

Thus, the Scheme aims at making every woman empowered, capable and independent.

Vasundhara Raje

Chief Minister, Rajasthan





a commitment to support

Bhamashah Scheme

Rajasthan's Public Welfare Benefits Delivery Scheme

With the objectives of financial inclusion and to empower the women of the State, Bhamashah Scheme was launched in 2008, wherein, around 50 lakh ladies were enrolled and 29 lakh accounts were opened.

Bhamashah Scheme, an end-to-end service delivery platform to transfer cash and non-cash benefits to the targeted beneficiaries in a transparent manner, was relaunched in the year 2014 with broader objectives.

The Scheme is a family-based programme of financial inclusion, where each family is issued a 'Bhamashah Card'. The Card is linked to a bank account that is in the name of lady of the house who is the head of the family. The card leverages bio-metric identification and core banking. Multiple cash benefits would be accessed through the Bhamashah Card and will be directly transferred to bank accounts of the beneficiaries. Non-cash benefits would be given directly to entitled beneficiaries.

It is one of its kind scheme where all benefits—cash and non-cash, e.g. services of Public Distribution System (PDS), Education Scholarships, payments under MNREGA and Social Security Pensions, benefit of other Schemes like Distribution of Scooties to Students, Indira Awas Yojana, CM BPL House, Janani Surakha Yojana, Unemployment Allowance, Skill Training, other individual beneficiary schemes and many other services will be routed through Bhamashah Scheme.

Under the Scheme, the family is being mapped correctly and single unique data set for the residents of the State is being made. Thus, duplication is checked. All demographics and socio-economic parameters have

been included to work out entitlement under various government schemes. Therefore, the Scheme will eventually cover beneficiaries at all levels across the State. Bhamashah Scheme leverages bank accounts opened under Pradhan Mantri Jan Dhan Yojana for achieving Financial Inclusion.

The Bhamashah platform does not limit the financial inclusion to mere opening of bank accounts, but simultaneously ensures door step delivery of banking services through Business Correspondents (BCs) of the banks and Micro ATMs, being established at all the panchayats. Further, various mobile payment gateways have been integrated with the Bhamashah platform, thereby making service delivery through JAM (Jan Dhan; Aadhaar; Mobile) trinity a reality in the State.

Benefits of the Scheme

- Ensuring empowerment of women
- Financial inclusion for all sections of the society
- End-to-end service delivery platform for cash and non-cash benefits with complete transparency and real-time delivery
- · Closer-to-home banking services to citizens
- A unified platform for a large number of schemes
- Includes both family and individual beneficiary schemes

Enrolment Process

The Bhamashah enrolment software has been developed to work both in offline as well as in online mode. State Government has facilitated enrolment near the door steps of the residents so that more and more residents are enrolled under the scheme.

For offline enrolment, camps were organised in each Gram Panchayat in rural area and in each ward in urban area. For online enrolment, various Points-of-Services can be used by the resident. Any resident of the State can also apply online for Bhamashah enrolment through the Bhamashah Portal.

The enrolment software also has features for updation of details like

- New birth in the family
- · Marriage of an individual
- · Death of a family member
- Change in address of resident
- Change in any of the detail like bank account number
- Correction in detail fed by operator



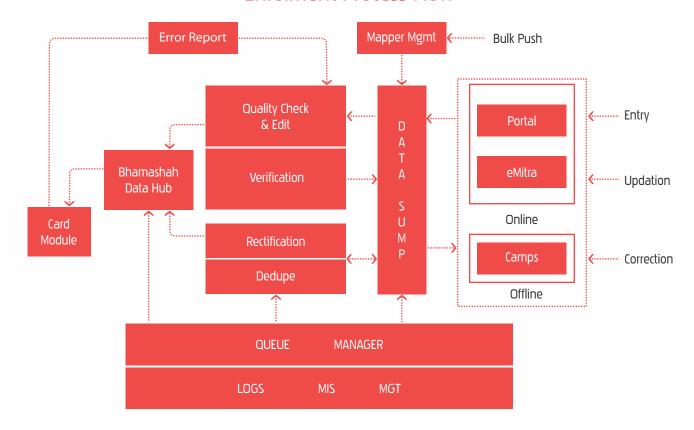
Resident with Aadhaar Number

- Resident with Aadhaar identification number is provided with enrolment form with pre-populated data already available with the State.
- The resident is required to fill the empty fields in the form.
- The details provided by resident are fed into the software.
- The form also contains details of grouping individuals into families.

Resident without Aadhaar Number

- If an individual does not have an Aadhaar number, facility for Aadhaar registration is available at selected eMitra kiosks.
- Photograph & biometric detail is captured for such individuals.
- Provision for correction of existing data is also available at the eMitra kiosks.

Enrolment Process Flow





a pledge to reach out

Quality Control

First check for data quality assurance has been provided in the enrolment software which ensures that invalid entries are not made in the data fields. Proper validation checks have been provided at relevant data entry fields in the software. No Bhamashah enrolment is undertaken without Aadhaar number and core bank account. If a resident does not have Aadhaar number, then he/she is enrolled for Aadhaar and then Bhamashah enrolment is undertaken using Aadhaar ID.

The verification of the Bhamashah enrolment of a resident is done by the verifier on various parameters. The data is digitally signed by Gram Sevak/Patwari and no editing can be done after that. The second level of verification is done by SDM /Tehsildar through public disclosure mechanism. The list of enrolled residents/families is displayed on notice board of the Panchayat and read out in the Gram Sabha for objections, if any. If any objections are received against any resident, the same is intimated by SDM/Tehsildar to the Collector. The list of all such residents is communicated by District Collector to State

Monitoring & Supervision

RajComp Info Service Ltd. is State Level Scheme Implementation Agency that engages technology/implementation partner(s) for:

- Resident data management
- Linking of resident data with departmental databases
- · Transaction monitoring
- Card preparation and distribution

Implementation Stakeholders:

- Field Agency for Enrolment (EA)
- Banking Partner (with core banking network)

Implementing Agency for further necessary action.

After uploading of enrolment data, quality check of the data is also done using data quality software. The software generates reports of resident where data quality is doubtful like:

- · Duplicate enrolment report
- Gender mismatch report
- Invalid Pattern

Some of the possible data entry errors:

- Logical mismatch Gender & Photo/Age & Photo
- Incorrect/Poor quality photograph
- Photo of photo/Inanimate/non human photo
- Error in name/address
- Transliteration errors (Name/Address)
- · Relationship error
- Incomplete address/Geographic correctness
- Fraudulent and frivolous/abusive text

Implementation & Management of Scheme

Field Level:

- District Collector as District Bhamashah Manager (DBM)
- District Level Statistical Officer is District Bhamashah
 Officer
- · ACP takes care of technical issues
- Block Level Statistical Officer is Block Bhamashah Officer

Role:

- Organising Camps
- Data Updation & Verification
- IEC

Bhamashah Card

The Bhamashah Card, with its 'Ultra Smart' features provides multi-dimensional benefits to the cardholder. With an entire back-end solution mapped with the card number the card truly empowers the cardholder, ensuring inclusion to the best possibilities. The card is the perfect combination of 'e' and 'Governance' ensuring the envisaged eGovernance.

As the card relies on back-end data set encompassing complete entitlement profile, neither there is a storage limitation as in case of chip or magnetic strip-based cards nor is there a requirement of updating profile on the card-based storage. Thus the entire control can be managed from central servers.

Family Card



Issuance of the Card

Family Card: Bhamashah Card is issued to the woman head of the family free-of-cost by the State Government, wherein the essential information regarding entire family is given. The Bhamashah Card leverages biometric identity of the beneficiary through UID (Aadhaar) and also ensures linkage with his/her core bank enabled bank account.

Individual Card: Any member of the enrolled family can get the Individual Bhamashah Card by paying a nominal fee. This card, apart from being an Identity Card, highlights individual's entitlements eg. Pensioner; Unorganised Labourer, etc

Individual Card



Secured Delivery of Services

- The concerned service department will deliver the given benefit/services/material delivery or deliver the amount to the core banking account of the Bhamashah Card holder family after bio-metric verification. It ensures that only the genuine Bhamashah Card holder families get the benefits of material/amount.
- The card cannot be used by anyone else except the head of the family/family members as it uses biometric verification. Therefore, there are no chances of misuse of the card when lost or stolen.
- In case of difficulty in verification through finger print based bio-metric authentication (especially in case of manual labourers whose finger prints are not easily readable), facility of secured validation through One Time Password (OTP) on registered mobile is also provided.

Multipurpose Card

- Every Individual shall be issued a multipurpose cum Identity Card
- Multiple benefits would be accessed through the card & directly credited into bank accounts
- Family identity would also be added
- Bank account in name of the lady of the house (Female Head of the Family) would be used for benefit transfer.

For facilitating the transfer of benefits, the 'RuPay Card' of various banks has been co-branded with Bhamashah Scheme. These co-branded cards will enable individuals and families to have an easy access to their bank account and also easy withdrawal of benefits.

e-Card







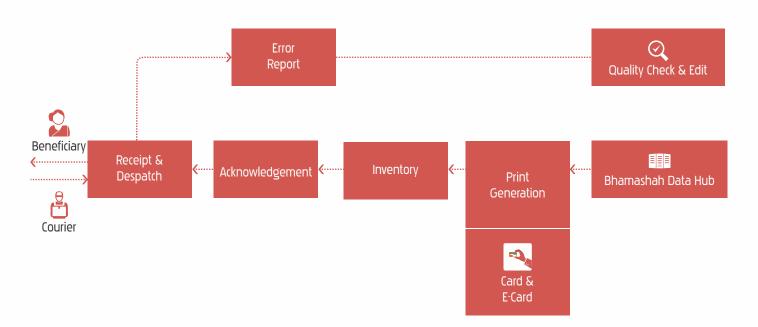
Card Printing & Distribution

- All enrolled families can get the Bhamashah Family Card through the concerned field level functionaries, Atal Sewa Kendras.
- Individual Cards can be made at an e-Mitra kiosk by depositing a nominal fee.
- The head of the family shall receive a message on the mobile at each stage: upload of Bhamashah enrolment data, post quality check, second verification and card delivery
- Enrolled family can check the status of delivery of Bhamashah Card through the Bhamashah portal and can also print the Bhamashah Family/Individual e-Card. This e-Card is also placed in e-Vault of the family/individual.

Security features on the card include:

- Micro-text printing
- Guilloche Pattern
- Invisible UV
- Fluorescent ink printing
- Bar Code/QR Code
- Hologram Hot stamping

Bhamashah Card Management





a resolve to serve

Unified Dataset

Unified Bhamashah Resident Data Hub (BDH) is created under the Bhamashah Scheme, which can be leveraged at the backend. It is the centralized and comprehensive dataset comprising authentic data for residents of Rajasthan. It also ensures 'One Family, One Identity' phenomenon along with 'One Resident, One Identity'.

In line with the Rajasthan eGovernance Architecture and completely compliant with Aadhaar authentication framework, the Bhamashah Resident Data Hub shall be leveraged by every department in a centralized manner for all departmental applications for service delivery.

Bhamashah Data Hub is comprised of Aadhaar Identification Data (KYR) and Basic Demographic data (KYR+) of residents of the State. This includes entitlements and provides eligibility status under various schemes. The data hub also contains photographs of individual residents getting enrolled under the scheme. This database shall replace all other resident/beneficiary databases being maintained by other departments. All cash and non-cash benefits shall be provided directly into the hands of the beneficiaries of the State using this single dataset and Aadhaar enabled biometric authentication. This would reform and institutionalise direct benefit delivery mechanism of government programmes. This will further aid in taking decisions regarding conversion of non-cash benefits into cash benefits.

Benefits of BDH

- BDH repository is a 'Single Source of Truth' for all resident data in the State
- Reduction in benefit leakages in welfare schemes
- Implementation of welfare schemes backed by clean and up-to-date resident data
- Easy identification of target beneficiaries. More than 90% accuracy in identification of 'Target Beneficiaries'
- Reduction of time to roll out new welfare schemes
- Reduction in 'Total Cost for Deployment' of new services
- Availability of shared infrastructure for delivery of welfare schemes thereby reduction in 'Total Cost for Deployment' of new services
- Tool for planning and deploying new schemes



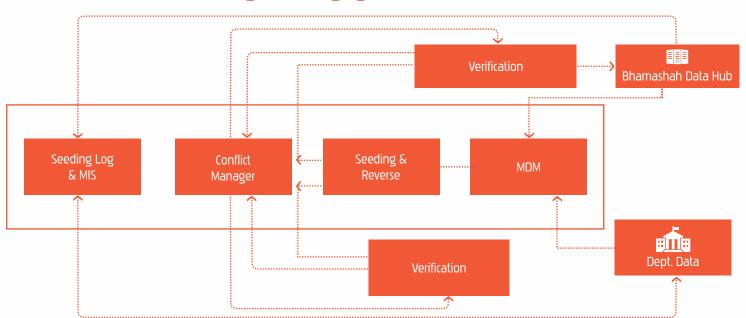
PoS Machine

Seeding and Leveraging BDH

One of the key uses of Bhamashah resident data hub is for 'Seeding' and 'Cleaning' of legacy departmental databases. Seeding is the process of inserting Bhamashah ID, Aadhaar number and bank account detail of the resident in a scheme / department database. This ensures that all legacy departmental applications leverage Bhamashah data for transfers. This also enables validation using Aadhaar infrastructure. This is one of the foremost requirements to transfer

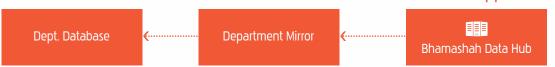
benefits directly into the bank account of the beneficiary through existing applications. In case of new application software being developed, only BDH would be used and a separate departmental data regarding beneficiary profile will not be required. Hence in case of such new applications, seeding or synchronisation of legacy database with BDH would not be required.

Seeding & Leveraging Bhamashah Data Hub



In case of Legacy Application

In case of New Application



Data Cleaning

The process of updating departmental data with that of KYR data in Bhamashah data hub is termed as Cleaning. Data cleaning is imperative to successful implementation of Bhamashah enabled service delivery. The process of data cleaning allows a State department to ensure that KYR information is correct and usable for various resident services and social and financial inclusion programs.

Data Standardization

The third important task involved is standardization of data. This is significantly important as the data from different source systems might have different masters, different formats, different syntax, etc. Under standardisation process, the master used in BDH are used by other departmental databases.

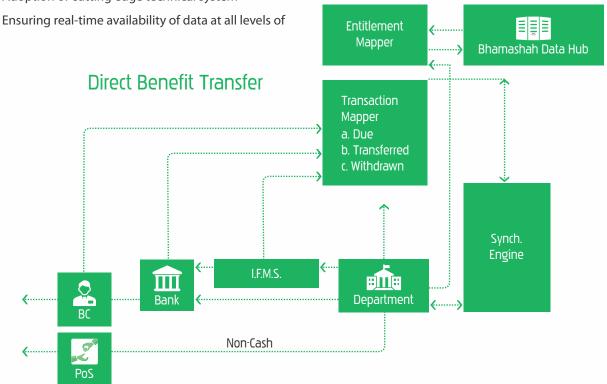
Direct Benefit Transfer

Direct Benefit Transfer (DBT) envisages transfer of benefits directly to core bank enabled bank account of the beneficiaries for the identified schemes. Beneficiaries are also provided with a facility of mobile payments.

Advantages of DBT

- Consolidate cash transfers to Households which are getting benefits from multiple sources and multiple forms
- Adoption of cutting edge technical system

- governance for strategic decision making
- Maximise benefits from expenditure of welfare schemes which leads to overall human development
- Safer and more secure than carrying cash or cheque
- Faster payment



Points of Service

Bhamashah card holders will be able to get services at many different service-points. For cash benefits, besides bank branches & ATMs, services will be available through Banking Correspondents and Micro ATMs at various e-Mitra kiosks across the State. eMitra is a multiservice, single-window network for providing government information and services to the residents. Various non-cash services would be available from eMitra centres as well as IT enabled PoS at concerned institutions like Ration shops for PDS and Medical Institutions for health insurance.

Additionally, integrated service delivery would be ensured at Atal Seva Kendras being set up at all district, block and panchayat levels and eventually in all municipal areas across Rajasthan. There are more than 20,000 points of service at all panchayats in rural areas and wards in urban areas for cash and non-cash service delivery.

Micro ATM Devices/PoS Terminals

The Micro ATMs are hand-held terminals that work with minimal power, connect to central banking servers through GPRS, thereby reducing the operational costs considerably. Micro ATMs will allow customers to perform basic financial transactions using only their Aadhaar number and their biometric/OTP as identity proof.

These Hand-held Terminals (HHTs) are multipurpose devices which can also be used for Point-of-Sale (PoS) devices, Aadhaar device, eMitra service device and as computing devices. The Micro ATM device is specially designed for applications in banking and finance sector as well as in microfinance, billing, collection, financial as well as non-financial transactions with finger print substantiation.

The MicroATM is also being deployed in fair price shops for automating distribution of food grains commodities.

The Micro ATM will support the following financial transactions:

- Deposit
- Withdrawal
- Funds transfer
- · Balance enquiry and mini-statement

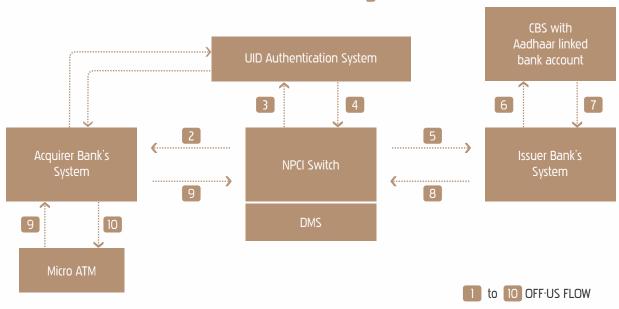
Similarly, in case of non-cash transactions, PoS Machines will ensure transfer validations and paper deliverables (receipts/certificates/vouchers) along with information on inventory.



Micro ATM Machine



Financial Transaction through Micro ATM



Core Bank Enablement of Cooperative Banks

Cooperative banks have been core banking enabled and linked with Bhamashah Scheme for delivery of services in remote areas throughout the State.

Primary Agriculture Credit Society (PACS), large agriculture multipurpose society (LAMPS) and eMitra Centers will act as Business Correspondents for the same. This will increase the points for banking services by more than 10,000.



Bhamashah

Transaction Mapper

Transactions both cash and non-cash, pertaining to a family are consolidated at one place by way of 'Transaction Mapper'. All the transactional events are linked with notifications to concerned stakeholders through SMS/e-mail. Multiple MIS reports are available to the decision-maker and beneficiaries alike. Thus, apart from bringing in awareness and transparency, this feature will help the government in analytics, taking corrective measures and designing of new schemes.



Bhamashah

Technical Architecture

The Bhamashah service delivery platform consists of five parts, i.e. Family Enrolment & Profiling; Resident Data Hub; Bio-metric Authentication; Benefit Transaction Management and Systems Management. The platform is based on n-tier application architecture with most robust technical stack to take care of load, speed and security issues.

1. Front-end Application

- a. Application Software are being developed using J2EE architecture
- b. IBM PureApp Websphere Application Server
- c. Front-end Operating System Linux and/or Windows
- d. Web based software compatible with popular web browsers

2. Back-end Platform

- a. Oracle Exadata
- b. IBM FileNet
- c. SAS & IBM Master Data Management (MDM) tools

3. Family Enrolment

- a. Offline information capture
- b. Asynchronous data transfer
- c. Quality control & editing
- d. Use of MDM and comparison with following data sets:
 - I. Socio-economic Survey-2011
 - ii. UID (Aadhar)
 - iii. Ration Cards
 - iv. Election
 - e. Generation of enrolment rolls for publication
 - f. Generation of Bhamashah Card & e-Card

4. Bhamashah Resident Data Hub

- a. Unique data-set to be used by all departmental applications
- b. Two-way organic & inorganic seeding with departmental databases

5. **Bio-metric Authentication**

Linkage with Central Identities Data Repository (CIDR) of UIDAI for bio-metrically secured identity verification for entitlement accrual.

6. Bhamashah Transaction Management

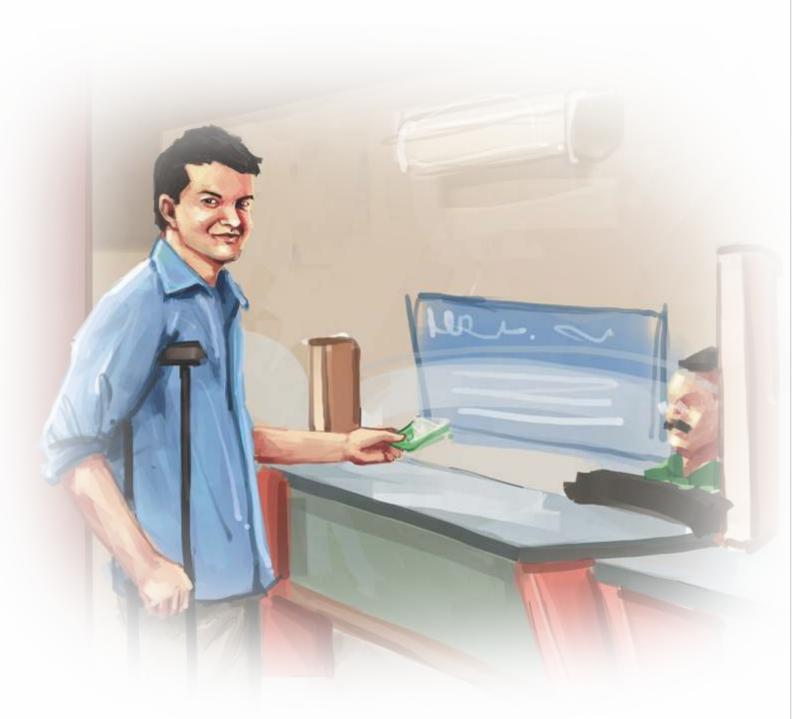
- a. Linkage with Integrated Financial Management System (IFMS) of the State
- Linkage with departmental transaction applications
- c. Generation of mail- and SMS-based acknowledgment on committed transactions
- d. Service charge transactions based on entitlement transfers

7. Systems Management

- a. Training Management System
- b. Incident Management System
- c. Camps Management System
- d. Inventory Management System
- e. Budget & Expenditure Monitoring System
- f. Card Printing & Distribution Management System
- g. Third Party Integration
- h. Mobile interface to applications as desired by State Government
- I. Integration with GIS

8. **PoS**

- a. C++ for PDS client
- b. Mobile payment linebags m-pesa, PayTm, etc.



the intent to strengthen

Bhamashah

Mobile App

Various transactional facilities to all the stakeholders of Bhamshah Scheme are being provided through Bhamashah Mobile App. The App works on all the operating systems. The features available in the App are:

For Beneficiaries

- Apply for Bhamshah enrolment
- Check status of enrolment
- Check status of transactions
- Transactions via various digital wallets such as PayTm, Vodafone m-pesa, Airtel Money as per RBI guidelines

For Government Officials

- Verification and tracking
- MIS for monitoring & supervision
- · Service charge management





eMitra

eMitra, Government of Rajasthan's e-governance platform, provides over 100 G2C and B2C services to its citizens across all 33 districts of the State.

eMitra's service delivery architecture connects the service providers with the citizens/residents. The service providers can be central & state government departments, PSU's, academic institutions or private service providers. They also include banks and aggregators for online fund transfer between stakeholders for real-time commission payout.

Interface to these service providers is provided through the eMitra and Bhamashah platforms. eMitra provides interface for services like certificates, demand/bill payments, application services and grievance redressal. The Bhamashah interface, provides connect to the direct benefit transfer and banking services.

For ease of use, the eMitra service has multiple point points of service & communication – centres & kiosks, web, mobile and SMS. Bhamashah interface enables banking facility at kiosks and banking outlets.

Objectives

- Provide a wide range of services of various government & private organisations in a citizenfriendly manner under one roof, so that citizens can overcome the inconvenience faced in moving around various offices
- Empower women by providing them business opportunities
- Generate employment opportunities for people till the grassroot level



Rajasthan Sampark IT Centres

Rajasthan Sampark IT Centres set up across Rajasthan ensure efficient delivery of services to people in an integrated and easily accessible manner. Coverage up to Block level has been achieved and setting up of centres up to Panchayat level is in progress with Rajasthan Sampark IT Centres at each District Collectorate and in all Panchayat Samities – provides an easy approach to senior Government offices/officers for the common man.

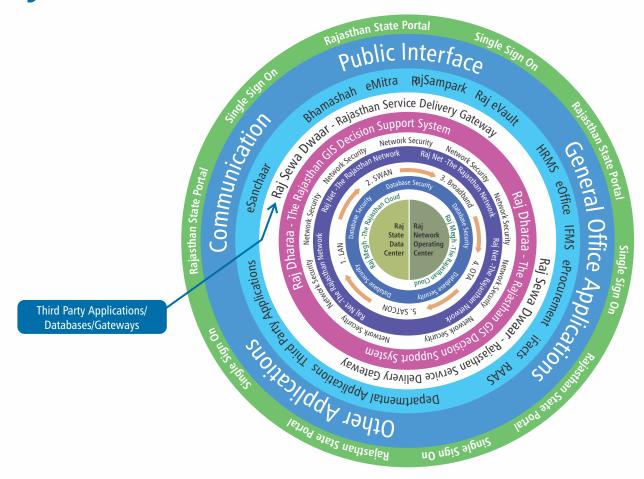
These Centers shall enable the citizens to reach the departments of the State Government for availing services and also for raising their queries and concerns, with the help of ICT interventions.

Housed within Atal Seva Kendras, Rajasthan Sampark IT Centres provide a centralized platform for following activities:

- Service Delivery to Citizens
- DBT through Bhamashah Scheme (banking correspondent services)
- Permanent Aadhar enrollment
- Work flow enabled grievance redressal system (Rajasthan Sampark Portal)
- Video Conferencing facility for Jan Sunvais (Public Hearing) up to block level i.e. 33 districts & 248
 Panchayat Samitis, review/ monitoring of Government programs/ schemes, etc.



Rajasthan e-Governance Architecture



1. Rajasthan State Data Centre & Network Operating Centre:

- 100 mbps Dedicated Connectivity;
- Hosting more than 500 Websites, Portals and Applications
- 2. Raj Megh: The Rajasthan Cloud
 - End-to-end Cloud enablement on SaaS, PaaS basis for Rajasthan
- 3. Raj Net: The Rajasthan Network
 - Seamless connectivity till Gram Panchayat Level through LAN/SWAN/Broadband/Over-The-Air/Satellite
- 4. Rajdharaa: The Rajasthan GIS-DSS
 - A seamless Geographic Information System for Rajasthan, shared by all Government Departments, Organizations and utilized for systematic decision support.
- Raj Sewa Dwaar: The Rajasthan Service Delivery Gateway

 Providing unique door of connectivity, unification and integration for all State, National and Private
 Applications/Gateways – The true Intelligent Middleware

6. Public Interface:

- 1 Fully automated & mobile ready Solutions for
 - Public Interface (Bhamashah/eMitra/RajSampark)
 - Government officials (HRMS/eOffice/IFMS/eProcurement/ifacts)
 - Communication (eSanchaar)
- 2 Raj eVault fully automated electronic verification, no need of hard copy documents/affedavits/notary attestation for service delivery
- 3 RAAS (Rajasthan Accountability Assurance System): End-to-End monitoring and accountability of government officials
- 4 Mobile Apps for all Government portals & application on all plat forms

7. Rajasthan Single Sign On and State Portal:

 One Person, One Identity – with all mapped datasets and documents for every state resident



Department of Planning Government of Rajasthan