

## *MPOnline*

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### **I) Project Overview**

The State of MP recognises the importance of Information and Communication Technology (ICT) as a key enabler in its economic development and improving the quality of life of citizens of Madhya Pradesh. Accordingly, the State has prepared its e-GOV policy with a vision of establishing an information society consisting of informed, active and therefore responsible citizens – the basic tenet of a true democracy.

The state seeks to create a knowledge society where access to information and knowledge would be symmetric amongst all seekers and users and every citizen must feel comfortable in accessing information through IT directly or through public-private partnerships.

**Why MPOne:** The purpose of MPOne is to set expectations for quality and excellence in state government services to citizens, state transactions with citizens and businesses, and internal state governmental operations/functions, promote goals for states to achieve and to build on the work being done by the private sector and state organisations and use strategic thinking to suggest reasonable yet challenging goals for the state.

The entire delivery structure starts from the government departments from where the requirements emanate. The policies and regulations precipitate from the top echelons of the government. This reaches the common masses finally through the municipalities and village panchayats in urban and rural areas respectively. The charter for MPOne is:

- Promote ‘E-Inclusion’ by providing all citizens widespread and easy access to government services, in the local language, effectively addressing the

existing digital divide and promoting entrepreneurs directly or through public-private partnerships.

- The State's Portal MPOnline has been designed to achieve the Government's vision of creating an 'e'enabled Society effectively contributing to the Social and Economic Development of the State, where there are no islands of elitism or isolated conclaves of wisdom.
- To meet the present and future needs of the citizens of Madhya Pradesh in a responsible manner to ensure the highest quality of life, Core Values of MPOnline portal are:
  - Integrity and Transparency in Government
  - Passion for the State
  - Collaboration and Public Private Partnerships
  - Citizen Empowerment.

**Innovation:** Prior to this innovation, citizens had to visit the village panchayats/ municipalities in rural/urban areas respectively for availing of the government services such as applying for death/birth certificates, ration cards etc. Other than these, for certain services citizens had to travel all the way to Bhopal, Gwalior or Indore where the headquarters of certain wings of the government are situated. The process as it existed prior to this initiative was time consuming and tiring and provided opportunities for corruption and also lacked transparency.

This initiative was envisaged to provide all the government services to citizens as well as businesses at their doorstep, making the governance reach the citizens rather than citizens approaching the government. This marks the government processes transparent and innovative.

## II) Result Indicators

### 1. Key Performance

#### a. Stakeholder-wise Services and Benefits of ICT/eGov Initiatives

The primary purpose of MPOnline is to develop and maintain a citizen service information network, which provides open access to online information for MP State. The Hallmark of this citizen service information network is the ability of the general public to obtain information that may not have been previously or easily accessible to them. Like most citizen service information network,

MPOnline offers a variety of information and communication resources that are relevant to the citizen. The creation of MPOnline allows citizens to access government information and services. Among its many features, the system has the capability to allow citizens to query database, request application, and check the status of communication made to government departments.

GoMP will use Information Technology to achieve the following:

- Improve the life of the common man leveraging the strengths of e-Governance
- Attracting investment in the sector so that the educated youth is able to contribute to the development of the State
- Create a pool of highly skilled professionals who are at par with the best in the country
- Transforming Resource Based Economy to Knowledge Based Economy.

The beneficiaries of the project are citizens, commercial organisations and Government Departments. The benefits delivered to citizens and commercial organisations are:

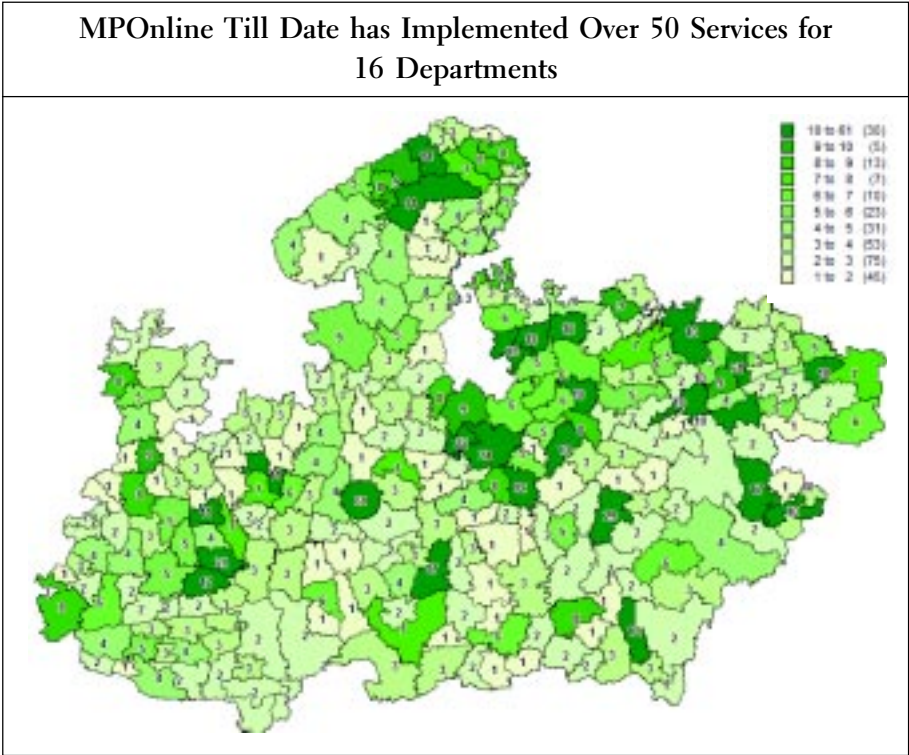
- Information dissemination to citizens
- Single window of access for services
- Faster delivery of services
- Faster, efficient redressal of grievances
- 24/7 access to government services
- Access to government officials
- Effective inter-departmental collaboration
- More accountability and transparency

The benefits to the GoMP can be summarized as:

- a. No Government expenditure
- b. No Trained IT/Technical Staff Deputation
- c. No Software Development Cost to Department
- d. No additional license cost for horizontal and vertical scalability
- e. Indirectly generating employment.

**b. Implementation Coverage**

MPOnline services are being delivered through 850+ KIOSKS and 1400+ CSCs, presently MPOne has presence at all 50 district HQs, approx. 280+ tehsil HQs, and approx. 280+ Block HQs. MPOne is aiming at increasing its presence to cover all Tehsils, Blocks and Panchayats either through MPOne KIOSKs or CSCs by end of FY 09-10. The following map shows MPOne presence up to Block level:



**2. Efficiency Improvement**

**a. Time and Cost Efficiency Improvements in Delivering the Above Set of Services**

Taking the services implemented online for Vyapam as an example, before the services were available online, the cost borne by Vyapam to process various application forms for entrance examination/admission was approximately 3.5 crores for 5 Lakh Forms. After implementing the services online Vyapam is able to save 3.4 crores which is approximately Rs.69.70 Per form excluding the cost

saving by candidate i.e. time, travel, draft/postage charges etc. The following table shows the cost saving calculation:

<b>No. of Applications</b>	<b>5,00,000</b>	<b>Total Cost</b>
Printing of OMR Form	3	
Printing of Rule Book	15	
Printing Cost of Admit Card	5	
<b>Total Cost Per Application</b>	<b>23</b>	<b>1,15,00,000</b>
Processing Cost		
Entry Cost Per Form	5	25,00,000
Processing Days	250	
Employee Cost – Vyapam		
– No. of Employees	10	
– Cost Per Day	1000	25,00,000
Employee Cost – Temporary		
– No. of Employees	100	
– Cost Per Day	300	75,00,000
Postal Charges for Admit Card	6	30,00,000
OMR Maintenance Cost (4)		350,000
Other Administrative Cost		
Transportation Cost (Per 10 Rule Books)	100	50,00,000
Employee Cost – Admin	50	25,00,000
<b>Total Savings</b>		<b>3,48,50,000</b>
<b>Saving Per Lac Applications</b>		<b>69,70,000</b>

**b. Time and Cost Savings for the Key Stakeholders to Avail the Above Set of Services**

Continuing with the example of Vyapam, before online services were introduced, the approximate cost for filling an application form manually borne by a student was:

- Visit to department to get the application form:
  - Local Rs.50
  - Other City Rs.100
- Preparation of Bank Draft for Fee Rs.35
- Registered Mail/Courier Charges Rs.35
- Photocopy of Documents Rs.25

**Total Money Spent**

Rs.195 Approx.

**Time Spent in Travelling/Submission**

(Approx. 8 Hours)

### **c. Specific Innovative Ideas Implemented in eGov Area**

Prior to this innovation, citizens had to visit the village panchayats, municipalities or even offices situated afar to avail of the government services.

This incurred a lot of hardship as well as expenses on behalf of the citizens. Apart from travelling and other shoe leather costs incurred, the citizens were also pitted at the mercy of the government employees, who for their selfish motives may make the process for the citizens more complex. The process as it exists prior to the initiative was time consuming, tiring, giving opportunities for corruptions as well as lacked transparency.

## **III) Enabler Indicators**

### **1. Project Roadmap**

#### **a. Vision Defined**

GoMP wants to provide citizen services at their doorstep, with special emphasis on the rural community of the state by using a Portal “MPOnline”. GoMP visions that for the services provided, the citizen is not required to come to the Government offices. The government wants a shift from Citizen In-Line to Citizen Online

- i. Anywhere, anytime government services
- ii. Transparency between Citizen and Government
- iii. Reducing the delays in decisions
- iv. Reduction in transaction costs
- v. Reduction in interface between Government & Citizen
- vi. An opportunity for gainful employment.

#### **b. Objectives Defined**

To provide one-stop shop services to all the citizens of MP, any service, anywhere, and any time.

MPOnline is a One Stop Window and integrated with other government departments like Municipality, Forest, District Collectorate, Urban

Administration Department, Commercial Tax, Agriculture, Regional Transport Office, Panchayat, Rural Development Department & Social Welfare Department, Public Welfare Department, Education Department, Health Department, Electricity Dept, Police Department.

By delivering a wide range of government-to-government (G2G) services from MPOnline, the government has improved transparency and accountability and reduced delivery cycles, thereby reducing cost of compliance with government regulation.

***Result Achieved/Value Delivered to the Beneficiary of the Project***

- Citizen Empowerment
- Created employment opportunities for the citizens of MP State (Kiosk Setup)
- Availability of 24x7 online Government Services
- Improved the efficiency and efficacy of Government Officers
- Drastically reduced the application processing time
- Curtailed the waiting time for documents
- Instant MIS reports for planning, budgeting, monitoring & evaluation
- Instant identification of delay points has enabled prompt administrative action
- Integrity and Transparency in Government
- Collaboration and Public Private Partnerships
- Government departments allocate more time to efficient Service Delivery since tedious data capturing is already done for them thereby making them more efficient in less time.

***Other Distinctive Features/Accomplishments of the Project***

- *Availability of Information* – The MPOnline portal provides citizens and businesses with the ability to easily communicate with GoMP departments and department officials and to get continuously updated government forms and information that previously could only be accessed by the few people with specialized knowledge of the old system.

- *Single Point of Access for Services* – Citizens will no longer have to visit individual departments to get services. All the necessary information will be available at the MPOnline portal in both English and Hindi languages.
- *Faster Delivery of Services* – MPOnline will provide G2C and G2G services to people without any geographical barriers. Citizens can check status and access government services from the comfort of their homes and have the necessary documentation delivered to them.
- *Better Collaboration Between Departments* – The MPOnline portal enables the online sharing of information, which increases the speed of service delivery. Currently, paperwork is copied and sent to all participants, but in future documents will be uploaded to the portal, where, for instance, the courts, to make faster decisions in legal cases, can access them right away.

c. Measurable Objectives

- Strength of service delivery network measured in number of kiosks/CSCs
- Number of departments for which services are being provided
- The number of services provided online for each department.

d. Project Milestones

*Project Rollout*

MoU signed with GoMP:	July, 2006
Portal go-live:	March, 07
First kiosk established:	Feb, 07
First service go-live:	Apr, 07
First payment gateway established:	Apr, 07

*Current Expansion*

Number of MPOnline designated kiosks: **850 approx**  
Number of CSCs: **1400 approx**





The following services are currently available on the portal:

- Free download of departmental forms (200+)
- Online payment of electricity bills (Bhopal, Jabalpur, Katni)
- Online payment of telephone bills (Airtel – landline, Tata Indicom – landline and mobile, BSNL – Landline and mobile bills for Bhopal/Indore SSA)
- Online payment of Property and Water tax – Jabalpur
- Online registration of architects and building permissions – Town and Country Planning
- Online reservation and admission tickets for national parks – Kanha, Bandhavgarh, Panna, Pench
- Online payment of insurance payment – LIC, Tata AIG Life
- Online application for examinations held by the Professional Examination Board (VYAPAM) – PPT, PMT, MCA/MET, GNST/PNST, PEPT/PAT, PAHUT, Pre-PG, Examination for jobs
- Online Admission Forms – Nutan College

- Open School
  - 10th Standard
  - 12th Standard
- M. P. Higher Education
- M. P. Public Service Commission
- Urban Administration Department
  - Property Tax Calculation & Payment
  - Birth Certificate Registration
  - Death Certificate Registration

***Total number of Internet transactions on the portal from Apr 2007 till date: 13 Lakhs +***

*Future Expansion:*

- Increase penetration in the rural areas
- Maximise transactions for offered services
- Tie-up with more banks to increase payment options
- Broaden the offering of services provided by including
  - *Upcoming Services*
    - Land Record
      - Online Khasra Nakal (P-II)
      - Online Kisht Khatauni (B-11)
      - Online Mutation
    - Firm & Society Registration
      - Online Application for Firm Registration
      - Online Application for Society Registration
      - Approval/Rejection of Firm/Societies
      - Niymavali for Society Registration

- Online Rent Collection for Municipal Property (Shops/Offices)
  - Collector Panna
- *Extension of Services*
  - Apply Online for Various Universities Services
    - Online Application for Enrolment /Examination
    - Online Examinations Results
    - Online Application Admit Card
    - Online apply for Revaluation/Re-totalling
    - Migration/Duplicate Degree/Mark sheet
  - Online Bill Payment
    - BSNL – Other SSA
- *Future Departments to be covered for more Services*
  - Transport Department
  - Commercial Tax Department
  - Treasury services
  - Agriculture – Farmer Related Service
  - Mandi Board – Sale/Purchase/Mandi Rate
  - Medical Councils
  - Registration of Shops/Doctors/Hospitals
  - Tourism services
  - Rail/Air Booking
  - Narmada Valley Development Authority

## 2. Process Reengineering & Legal Reforms

MPOnline is a service provider for the GoMP and our contribution to process engineering and legal reform is restricted to being advisory in nature. However, MPOnline is a key participant in designing the process flow with the department

SMEs during requirement gathering. We also collaborate between all concerned stakeholders if the service spans across multiple Government bodies.

### **3. Project Sustainability**

The sustainability of this initiative will depend primarily on the will of the government to make it a success and enabling their citizens with e-governance. However, the conceptualisation and in-principal progress of this initiative is in itself the proof of the will of the GoMP to promote this initiative.

On an on-going basis, this initiative will become self-sustainable over a period of time. Once all the services of the government are made available at the doorstep of the citizens and the citizens feel its benefits, this initiative will sustain on its own at the behest of the citizen demand.

Even the delivery mechanism of service delivery points will be self sustainable as not only will it generate employment opportunities, it will also assure a sustained income for the KIOSK operators.

#### **a. Financial Model (Funding Pattern, Business Model, PPP, etc)**

The project is being implemented on a Public-Private Partnership mode adopting a Build-Own-Operate (BOO) model with no upfront financial burden on the State.

As per the Cabinet mandate given to MPOnline, all revenue is to be earned using User Pay Model in which users will pay for the services availed via the MPOnline portal. In certain cases, the department in question chooses to bear the costs instead of passing them on to the citizens.

As MPOnline does not charge any money from the department for which the service has been developed and the application software is free for the department, there is no development cost at all. The development, server, maintenance and other indirect costs are initially incurred by MPOnline and have to be recovered using user pay model over a period of three years.

**Technology Maintenance** – The portal and web services have been implemented using Microsoft® Windows Server System™ integrated server software and the Microsoft .NET Framework. Microsoft Internet Security and Acceleration (ISA) Server, Microsoft Internet Information Services 6.0, Component Services, Content Manager, Microsoft SQL Database, and Microsoft

Operations Manager 2005 form the hosting environment. The portal will access a variety of applications developed on DotNet.

The presentation Layer consists of a browser-based user interface and a Web Service listener developed using Microsoft ASP.NET. The listener is responsible for receiving incoming messages containing requests for service, for parsing the messages, and for dispatching the request to the appropriate method on the business interface.

The Business Layer is built using the Microsoft Visual C#® development tool to implement the business logic of the application/s. It is subdivided into two parts:

- i. The Business Façade uses Microsoft ASP.NET to provide a simple interface, which maps directly to operations exposed by the Web service.
- ii. The Business Logic layer provides all the services to the business façade.

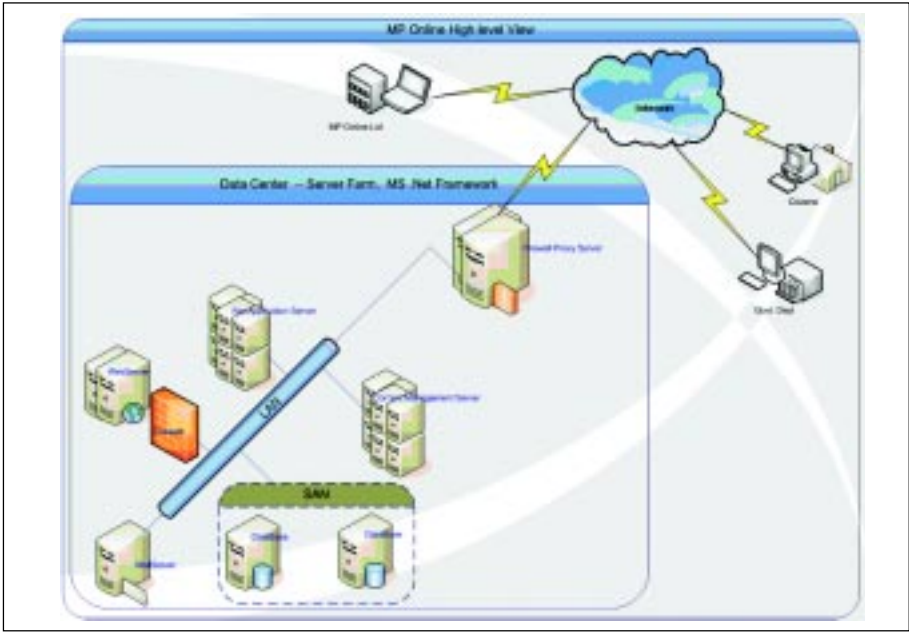
A public key infrastructure (PKI) layer provides an additional level of security for identification of the users and to ensure integrity of data while the data travels between the kiosk, other users, and the data center.

Application-level security is maintained through user identification, authorization, and access management. In addition, at the database level, security is maintained by using audit trails and database encryption. The Data Access Layer presents a logical view of the physical data to the business layer. It isolates business logic from the underlying data stores, thereby ensuring the integrity of the data. Microsoft ADO.NET bridges the business logic layer to the data layer.

**Disaster Recovery Center** – A Disaster Recovery Plan has already been prepared and tested in case of any disaster. A disaster recovery team has been identified with clear roles and responsibilities. The process is well documented and periodic tests are carried out.

### ***Deployment Architecture***

Microsoft Windows Server System forms the backbone of the MPOnline data center infrastructure. The MPOnline data center conforms to the Microsoft data center reference architecture for security, application hosting, data services, management, and networking services.



**Security**

The MPOnline data center infrastructure is collocated within an Internet service provider’s data center that provides a state-of-the-art facility and ensures higher levels of physical security and high availability of the infrastructure.

To ensure a higher degree of security, the data center implements firewalls at the perimeter. These firewalls provide application-level filtering and use a host-based Intrusion Detection System (IDS) to help identify malicious activity from hackers on the firewall server.

**Data Redundancy**

To ensure reliability of service within the data center, MS-SQL database Server is implemented in cluster mode. The cluster uses a robust Storage Area Network (SAN) over a fibre optic connection, which enhances the performance of data updating and retrieval.

**Availability**

Microsoft Operations Manager plays a critical part in administration of servers within the data center, which provides the data center administrators to proactively manage servers. It allows administrators to set thresholds on different servers and remotely manage them.

***Continuity***

MPOnline also deploys Business Continuity Site, which ensures high availability and redundancy of service delivery, even in the event of disaster at the data center.

**b. Project Management Team (Full Time Department Officials/Consultants)**

MPOnline is a joint venture between GoMP and Tata Consultancy Services Limited (TCS). Senior level staff has been deputed from TCS and 2nd level staff has been recruited locally, most of the staff has been selected as per the TCS selection procedure ensuring the right technical staff. MPOOnline has complete technical support from Microsoft Technology Centre of TCS and from Microsoft Corporation.

**COO**

Satnam Sethi

***Marketing Team***

Brijesh Vyas – Head, Business Development, Tanmay Tiwari

***Business Relationship Management***

Pallavee Dutta

***Operations Support Staff***

Rajesh Gurjar, Anil Sethi, Urvashi

***Technical Team***

Project Lead, I.T. Analyst – Navneet Jain

Technical Architect, I.T. Analyst – Himanshu Agnihotri

I.T. Analysts – Anita Bhatt, Hitendra, Geet, Abhay

Developers – Surendra, Rahul, Amita, Vikas, Kshitij, Nitin, Shailesh, Anurag, Imran, Dharmendra, Dhananjay, Abid, Ishvinder, Rajeev, Harsh, Rajat, Satya, Praveen, Vyom, Neha Rajput.

***Finance***

Sunil Sinha, Jaikishan

### *Hardware/System Administration*

Yashwant

## **4. Change Management**

### **a. Change Management Strategy**

It is widely agreed that effective change management is the key to the success of e-Governance projects. The strategy adopted by MPOnline is a multi-pronged approach:

1. Educate stakeholders on the benefits of e-Governance.
2. Involvement of all stakeholders through all phases of the implementation to ensure greater buy-in and lessen resistance.
3. Extensive training and support to stakeholders to increase their comfort with the solution.

### **b. Capacity Building Plan**

#### *Capacity Building – Government*

One of the key factors that affect the success of this initiative is the adoption of the program by the government officials and their acceptance of the change that will be brought about as a result of the initiative. An increased level of computer literacy will also reduce opposition to adopting the new program. To this end:

- Conducting trainings for government officials to acquaint them with the portal and to help them through the initial phase of transition.
- Involvement of the officials who actually deal with the services on a day-to-day basis to increase their involvement, reduce the fear of the unknown and to reduce resistance to the change.
- Involving all stakeholders – government and external – in the change management plan to build awareness and to sensitize them.

#### *Capacity Building – Citizens*

The success of e-Governance initiatives is indelibly linked with the effective use of these services by the citizens. India has made immense progress in the sphere of IT enabled services and the knowledge industry, the progress has been restricted



to urban areas, with the exception of some rural initiatives. The Digital Divide can be bridged by capacity building amongst citizens through:

- Increasing awareness of services delivered by effectively using tools like Internet, cable TV and radio. Combined with appropriate content, local language, reliable connectivity, the media can be a very effective tool to ensure higher awareness.
- Empowering citizens by educating them about the Right to Information Act.

### ***Capacity Building – Service Delivery at Kiosks***

One of the unique challenges India faces is the lack of computer literacy of the citizens at whom this initiative is aimed at. Until the Digital Divide is bridged, kiosk operators are being used under the 'Assisted Access' model that provides a solution to deliver eGov services to the citizen.

- Educating the kiosk operators, particularly in rural areas, to build capacity at the service delivery points.
- Adopting a flexible revenue model that ensures sustainability via mutual benefits.
- Improving the capabilities of kiosk operators through trainings and skill upgradation.

### **c. Leadership Support & Visibility**

The IT department of the GoMP was consulted when the project was launched to understand the technical requirements and also for prioritizing the tasks and services. The Principal Secretaries, Secretaries, Deputy Secretaries and Additional Secretaries of various departments were also contacted during the finalization and prioritizing of the Services. All the government departments were consulted to understand their specific requirements at the time of the development and deployment of the services.

As part of capacity building, the support of the Government representatives has been invaluable in formulating processes and procedures to maximize the benefits of the initiative. Their contribution in smoothing the path for change in engaging key Government stakeholders and providing education within Government bodies is one of the key factors of the success of this initiative.

## **5. Project Monitoring**

### **a. Monitoring & Evaluation Process**

All strategic decisions are made collaboratively by MPOnline and GoMP via its representatives on the boards. Board meetings are held every quarter to monitor the progress. A Rate Fixing committee comprising of MPOnline officials and government officials of the concerned department determines the charges borne by citizens and departments. All financial expenditures and disbursements require the signatures of two board members. The COO of MPOnline meets with his government counterparts on a regular basis for prioritizing work, facilitating interactions with Government departments and to seek assistance when faced with challenges.

### **b. User Feedback, Project Assessment Mechanism**

Customer queries are resolved through emails or on telephone. A designated help desk monitors the customer queries/issues and provides support and solutions to their problems. Cultural factors such as providing support in vernacular languages have been taken into consideration while establishing the help desk. We have planned to increase the strength of the support function to cater to the developing kiosk network.

Also, since March 2007, three User Satisfaction studies have been completed successfully and the services have been improved as per user feedback.

### **c. Third Party Overall Project Audit Mechanism**

An external security audit was conducted in Feb 2009 by TCS. This audit verified security basics such as infrastructure, admin and security, password encryption and methodology used, data posting between forms etc. The audit report has been delivered, the non compliances (NC) reported have been rectified and the NC clearing certificate has been received. A security policy document has been prepared as follow-up and has been distributed throughout the organisation.

MPOnline has integrated with SBI and ICICI bank payment gateways. Clearing the security audit was one of the preconditions laid down by the banks for this to be achieved.

The project undergoes an yearly external statutory financial audit. This audit is carried out by SB Billimoria Co. (SBB) of the Deloitte Touche Tohmatsu (DTT) group. MPOnline has been audited thrice – in 2006, 2007 and 2008. Other than the external audits, the project undergoes quarterly internal financial audits.

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