

Chapter 6

MP ONLINE **

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I) OVERVIEW

MPOnline is an acronym for 'MP Online Information for Citizen Empowerment', the citizen services portal of Government of Madhya Pradesh (GoMP). MPOne Limited is a joint venture company between the GoMP through Madhya Pradesh State Electronic Development Corporation (MPSEDC) and TATA Consultancy Services Limited (TCS) with the objective of developing and operating the official portal for the Government of Madhya Pradesh.

MPOnline is an initiative by the GoMP to serve its citizen by providing them with G2C, G2B and B2C services at their doorstep, in the process eliminating the need for coming to the Government offices and avoid standing in long queues.

With the help of the portal, citizens can avail of the government services such as filling forms for professional examinations, applying for birth/death/caste certificates etc. These services can be availed by citizens through authorised kiosks of MPOne, Common Service Centres (CSC) integrated with MPOne, cyber cafes or via the internet from the comfort of their homes.

MPOnline was formed in 2006 and the first services were delivered via the portal in 2007. The chairman of MPOne is Mr Anurag Jain, Secretary IT and Secretary to CM, GoMP. Also on the board of the company are an OSD IT, GoMP and several Senior Vice Presidents of TCS.

II) RESULT INDICATORS

1. *Key Performance*

a. Stakeholder services and benefits achieved through ICT interventions

Benefits Delivered:

* *Winner of CSI e-Gov Awards, 2009-2010*

MPOne has helped the Government of Madhya Pradesh in achieving its mission i.e.

- Anywhere, anytime delivery of Government services
- A shift from 'Citizen In-Line' to 'Citizen On-Line'
- Increased transparency between citizens and their Government
- Reduction in delays in decision-making
- Reduction in costs incurred by the departments
- Reduction in the number of intermediaries between the Government & citizens
- An opportunity for generating gainful employment by setting up a kiosk network
- Availability of a large pool of trained personnel

Further, this has been achieved with:

- No investment in infrastructure
- No need to deploy and retain trained IT personnel
- No cost to any government department

Citizen Empowerment

- Availability of 24x7 online Government Services; 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
- 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
- Collaboration and Public Private Partnerships
- Reduction in transaction costs

G2C Services

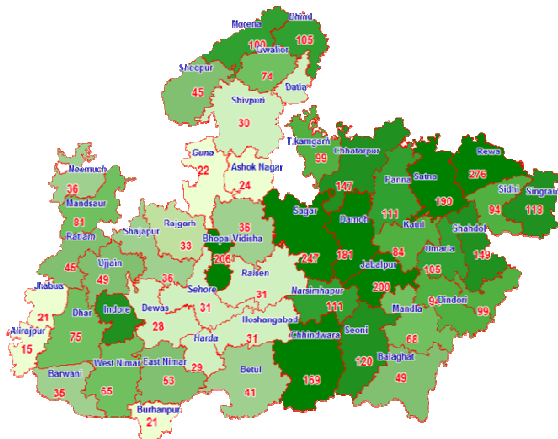
b. % of services covered as ICT interventions

EXISTING GOVERNMENT CLIENTELE	EXISTING EDUCATIONAL INSTITUTIONS	B2C CLIENTS
Board of Secondary Education	Devi Ahilya University	Airtel
Department of Higher Education	IGNOU	Tata DOCOMO
Department of Technical Education	Jiwaji University	LIC
Department of Tourism	Makhanlal University	Tata AIG

Department of Transport	RGPV Polytechnic	Tata Indicom
Directorate of Town & Country	RGPV Degree	BSNL
Forest Department	Ujjain Engineering College	
Madhya Pradesh State Electricity		
Madhya Pradesh State Open School		
Professional Examination Board		
MP Public Services Commission		
Urban Administration &		
Food & Civil Supplies Department		
MP Madhya Kshetra Vidyut Vitaran		

c. Geographical Spread in the State achieved

Currently, MPOnline services are being delivered through 2000+ kiosks and 4400+ Common Service Centres (CSCs) established under GoMP's , eGovernance initiative. MPOnline has presence in **all 50 districts**, over **300 tehsils** and **280+ blocks** of MP.



MPOnline Service Delivery Network	
MPOnline	2,124
Kiosks	
AISECT	1,942
Reliance	1,380
NICT	557
CMS	457
TOTAL	6,460

Employment Generated

	2007-08		2008-09		2009-10		2010-11	
	CSC	Kiosk	CSC	Kiosk	CSC	Kiosk	CSC	Kiosk
0 - 6000		152	45	267	383	750	1101	769
6001-12000		5		86	45	189	71	242
12001-24000		5		104	19	192	25	208
24001-36000		1		48	4	106	7	83

36001-48000			21	2	59	0	35
48000- Above			24	0	135	6	55
Total	0	163	45	550	453	1431	1210

* Data as of 15 Aug, 2010

2. Efficiency improvement

a. Time saving / improvements in the delivering the above set of services.

Case Study I: Professional Services Examination Board (VYAPAM)

Multiple options of submission of fees

Possible to fill forms through-out the day at any convenient time without queuing up for hours

No Postal Losses / Delays – Cost Saving for Student

No Queues at Vyapam - Saving in Time / Travel Cost

Negligible rejections due to data entry errors

Greater transparency through availability of information

Major cost savings due to removal of the need to travel

Benefits For The Professional Services Examination Board

Estimation of # of forms	Distribution	Processing	Payment Realization
<ul style="list-style-type: none"> • <u>No Estimation</u> Required for # of Forms to be printed • <u>No Budget Estimation</u> Required • <u>No Wastage</u> of Stationery • <u>No Storage</u> or Handling Issues • <u>No Re-printing</u> issues • <u>No Sales Centres</u> Required • <u>Zero Cost</u> of Distribution and Transport 	<ul style="list-style-type: none"> • <u>365 x 24 x 7</u> Availability of Forms • <u>Zero Cost</u> of Transport • <u>No Distribution</u> Required – No Temporary Staff • <u>No Coordination</u> with Sales Centres Required • <u>No Queues</u> at Vyapam 	<ul style="list-style-type: none"> • <u>No temporary staff</u> Required for Processing • Processing start s immediately. <u>No Delay s.</u> • <u>Online verification</u> at the time of filling / entry of the forms • <u>Negligible rejections</u> due to online validations at the form level 	<ul style="list-style-type: none"> • <u>Online Payment Transfer</u> • <u>Advance Payment</u> Received • <u>No Loss of Revenue</u> due to Rejection / Expired DD • <u>No Reconciliation</u> Required –

b. Cost savings for delivering above set of services.

Savings For The Professional Services Examination Board

No. Of Applications	5,00,000	Total Cost
Printing of OMR Form	3	
Printing of Rule Book	15	
Printing Cost of Admit Card	5	
Total Cost per Application	23	1,15,00,000
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 Maintainance Cost (4)		3,50,000
Other Administrative Cost		
Transportation Cost (per 10 Rule Books)	100	50,00,000
Employee Cost – Admin	50	25,00,000
Total Savings		3,48,50,000

c. *Cost Saving for availing these services*

Savings For The Professional Services Examination Board

Cost for Students	Cost	Cost	Savings
Visit to department to get the	100	.	100
Cost of preperation of Bank Draft	35	.	35
Cost of registered mail or courier	35	.	35
Cost of Photocopy	25	.	25
Cost of online application	.	50	-50
Expenditure per regular student	195	50	145
Total savings for student			7,25,00,000

Case Study II: Online, Off-Campus Counseling for Department of Technical Education

Taking the example of the Department of Technical Examinations, MPOnline successfully implemented an Online, Off-Campus Counseling service for the MCA, MBA and B. Pharma entrance exams. Before the initiative, students had to travel to the few centres where counselling camps were being held. This resulted in incurring travel and accomodation costs and expenditure of considerable time and effort.

a. *Time saving / improvements in the delivering the above set of services.*

Time & Cost Savings For The Professional Services Examination Board

DTE Expenditure	Centralized	Online Off-	Savings
Cost of Stationary	10	.	10
Cost of Tent & Light	40	.	40
Contigent Expenses	40	.	40
Cost of Travel	20	20	.
Cost of Food & Beverages	50	.	50
Cost of Remuneration &	70	.	70
Cost of Software Devnt &	120	50	70

DTE Expenditure per	350	70	280
DTE Total Expenditure	7,000,000	1,400,000	5,600,000
Time Saving	Centralized	Online Off-	Savings
Time Duration (in Month)	4	1	3
Employee Involved	100	30	70
Parallel Counseling	Not be	Done	

It is worth noting that this was achieved at **no extra cost to the board**

b. Cost Saving for availing these services

Time & Cost Savings For Students

Course	Total Applicants	No. of	Not Allotted
MBA	15,781	13,000	2,781
MCA	4,949	4,000	949
B.Pharma	23,000	3,000	20,000
Total Student	43,730	20,000	23,730
Students Expenditure	Centralized	Online Off -	Savings
Cost of Travel	800	.	800
Cost of Accommodation	1,000	.	1,000
Cost of Food &	400	.	400
Others	.	100	-100
Expenditure per	2,200	100	2,100
Total Expenditure for	44,000,000	20,00,000	4,20,00,000

III) ENABLER INDICATORS

1. Processes

a. Major front end process changes and implemented

Taking the example of the Department of Technical Examinations, MPOnline successfully implemented an Online, Off-Campus Counseling service for 13 technical courses including BE, MCA, MBA, B. Pharma, M Pharma etc. Before the initiative, students had to travel to the few centres where counselling camps were being held. This resulted in incurring travel and accommodation costs and expenditure of considerable time and effort.

For Students:

Earlier:

- Students and their guardians spent time and money to travel to the 5 counseling centres.
- They also underwent great hardship due to inclement weather, problems due to availability in trains and hotels, spending whole days in queues and lack of infrastructure and basic amenities at the counseling centres.

Now:

- Since the introduction of Online, Off-campus counseling, students have the option to choose from *any* engineering institute without the need to travel at all.
- Students participate in the counseling from home, a local internet café or a local kiosk/CSC.

b. Major back end process changes and implemented

In the traditional counseling, students would walk to one or more of the stalls set up by colleges and explore the options the college offered.

For Students:

Earlier:

- The options available to the students were dependent on the number of stalls visited.
- Students had to decide in a few minutes and were unable to research their options. Once made, the students' choices could not be changed.
- The process was not centralized and far from transparent. Students were often misled by the agents employed by the colleges.

Now:

- Students register online, are able to see a list of *all* courses available and then choose.
- Students now have several days to research various colleges and consult guardians before making any decisions. They also have an option to change or reprioritise their choices.
- The process is now transparent for the students as well as the colleges as both have the complete view of vacant seats, reserved seats and so on for each course of each college.

For the Department:

Earlier:

- At the counseling centres, practically the complete strength of the college staff would be deployed solely for the counseling exercise.
- As staff would be making arrangements for counseling, the routine teaching at the college was affected for as much as 6 months at a stretch.
- Earlier, the counseling process took over a month and students were allocated colleges over a span of about a month. This meant that courses at colleges were delayed and commenced only when all the seats for the course in that college were full.

- As data was collected at different levels and manually collated, meaningful data about the counseling took months of entry, collating and analysis.
- Financial reconciliation took several months.

Now:

- The staff deployment has gone down to 2 or 3 people at each of the help-centres established by the dept.
- Routine academic sessions continue unaffected.
- Allotment for each round now only takes a few days and is allocation for a particular course in completed in one-shot.
- The department gets updated, on-demand reports of the number of registrations, choice filling, allotments and fee payments at the click of a mouse.
- All financial MIS reports are available online on-demand.

2. People and Resources

a. Project management & Monitoring – Full time team in place

Senior level technical and management staff has been deputed from TCS. All other personnel have been recruited locally, creating bona fide employment opportunities in the IT domain in the state. Staff is selected as per the TCS selection procedures, ensuring the right technical skills and fit for the staff.

MPOnline has complete technical support from Microsoft Technology Centre of TCS and from Microsoft Corporation.

- COO - Satnam Singh Sethi
- Sales, Marketing & Delivery Network Management Team (3)
- Brijesh Vyas – Head, Business Development
- Business Relationship Management - Pallavee Dutta
- Technical Team (50+)
- Project Lead – Anita Bhatt
- Technical Architect - Himanshu Agnihotri
- Finance (4)
- HR (1)
- Customer Care (7)
- Hardware/ System Administration (3)
- Operations Support Staff (2)

b. Achievements of training of internal & external members on the new system

Continuing with the example of Online, Off-Campus counseling held for the Dept of Technical Education, MP, extensive trainings were conducted before

the start of the service. Of the 13 counseling conducted by MPOnline for DTE, the most significant is the BE counseling for engineering colleges. As this was the first time that the counseling was to be held online, the solution was first deployed on a demo server so that students and dept officials could be trained beforehand.

A detailed programme of training and workshops for department personnel was planned and executed over a period of two months prior to the start of counseling. Dept personnel were called to about 10 central locations and MPOnline personnel traveled to these locations and conducted workshops for the dept's manpower.

Apart from this, the demo was also available online to students who would finally be using the system. Students could register themselves, enter their details and marks, select their choices of colleges and courses and a dummy allotment would be done for each student.

c. Change management strategy defined and implemented

- To reduce resistance to the new system and to smoothen the path for the change, department stakeholders were involved through every part of the process. To gain the confidence of the key department stakeholders, the following initiatives were taken:
- Introduced online, off-campus counseling to the department in a phased manner, starting with those where the number of participants was low. Demonstrated success in these initiatives helped win customer confidence.
- Educate stakeholders on the benefits of eGovernance; demonstrated delivery of these benefits at the end of each counseling.
- Initiation of periodic and frequent review meetings involving stakeholders from the departments, engineering institutes and other govt. bodies involved in the process
- Involving all stakeholders – government and external – in the change management plan to build awareness and to sensitize them
- Extensive training, handholding and support to stakeholders to increase their comfort with the solution.

Apart from this, the following exercises were also conducted:

Capacity Building: One of the challenges faced in the introduction and adoption of most eGovernance initiatives is the lack of trained IT. manpower in the public sector to implement and support such an initiative. This concern is often expressed by clients even after demonstrating several example of successful implementations.

To address this concern, MPOnline offers a BOOT model, where we provide full infrastructure and manpower support for the design, implementation and

support needs of the client. This is complemented by conducting training and handholding sessions where we build the in-house capacity of the personnel of the client department

Building Trust: The comfort and security in the minds of citizens and department officials often erodes when a non-government agency is the sole stakeholder and implementer of an e-governance initiative. We counter this by involving the government stakeholders of MPOnline right from requirement gathering, rate fixing, implementation and up to the monitoring stages of the services we offer to a department.

d. Leadership support (Political, Bureaucratic) and its visibility

Very strong support is extended to MPOnline by the government of MP. Since the approval of the cabinet note that was issued to form the company, MPOnline has been strongly backed by the state government. The Secretary (IT), Mr Anurag Jain, in the capacity as the chairman of the company has been key in making this a successful initiative. Also instrumental in MPOnline's success is another board member, Mr Anurag Shrivastav, who is also an Officer on Special Duty (IT). The confidence of the various stakeholders in government departments in MPOnline is also boosted by the close association of the organization with the DIT, GoMP. The initiative is closely monitored and mentored by the DIT.

e. Financial Model (Funding pattern , Business model PPP etc) defined and implemented

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 via a User Pay Model in which users pay for the services availed via the MPOnline portal. However, in a few cases, the department in question chooses to bear the costs instead of passing them on to the citizen.

As MPOnline does not charge any fee 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 via the user pay model over a period of three years.

Delivery Network Financial Model: The kiosks and CSCs through which MPOnline services are delivered are set up as franchisees. All investment in

personnel, infrastructure and connectivity are borne by the kiosk/ CSC owners.

- Citizens pay a small 'portal fee' to avail services on the MPOnline portal. Of this fee, 60% is given to the kiosk owner, and 40% is retained by MPOnline. Franchisees do not have an exclusive contract with MPOnline and are free to use their infrastructure for their other businesses.
- The kiosks work on a pre-paid model where they 'top-up' their account with a certain amount of money and can then provide services to citizens for as long as they have credit balance.
- Franchisees pay a one-time registration fee, and then pay an annual renewal fee based on the volume of business done.

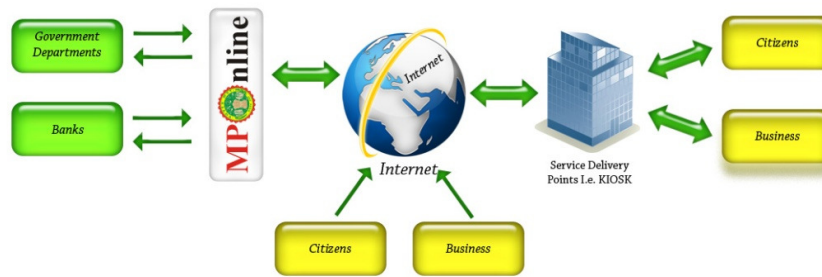
Integration with CSCs: MPOnline has the proud distinction of being a state where CSCs are financially viable. A decision was taken by the IT Department of the Government of MP to make CSCs viable. It was decided that CSCs would be integrated with MPOnline. MPOnline was mandated to increase its presence in Urban Area and to establish its kiosks in urban areas only while CSCs would cover rural areas, as per the GOI scheme.

MPOnline was to be the canvas for All G2C Services delivery, whereas SCAs were to provide all local level B2C Services through CSCs. All SCAs have been directed to integrate with MPOnline for all G2C Services, as good number of services are already been provided by MPOnline through MPOnline Kiosks.

f. Delivery Mechanism

One of the unique challenges India faces is the lack of computer literacy of the very citizens at whom this initiative is aimed at. Until the Digital Divide is bridged, the 'Assisted Access' model is being used to deliver online services to citizens.

Under the Assisted Access model, MPOnline has established an extensive network of kiosks that provide infrastructure and trained personnel to deliver our online services. For availing services on MPOnline Portal, citizens / businesses will have to pay a "service charge" over and above the "fee" for the Service. This service charge is shared between MPOnline Limited and the KIOSK. The "fee" collected will be passed on to the department / institution concerned for each service by MPOnline Ltd.

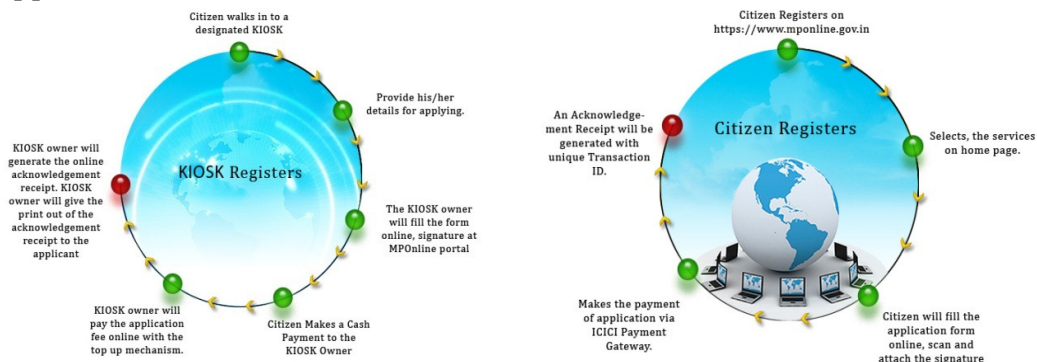


Each kiosk provides connectivity, man power with the appropriate skills, as well as facilities to scan and print. The kiosks work on a pre-paid model where they 'top-up' their account with a certain amount of money and can then provide services to citizens for as long as they have credit balance.

Service Delivery via Kiosks

Under the Assisted Access model, MPOne has appointed various franchisees and established an extensive network of kiosks that provide infrastructure and trained personnel to deliver our online services. The kiosks connect to MPOne portal via the internet and enable the rendition of the hosted services. A citizen can walk to the nearest kiosk, where the kiosk operator will fill forms and digitise supporting documentation for him and leave after paying a nominal portal fee in cash.

The KIOSK owner generates the acknowledgment receipt and give the print out to the applicant. The acknowledgment receipt will have a unique transaction ID along with the applicant details and the fee paid by the applicant.



Service Delivery via Direct login for the Citizen.

For those citizens who are computer literate and have access to either internet banking or a credit/ debit card, MPOne services can be accessed directly via the portal, with an optional and simple registration process. The MPOne portal is integrated with ICICI bank's payment gateway and a user can use any Visa or Master credit or debit card to pay for services.

The citizen will be issued an acknowledgment receipt. The acknowledgment receipt will have a unique transaction ID along with the applicant details and the fee paid by the applicant.

Payment Mechanism

As with the service delivery mechanism, our payment methods are also suited to both those who use information technology comfortably and those who are challenged.

For availing services on MPOnline Portal, citizens / businesses will have to pay a “service charge” over and above the “fee” for the Service. This service charge will be shared between MPOnline Limited and the KIOSK. The “fee” collected will be passed on to the department / institution concerned for each service by MPOnline Ltd.

MPOnline Limited provides two types of payment mechanisms to its customers. Citizens and Business can either pay by Credit Card, Internet banking or by Cash. For Cash payment, citizens and business will have to avail services via an MPOnline Limited authorized Internet KIOSK.

Cash – The ground reality of the vast rural areas of India is that eCommerce is either unheard of, or is not trusted and that people still prefer to deal in cash. Our service delivery mechanism is geared to address this divide, too. When a user has a preference for cash transactions, availing a service hosted on MPOnline is as simple as walking to the neighbourhood kiosk and paying for the services in cash.

Internet Banking – Any customer who has an account with the following banks can initiate an online transfer (Online Debit facility)from his/her account to the MPOnline account to pay for services availed:

State Bank of India	State Bank of Indore	Union Bank of India
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Credit, Debit or ATM cards – MPOnline has now integrated with the following payment gateways:

<u>ICICI Bank payment gateway</u> Accepts Visa and Master credit and debit cards issued by any bank	<u>SBI payment gateway</u> Accepts Visa and Master credit and debit cards issued by any bank, and SBI - ATM-cum-debit Maestro cards
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The portal now accepts the following cards:

Visa and Master credit cards	Visa and Master Debit cards	SBI - ATM-cum-debit Maestro cards
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Pay-in Slips: Payments can also be accepted through pay-in slips at any branch of the following banks through-out the country:

State Bank of India	Axis Bank
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3. *Technology*

a. *Disaster Recovery & business continuity plan defined & implemented*

Data Redundancy: The current infrastructure at the MPOnline data-center consists of two Quad-Core servers, one deployed as the application server, the other as the database server. These are backed up by two Hex-Core servers. 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.

Shortly, the infrastructure will be ramped up to include 2 more Hex-Core servers for the web layer. The web and data layer will have distinct backup servers and SAN storages.

b. *Technological solution cost effective and maintenance over time*

The clients departments and organizations of MPOnline do not incur any capital or operational expenditure at all. The infrastructure was setup by MPOnline and the cost of the same is recovered over a period of three years through the portal fee charged. All maintenance and upgrade costs are borne by MPOnline.

c. *Security and confidentiality standards defined and implemented*

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.

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.

Confidentiality: All data collected for a client is stored at the secure database servers at the MPOnline data centre. Access to this data is restricted and is role based. Access to the servers is restricted through the use of biometric devices. All data is handed over to the clients on the completion of a service cycle.

4. Replication of the model

The knowledge and experience gained by the successful implementation of the MPOnline project can easily be ported across to any other state of the country, and even to the creation of a IndiaOnline portal.

Based on MPOnline, TCS will be launching MahaOnline in Maharashtra this year. Similarly, discussions are on for the replication of this model in Bihar, UP and Chhatisgarh.

(Mr Satnam Sethi, Chief Operating Officer, MPOnline & Ms Pallavee Dutta, Business Relationship Manager, MP Online, Pallavee.d@tcs.com)