AWARDS SCHEME FOR EXEMPLARY IMPLEMENTATION OF e-GOVERNANCE INITIATIVES

NAME OF CATEGORY- **INNOVATIVE USE OF ICT BY STATE GOVERNMENT PSUs'/ COOPERATIVES/ FEDERATIONS/SOCIETIES**

1. **Coverage – Geographical and Demographic** :-

(i) Comprehensiveness of reach of delivery centres,

> Since this is a web based application, any person having domiciled for 15 years in Maharashtra can apply from anywhere across the globe for MHADA lottery.

(ii) Number of delivery centres

> Every machine or gazette which is having internet connection

(iii) Geographical

(a)National level – Number of State covered

(b) State/UT level- Number of District covered

(c) District level- Number of Blocks covered

Please give specific details:-

> Entire application is web enabled with real time validation.
> This initiative makes it possible for citizens to avail fully online services.
> Online registration and application for lottery,
> Online payment through Payment gateway(Debit Card, Credit Card, NetBanking),

(iv) Demographic spread (percentage of population covered)

> - Online Registration Received = 118417
> - Total No of Application Received = 123254
> - Online Payment Received = 35065

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

> The original project was completely manual and each of the key stages namely distribution and receipt of applications, scrutiny of the applications, lottery draw and post lottery processing was totally manual.
>
> This involved printing of thousands of brochures and forms, physical distribution and collection of the filled forms, manual scrutiny and draw using traditional methods. Long queue for purchasing and submission of application. Refunds to non-winners and allocation of flats to winners were also done manually.
>
> As with all manual processes, these processes were time consuming and prone to errors.
>
> To overcome this manual, time consuming and error prone process, MHADA took the ICT initiative of developing a web based application for accepting applications and conducting the lottery in a transparent and fair way.
>
> From this year we have developed a productized version of lottery software which can be used by any MHADA regional boards and other government or semi government organizations which are performing housing lotteries for public with minimal customization.

3. **Scope of Services/ Activities Covered** (Relevance of choice of application for clients/ PSU, extent of e-enablement in terms of number of processes/services, extent to which step in each service/process have been ICT- enabled #)

> Entire application is web enabled with real time validation.
>
> This initiative makes it possible for citizens to avail fully online services.
>
> Online registration and application for lottery,
>
> Online payment through Payment gateway(Debit Card, Credit Card,

NetBanking),

Draw and Flat allocation are also automated.

Refund through ECS directly to applicant account.

All the information about their application status via mail and SMS.

4. Strategy Adopted

(i) The details of base line study done,

- Form Core group of evaluators

- Identify & Define Goals of the application

- Prepare Demos / Mocs under test

- Define Set of tasks & Channels of Evaluation

- Perform the tasks and evaluate

- Implement Changes

(ii) Problems identified,

(iii) Roll out/implementation model,

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

Usability / Heuristic Evaluation

Heuristic Evaluation is a method for quick and easy evaluation of the user interface.The process requires that a small set of users (or "evaluators") and ergonomic experts examine the interface, and judge its compliance with recognized usability principles (the "heuristics"). The goal is the identification of any usability issues so that they can be addressed as part of an iterative design process.

5. **Technology Platform used-**

   (i) Description,

Technology Used:
1. JBOSS Server (v jboss-6.0.0.20101110-CR1)
2. Oracle 11g Database Enterprise Edition
3. JDK v1.6 64Bit
4. Java Script
4. Operating system on server , Red Hat Linux 5.5 64Bit
5. Struts v1.3.10
6. Spring v2.5
7. Jasper Report (IReport v3.5.7)
8. Open Office v3.3.0

   (ii) Interoperability

Used technical stack is having feature of Interoperability.hence system having Interoperability feature.

   (iii) Security concerns

All data encrypted when stored. All servers in data centre hardened with restricted access. Use of Oracle Vault to log DBA activities

   (iv) Any issue with the technology used

No

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

SLA documented containing entire scope of the project.

6. **Enhancement of Productivity** (Give details about impact on volume of transactions handled per employee, Productivity of machines/ resources#)

More than 1000 transaction per employee per day.

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

(i) Volume of transactions processed,

- Online Registration Received = 118417

- Total Rejected Registration = 4754 (Due to photo, PAN No and Bank Account Scrutiny)

- Total No of Application Received = 123254

- Online Payment Received = 35065

- DD Payment received = 58565

(ii) Coping with transaction volume growth

(iii) Time taken to process transactions,

In a millisecond

(iv) Accuracy of output,

Online Validated output in a millisecond

(v) Number of delays in service delivery

8. **Service Delivery** – Business/ Client Centricity (Give details about improvement in interaction with clients and outcome for clients, relevance of access points, Length and Breadth of services provided online etc. #)

SMS and Email Gateways

Direct communication was established with the applicants through SMS and emails informing them about the status of their

application at various stages.

Online Payment

Online Pancard Verification

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

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

Due to online application and online payment, anyone across globe can apply for lottery hence efforts, time and money require for physical collection and distribution of forms and long queue for payments in banks are reduced.

(ii) Feedback/grievance redressal mechanism,

We have allowed public to post their feedback for this lottery process. We got a good response from the public.

MHADA has also deployed a call centre at MHADA premises to handle all the queries regarding lottery.

We also have Help Desk set up for citizens with MHADA staff which handle grievances of applicants visiting MHADA.

(iii) Audit Trails,

Audit trails and logs to enable tracking of all additions / deletions to the database.
Each system entry has been traced.
Each Transaction / event have audit Trails

(iv) Interactive platform for service delivery,

User friendly ,Interactive User Interface with secured web based

technology has been used to deliver best citizen centric service delivery.

(v) Stakeholder consultation

All the Stakeholder's involved in the system like Bank,Application Development,testing,code walk through by IIT,MHADA as a Domain player and all the process was scrutinized by Over sight committee (OSC)

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

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

SMS and Email Gateways

Direct communication was established with the applicants through SMS and emails informing them about the status of their application at various stages.

(ii) Completeness of information provided to the users,

All the information in terms of information booklet and video are available on lottery website. In case of any query, user can call call centre and customer care executive will solve their query.

(iii) Accessibility (Time Window),

24*7

(iv) Distance required to travel to Access Points

Its and online process, no need to travel anywhere, only if you are paying by Demand Draft (DD) then need to go to the bank.

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

Yes,As per Applicant's convenience online / offline facility was

available.Documents which are downloaded on machine are in pdf format.

(vi) status tracking

1. Each Application's status is tracked .User will receive sms or email at every stage,

eg   registration successful, rejection in scrutiny, apply for lottery successfully, payment received.

11. **Innovation** (Give details on how the usage of technology is exemplary, any use of new and emerging technology, impact on number of steps required, identification and removal of bottlenecks/ Irrelevant steps etc. #)

Application has developed in Open Source JAVA on Linux environment making it easily portable.

Hardware configuration used outsourced virtualized servers which could scale on the fly. With the result data centre could handle 10 times the average load on the last two days without loss of response to the users.

One time registration, which is reducing efforts in terms of entering some basic information like name , dob, pancardno, address, income , etc again and again for each application

Same software product can be used for different lotteries by different organization after making minimal customization in it.

12. **Defined and Achieved outcomes** (Give details about extent of improvement in terms of organizational objectives, output targeted in the beginning of the project and output achieved, extent to which the project is able to reach/ fulfill the requirements of planned beneficiaries etc. #)

Lottery has successfully completed in fair and transparent manner.

13. **Sustainability** (Give details about sustainability w.r.t. technology (technology used, user privacy, security of information shared- Digital Signature/ Encryption etc. #), Organization (hiring trained staff, training etc#), financial (Scope for revenue generation etc. #)

Great care was taken to ensure that system architecture is sustainable. This included:-

a) Technology used – Open sourced JAVA on a Linux platform
b) User Privacy – Access to user data available only through OTP
c) Security of Information – All data encrypted when stored. All servers in data centre hardened with restricted access. Use of Oracle Vault to log DBA activities
d) Organization – Special hands-on training given to in-house call center employees and staff involved in running the lottery
e) Scope for Revenue Generation – Entire system available as a package for other housing lottery agencies.

14. **Adaptability Analysis**

(i) Measures to ensure adaptability and scalability

All screens for the user were in local language Marathi and English.

Application was developed in Open Source JAVA on Linux environment making it easily portable.

All vendors are bind with long term contracts. MHADA

Emloyees are trained by the vendors to handle moderation.

SOP manual is done.

Third party Impact Assessment done - By IIT. Smooth functioning. No loss of Data.

(ii) Measures to ensure replicability

As it is a product version, we can replicate it with minimal customization for other housing lotteries.

We have prepared a SOP manual which can be used by our regional boards for performing their lotteries.

All vendors are bind with long term contracts. MHADA Emloyees are trained by the vendors to handle moderation.

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

No

(iv) Risk Analysis

Hardware configuration used outsourced virtualized servers which could scale on the fly. With the result data centre could handle 10 times the average load on the last two days without loss of response to the users.

15.   **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

MHADA can handle any lottery in an automated manner.

Agents interference has substantially reduced.

(ii)   To citizen

We have taken feedback from the applicant and the result is as follows

For Usability:

Excellent/good: 93 %

Average: 4 %

Poor: 3 %

For Speed of the Site:

Excellent/good: 94%

Average: 4 %

Poor: 2%

For Help Available on Site:

Excellent/good: 91%

Average: 5 %

Poor: 4 %

For Call Centre Response:

Excellent/good: 83%

Average: 7 %

Poor: 10 %

(iii)   Other stakeholders

Increased Transparency

Better Service

Improved efficiency

Reduced risk

Less paperwork

16.	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):
G2C

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

SrN	earlier system	new system
1	The original project (prior to 2006) was completely manual and each of the key stages namely receipts of applications, scrutiny of the applications, lottery draw was totally manual.	All the key stages from registration, application, moderation, payment, Draw allocation of flats and Refund are automated
2	Due to High volume of applications Physically collection and distribution of forms and hence Long queues for application forms	Since its an online application process, anyone across globe can apply for lottery.
3	Printing of thousands of brochures and forms,	No need to print brochures and forms thus saving paper.

4	These processes were time consuming and prone to errors.	Time saving, no errors
5	No editing in the application once u submit it.	Can edit application details until he does not pay the payment
6	No base was there to authenticate the user	User authentication with PanNo, Checking PanCard no with live databse
7	Refunds to non-winners were also done manually.	Refund to non winners in their bank account through ECS
8	Data security was weak.	Lottery data and application are highly secured as it is hosted on private data centre which is secured with Firewall Protection, RHEL Advanced 64 license support, IPSEC VPN Services, Load Balancer, SAN storage, Web Server Log Reporting.
9	No call centre	Deployed call centre to handle queries of the public regarding lottery.
10	No scope for giving feedback.	Allow user to give their feedback and we are reviewing those feedback.
11	Agent's interference were more.	Because of deduplication of Pancard and Bank account, scope for agents interference are restricted.

18.   Other distinctive features/ accomplishments of the project:

1. Image building of government / semi government organizations. By successfully completing this innovation, there is an attempt to increase the faith of the public in

the transparency in the government organisation

2. Transparency in allocation of tenements

3. Scope for Revenue Generation – Entire system available as a package for other housing lottery agencies.

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