AWARDS SCHEME FOR EXEMPLARY IMPLEMENTATION OF e-GOVERNANCE INITIATIVES

III.   **NAME OF CATEGORY- 'INNOVATIVE USE OF TECHNOLOGY IN e-GOVERNANCE'**

1.   **Coverage – Geographical and Demographic** :-
   (i) Comprehensiveness of reach of delivery centres,

   > Target population of the project was entire citizens of India, interested for taking Liquor Shops in Chhattisgarh for the financial year 2014-15 as per terms and conditions of the offer of Excise Department, Government of Chhattisgarh.

   (ii) Number of delivery centres

   > Web based solution was provided so it was available to all interested persons above age of 21 years.

   (iii)Geographical
   (a)National level – Number of State covered

   | All States |

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

   | All Districts |

   (c)District level- Number of Blocks covered

   | All Blocks |

   Please give specific details:-

   > It was available to all interested persons above age of 21 years.

   (iv)Demographic spread (percentage of population covered)

   > 43 % of the population was target.

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

   > Prevailing system of allotment of Liquor License for retail sale In Chhattisgarh was by taking physical applications along with DD for payment of fees along with other formalities. Scrutiny of applications and Data entry of valid applications. The process fees were realized to Government treasury via chalans after clearance of each instrument.
   >
   > The above process resulted in involvement of Antisocial elements in the process of deposit of forms which created law & order problems and also depriving the serious candidates from submitting application forms. There was no check on the source of Process fees as the DDs were prepared from cash and source of the same could not be traced,

hence the use of Black Money in the above process could not be ruled out which was a matter of major concern of Income Tax department.

The entry of physical forms was a cumbersome process, it required a huge manpower due to large number of applications, and there were chances of manipulations & faults, leading to litigations and restart of the entire process. The entire process lead to huge financial expenditure.

Manual checking of each DD, preparing of Chalan forms for each DD and then depositing it in Bank for clearance and finally assuring the clearance of Chalan in favour of Government, was not only time consuming but also there were chances of mistakes. The amount was realized in favour of Government after lapse of several months resulting in loss to Government in terms loosing bank interest on the amount.

3. Scope of Services/ Activities Covered (Relevance of choice of application for client/ agency, Extent of e-enablement in terms of number of services, Extent to which step in each service have been ICT- enabled #)

1- Online submission of forms.

2- Online submission of payment of process fee

3- Verification of Online submitted application

4- Online confirmation of application via sms and e-mail

4. Strategy Adopted
(i) The details of base line study done,

Prevailing system was manual; it was decided to adopt online system to avoid the problems faced in present system. It required online submission of forms, online payment, confirmation and computerized lottery.

(ii) Problems identified,

Number of target citizens very large this required the design of online System to cater the citizens without any delay. Prevailing system required huge manpower to manage the manual process which required scrutiny of the data, crosscheck of forms, realization of Process Fees via banks. The process and was too much time

consuming and fault prone. Account finalization took years due to manual errors. These problems have been rectified in the new online system.

Online payment gateway was required to be foolproof so as to have 100% realization of fees within minimum time duration. The data had to be maintained with full security so as to avoid any leakage/hack at any level and with no loss of data.

(iii) Roll out/implementation model,

Prototype model was adopted to develop the system.

(iv) Communication and dissemination strategy and approach used.

Advertisement of tender through print media has been adopted for approach.

Internet was the basic media to submit the Application forms and email & SMS media to acknowledge the successful/Failure submission of the same.

5. **Technology Platform used-**
   (i) Description,

   Operating Server - Windows Server 2008 R2 , Application Server - IIS7 with .net framework 3.5. Database Server - SQL Server 2008.

   (ii) Interoperability

   Microsoft SQL Server and .net Framework is very well compatible with the Operating System version. On Other hand for Database redundancy SQL Database mirroring was performed. Also for reporting Services MS SQL Reporting services was also used.

   (iii) Security concerns

   Application server and Database server has been put behind the firewall and IPS/IDS device. At the other end specific ports were open between the application server and Database server. Un-Authorized and unintended traffic such as SQL Injection has been removed in code level. For Payment gateway 2 way SSL encryption has been used to avoid intrusion/capture of the data.

   (iv) Any issue with the technology used

   As per the Design of the application and testing at Load level has been performed to check the performance level of the program.

> Design has been modified to work on Dial-Up category of the network also. In result a foolproof fault free technology was made available to the target citizen.

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

> The software was developed & maintained by government agency NIC. Hence SLA was ruled out.

6. **Demonstrate innovative use of ICT for development** (Give details about use of new and emerging technology, innovative usage of ICT for process change to improve quality of the life/ organizational effectiveness, relevance of technology to provide the service #)

> 1. Payment process has been simplified and facility of direct submission to accounts of Excise Department via online payment gateway (via more than 50 banks and major credit & debit card houses) was put in place. This resulted in hassle free process as compared to old method of Draft payment system.
>
> 2. Acknowledgement of Success/failure submission of the application using Email and SMS system.
>
> 3. Account finalization without any error was accomplished with the developed system.
>
> 3. Problem Solving cell has been formed for the redressal on phone and email.

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

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

> User was free to use the system from anywhere throughout the country. The system was free of charge for user, less time consuming. The online system was available to the user round the clock in all days of the week.

   (ii) Feedback/grievance redressal mechanism,

> Problem Solving cell was formed for redressal over phone. Online redressal mechanism was put in place all the complaints/feedback was received by e-mail and were responded.

   (iii) Audit Trails,

Security audit of the system was conducted.

(iv) Interactive platform for service delivery,

Online GUI was provided to all the target users for submitting application.

(v) Stakeholder consultation

The stakeholder in this case was excise department and was fully involved in entire process.

8. **Adaptability and Scalability** (Give details about Local language support, ability to leverage shared Government infrastructure, Standardization of technology used (hardware, software, application etc. #)

National Informatics Center's infrastructure was used to develop and host the application. Application designed was optimized to run on low speed networks such as dial-up networks using .net platform and Microsoft SQL Server.

9. Adaptability Analysis

    (i) Measures to ensure adaptability and scalability

Application developed over in .net framework and database installed in Microsoft SQL Server 2008 on windows server 2008 operating system, which was fully compatible among itself and complement each other.

    (ii) Measures to ensure replicability

Using Microsoft SQL 2008 server features, Database was mirrored for redundancy and scheduled for proper backups.

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

Nil

    (iv) Risk Analysis

SSL encryption used for payment gateway transactions to avoid intrusion and cracking of the same.

To avoid forgery in submitted application forms, submission of pan card details of the applicant with scanned copy image for later verification has been employed.

10. **New Models of Service Delivery** (Give details about type of partnership model use, Links to/Supported by Public/Private Organization Links provided to relevant websites etc. #)

> Payment gateway from State Bank of India has been incorporated which provided online payment facility from more than 50 Banks and major Credit & Debit card houses.

11. **Efficiency Enhancement** (Give specific details about the following #)
    (i) Volume of transactions processed

> Total number of hits on the site was 9118560 in 21 days and No. of online application submitted 4, 55,928.

(ii) Coping with transaction volume growth

> To cope up the transaction growth application server has been put in network balancing IIS Server farm and a high end Database server.

(iii) Time taken to process transactions,

> Depends on the user to complete up the forms and after submit it takes around a minute on an average to fill up the banking details and back to return page.

(iv) Accuracy of output,

> 97.5% transactions were successfully saved.

(v) Number of delays in service delivery

> No Delay in service delivery.

12. **User convenience** (Give specific details about the followings #)
    (i) Service delivery channels (Web, email, SMS etc.)

> Web, email & SMS were used for delivery of information as per requirement

(ii) Completeness of information provided to the users,

> The information provided to the users was complete in all respect and the developed system did not require physical interface at any level.

(iii) Accessibility (Time Window),

> Accessibility for each user was unrestricted.

(iv) Distance required to travel to Access Points

> The system developed was web based and was accessible from any

location of the country

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

The system was having facility of Online entry of forms, downloading of filled forms and online submission of forms. The system was having facility of payment of fees Online. There was tie up with SBI which provided online payment facility from more than 50 Banks and major Credit & Debit card houses.

(vi) status tracking

Web based Status tracking was available for the smooth functioning of the system

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

1. SSL encryption used for payment gateway transactions to avoid intrusion and cracking of the same. To avoid forgery application submission pan card details of the applicant with scanned copy image to later verification has been submitted.

2. Application developed over in .net framework and database installed in Microsoft SQL Server 2008 on windows server 2008 operating system, which was full compatible among itself and complement each other.

3. Using Microsoft SQL 2008 server features, Database was mirrored for redundancy and scheduled for proper backups.

4. Application was developed and maintained by NIC.

5.Total revenue generated Rs. 227.96 Cr. and interest earned Rs. 46.59 Lacs. From day one of process to the day of Computerized Lottery

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

    (i)   To organization

1. Entire physical system right from receiving of form & fees to allotment of licenses was replaced by paperless Online system

2. Fully transparent and secure system was put in place and use of Black Money was totally eliminated as the source of Fees was known due to Online payment method.

3. Law & Order issues, involvement of musclemen eliminated.

4. Issue of depriving of genuine applicants from participation was totally eliminated.

5. Due to real-time realization of Fees in Government accounts the Government benefited in terms of Revenue from interest received from the deposit.

6. The government received online payment of Rs 227.96 Crores. The government earned interest of Rs 46.59 Lacs by online deposit and per day MOD of amount from day one of the start of the process to the day of Competrized Lottery.

7. There was saving to Government in terms of huge manpower & in turn financial saving.

8. Manual reconciliation of receipts took years in earlier system. Reconciliation errors were eliminated entirely in new system.

9. The developed Online system in Chhattisgarh has been appreciated by Govt. of Jharkhand & Bihar. The technical team of both the states visited Chhattisgarh to understand the system for implementation in their state.

(ii)   To Citizen

1. The online system allowed the applicants to apply online right from their residence from anywhere.

2. They were not required to visit Bank for preparation of DD & not required to visit to Excise offices to deposit completed forms.

3. They were able to verify about acceptance of their online submitted application form online.

4. The chances of depriving of genuine applicants from applying by musclemen and other miscreants were totally eliminated.

5. The online system was available to citizen on 24x7 basis up till the last day scheduled for applying.

6. The chances of rejection of application at a later date were totally eliminated as the citizens were given confirmation via email & SMS after successful acceptance of form and realization of process fees.

(iii)   Other stakeholders

1. The other stakeholder were banks which benefited in terms of saving of manpower due to online deposit of Process Fees.

2. The banks and Credit cards houses earned in terms of online transaction charges.

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

It was G2C project and it benefitted Citizen, Government & Banks.

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

1. The earlier system was physical and fully dependant on manpower. The new system was fully online and replaced Manual involvement at all stages.

2. The earlier system being manual was fault prone; the replaced system being Online was fault free.

3. There was loss of revenue due to late realization of Process fees in old system. In the online system with online payment system, realization of revenue was instant resulting in zero loss and gain in terms of Interest received from the Bank deposits from day one of the start of the process to the day of Computerized lottery

4. The earlier system was not tamperproof. The replaced online system is tamperproof.

5. The earlier system was time consuming; The replaced Online system is instant.

6. The earlier system was having chances for manipulation & depriving of genuine applicants. The chances of manipulation were totally eliminated and genuine applicants could apply without any hindrance.

7. There was scope of use of black Money in the old system. The replaced system totally eliminated the use of Black Money.

8. Chances of litigation were eliminated by the replaced system.

9. Account finalization in old system was full of errors in old system and it took years to finalise the accounts resulting in audit issues. This problem was totally eliminated in the new system; the finalization of account was on real-time basis.

17.   Other distinctive features/ accomplishments of the project:

1. Citizens saved in terms of time & Money.

2. Transparency, reliability, accuracy & 24X7 availability for all stakeholders.

3. The Government also saved in terms of Time & Money.

4. A fully transparent round the clock system was available to the citizens

5. The platform being online instigated common man to apply and earn business from Government if selected.

6. The monopoly of vested groups was eliminated.

7. The government earned extra revenue as interest from bank deposits.