SWARNIM-RTO: A New Service Paradigm
An e-Governance Project of the Govt. of Gujarat

Nityesh Bhatt
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About the Initiative

This publication is a part of the Capacity Building initiative under the National e-Governance Plan (NeGP) by NeGD with an aim to draw out learnings from various projects implemented in various States/UTs and sharing this knowledge, in the form of case studies, with the decision makers and implementers to benefit them, by way of knowledge creation and skill building, from these experiences during planning and implementation of various projects under NeGP.

Conceptualised and overseen by the National e-Governance Division (NeGD) of Media lab Asia/DeitY these case studies are submitted by e-Governance Practitioners from Government and Industry/Research Institutions. The cases submitted by the authors are vetted by experts from outside and within the Government for learning and reference value, relevance to future project implementers, planners and to those involved in e-governance capacity Building programs before they are recommended for publication. National Institute for Smart Government (NISG), working on behalf of this NeGD provided program management support and interacted with the authors and subject matter experts in bringing out these published case studies. It is hoped that these case studies drawn from successful and failed e-Governance projects would help practitioners to understand the real-time issues involved, typical dilemmas faced by e-Governance project implementers, and possible solutions to resolve them.

Acknowledgment

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1. **Abstract**

Motor Vehicle Department of Ministry of Road Transport and Highways (MORTH), Govt. of India is responsible for monitoring Motor vehicles and drivers; and taking road safety initiatives in India. For its execution, each State and Union Territory has a network of the Regional Transport Offices (RTOs). Due to exponential growth in the economy and vehicles, pressure of RTOs has risen significantly in last decade. Application of information and communication technology (ICT) has been instrumental in metamorphosis of each sector including government. Ahmedabad RTO has shown exemplary transformation in its performance due to ICT at each stage of public interaction in last one and half years. Based on its success, this project named as ‘SWARNIM RTO’ has been rolled out in entire State.

ICT initiatives like biometrics, online appointment system, SMS coupled with process reengineering (both at front-end and backend) at RTO; have resulted in considerable improvement in overall service experience of citizens at RTO. This project has reduced the role of the middlemen from the system and has significantly diminished corruption widely prevailing in RTOs for years. However, senior officials based both at Gandhinagar and Ahmedabad look for further improvement in technology enabled customer experience with better service standards and improved quality level. They also want to augment the scope of project to cover whole gamut of activities of RTO.

2. **Keywords**

Motor Vehicles Department, RTO, Driving License, Government Process Reengineering (GPR), Public-Private-Partnership (PPP), Citizen Relationship Management (CRM), IT Infrastructure, Change Management, Time & Motion Study, Green Governance

3. **Note to Practitioners**

Motor Vehicles Department is one of the most important departments which provide different services to various stakeholders of different age groups. A driving license is a special document which is required in order to enable a person to drive a motor vehicle on roads. It is one of the most coveted documents to be possessed by a person. Many times, it is the first interface of a common person with the government. Motor vehicle is today a symbol of upward mobility of a citizen and therefore every citizen desires to have a driving license at the earliest. Many people, in order to get a livelihood, are engaged in driving of transport vehicles, tourists vehicles, and other such vehicles used for ferrying goods and passengers, and for them it is an essential qualification in order to get job. For a normal citizen also, driving license is mandatory document as per the regulation. Therefore, number of people visiting RTOs is extremely large.

As per law, a driving license can only be issued by the Licensing Authority having jurisdiction over a particular territory. Normally, this authority is given to a Regional Transport Officer.
and through a network of Regional Transport Offices; this task is carried out by the Government. A citizen needs to fulfill the following in order to have a driving license:

- a) Be eligible to hold a driving license in terms of age and qualification;
- b) Produce necessary documents to supplement his/her claim of eligibility;
- c) Pay requisite fee; and
- d) Pass through tests mandated by law in order to prove knowledge and skills required for driving.

A citizen earlier spent considerable amount of time and money to get licence. This project acquired added significance as sizeable number of people visited RTO to get licence. The aim of the project was to make the entire process convenient, transparent and more efficient. The whole process was re-engineered keeping citizens at the centre.

The old process was both time-consuming and hassle-prone. Its major focus was therefore to make it convenient to the citizen to obtain his licence. In order to improve convenience for the user, RTO at Ahmedabad was modernised. The existing infrastructure of Office was under severe strain considering the large number of citizens coming to office. In order to ensure that the initiative outlined above was implemented with fullest efficacy and citizen were provided better amenities; the civil infrastructure was upgraded in the RTO.

While renovating office at RTO Ahmedabad, a series of steps were taken up and modern management concepts like process reengineering, citizen service, relationship management, single window etc. were introduced. This was predominantly an in-house job led by the Transport Commissioner. To streamline the movement of applications, the entire layout has been redesigned with required facilities. For this flow design, two reputed architect were hired who made multiple presentations before final selection. Gujarat Rural Industrial Marketing Company (GRIMCO) was awarded the contract for internal layout and furniture as per unique requirement. Some of the salient features of this design are as follows:

- i. **Facilitation Area** – which is equipped with a help desk, token counter and LED displays.
- ii. **Waiting Hall** – has been air conditioned and remodeled to have civic amenities. It also has an audio-visual display for viewing road safety films/messages while waiting.
- iii. **Service Zone** – has single window counters with seating facilities and also the Knowledge Test Centre.

The waiting time of the applicant is innovatively utilised by displaying and showing road safety messages through panels and multi-media devices. Overall, this government to citizen (G2C) e-Governance project has earned lot of goodwill from citizens and has
generated positive word of mouth publicity. Project has received numerous accolades from various state and non-state actors for citizen centricity, re-engineering accountability and transparency through ICT intervention.

4. Project Context

4.1. Background / Pre-implementation Scenario

Motor Vehicle Department is entrusted with the task of monitoring of Motor vehicles and drivers; and taking road safety initiatives in the country. The department carries out its mandate with the help of the Regional Transport Offices (RTOs) spread across the State. With the growth in the economy and rising social standards, the demand for vehicles and mobility has grown manifold. The last decade has particularly witnessed a heavy growth in both number of vehicles and drivers. For example, the number of registered vehicles in Gujarat has risen significantly from about 60 lakhs in 2001 to around 129 lakhs in 2011 indicating that the vehicle population has almost doubled in the State in a decade.

Increased vehicle population has put tremendous strain on the existing resources of the department which caters to the needs of the public under the Motor Vehicles Act. The main functions of RTO include:

i. Registration of Motor vehicle and subsequent changes in the details of registration during its’ life cycle;

ii. Issuing of Driving Licenses and changes therein;

iii. Collection of Motor Vehicle taxes;

iv. Road safety initiatives;

v. Miscellaneous Functions like issue of permits. Permits are issued for driving commercial vehicles like Bus, Truck, Auto rickshaw, etc.

About 60 lakh people visit RTO Offices per year (figures of the year 2010-2011) for various purposes as stated above. The RTO is one of the front line offices of the Government having a huge public interface particularly for the young people who visit Government office for the first time. Ahmedabad RTO is the biggest in Gujarat which serves population of nearly 85 lakh. Before implementation of this project, these applicants were served on first come first serve basis every day from 10 am to 7 pm. To save time, the first time applicants used to stand in queue every day from 7 am itself so that they could avail services at earliest.

To serve more than 600 to 1000 applicants standing in queue, employees (including male and female of different age groups) had to stay up to 7 and 8 pm almost every day. Still, both public and employees faced lot of harassment. Public agony was
frequently reported in media. Due to extreme weather and extensive fatigue, every week, some young boys and girls used to faint while standing in queue and therefore emergency ambulance of EMRI - 108 needed to be called. Arguments and skirmishes between staff were order of the day. This situation resulted in emergence of a large number of touts. In order to service such a large number of people effectively while maintaining service standards, it was decided to implement electronic governance with comprehensive Process Re-engineering in the department. This project has been a brainchild of Shri J.P. Gupta, State Transport Commissioner – Gujarat with complete administrative, legal and financial support from Government of Gujarat. It is his firm opinion that decrease in human intervention in any government process brings greater transparency. At later stage, he was supported by Shri J.M. Bhatt, Regional Transport Officer – Ahmedabad RTO.

5. **Project Overview**

5.1. **Project Description**

Under the leadership of the Commissioner of Transport, the project was conceptualized and discussions were held with different stakeholders. Visits were made at various RTOs in different states like Andhra Pradesh, Rajasthan, Karnataka, Maharashtra, Assam etc. to learn about their best practices in terms of processes and technology. Core team also held discussions with department officials (administrative officers and inspectors) and staff at grass root level. During the field visits, brainstorming sessions were held with dealers of motor vehicles, vehicle owners associations and agencies involved in road safety work at the district level. Thus, involvement of staff and all round communication paved the way for effective project implementation.

Along with this departmental exercise, the Government took necessary policy decisions, provided guidance for implementation and sanctioned budget. Project at main office with 17 counters was inaugurated by Shri Vajubhai Vala, Hon’ble Minister – Govt. of Gujarat in July 2011 while the second RTO office based at Vastral, Ahmedabad with 7 counters in a completely new building was inaugurated by Shri Narendra Modi, Hon’ble Chief Minister - Govt. of Gujarat in August 2011. He reportedly remarked in his inaugural address that “the building and services at new RTO are comparable with the international airport”

Administrative processes were designed by the core group under guidance of Commissioner of Transport. He also administered a structured time and motion study to determine time required to serve an applicant during entire chain of activities. Based on this scientific study, whole workflow was designed and number
of counters was decided. It included rigorous review of total footfall, growth of applicants over years, time required for each process, space availability etc.

Software for the same was developed by National Informatics Centre (NIC), Hyderabad. In order to learn the workflow, this team stayed at Ahmedabad for almost a week. Many a times, inputs were provided through video conferencing. Overall, it took two months for the team to develop the system which was revised multiple times later based on needs felt for further improvement. Software has been built using Java and VB languages while Oracle 11 G has been used as backend. Current version of software is 3.56 while next version 3.58 is in progress. Software contains a large number of MIS reports. Due to excessive data storage (more than 250 GB) at Ahmedabad RTO, MIS generation took lot of time at RTO Ahmedabad affecting routine transactions. Therefore, currently these reports are generated in evening after day to day office work is over. At other RTO offices in Gujarat, MIS feature works successfully.

Presently, the IT platform of VAHAN (for vehicle registration and related transactions) and SARATHI (for driving license purpose) developed by NIC and approved by MORTH has been used. VAHAN maintains centralized repository of different types of vehicles across the country while SARATHI software provides uniform procedure and common framework for providing licenses. At present, data of Ahmedabad RTO are stored in local servers and its backup is taken every day. In future, it is proposed to establish a DR site at Gandhinagar RTO.

This project has deployed Client–Server architecture at each of its office in State. Each RTO office hosts its own independent server. Department has floated a tender for central server which is likely to get ready within a year. National Informatics Centre (NIC) looks after entire technology management function. All local servers at different RTOs are connected with NIC, Gandhinagar through Virtual Private Network (VPN). Each server automatically sends transactional data to NIC server in every 30 minutes. For ensuring security, backup is taken at local server every 10 minutes. UPS also exists at every office. Each office also maintains primary as well as secondary server which are remotely managed by NIC, Gandhinagar. Linux network OS is installed at each server. USB drive cannot be accessed on any computer in RTO offices. Periodic database and Security audits are conducted by Audit General (AG) office based at Rajkot and Ahmedabad.

Office does not have any technically qualified employee. Nonetheless, an old RTO employee Mr. Prakash Bhai looks after its technical infrastructure since 1989. In addition, more than 170 employees have been provided with training on all modules of software. For day to day technical support, Guj Info Petro Ltd (GIPL) has hired some technical professionals for each RTO on a contractual basis. Noteworthy about
the project is its conceptualization and implementation despite a shortage of staff and a large quantum of work at hand. Team work at different levels also played a significant role in the project. Brief overview of this ICT enabled and reengineered single window system is as follows:

**Single Window System:**

Under the old system, an individual was required to approach different windows (at-least six) that were catering to a small segment of overall process. These were physical inspection, payment receipt, biometric inputs, data entry, knowledge test and receipt of license (Refer Exhibit 1). An applicant was required to move from one window to another and had to wait for his/her turn at every window in order to get his/her work done. This system resulted into long queues and was a time consuming and tiring system with lot of hassles and inconvenience. The multiplicity of windows was one of the main reasons that resulted in the prevalence of middlemen and touts that had a huge disruptive effect on the system and encouraged non-transparent behaviour at times.

The new system offers single window where all processes relating to an application like receiving application, scrutiny, fee collection, bio-metrics etc. are amalgamated (Refer Exhibit 2). In addition, multiple counters were established for each process depending on number of applicants. For providing comfort during idle time, sitting arrangement was made for applicants in front of the window/counter. A display system is arranged in waiting hall. Questions to be answered during knowledge test are displayed here sequentially along with right answer. In another monitor installed in waiting hall, applicants can see the activities of test hall where knowledge test takes place. In case of irregularity, people can not only monitor but can raise objections. Provision of RO water, air-conditioned rooms and high back chairs have added to applicants’ convenience. Some of photographs depicting the same are given at the end of the case.
For better quality of photograph and verification of data entered, double monitors were installed. Due to this; during the entire process of photo-capturing and data-entry, applicant could see and approve (or reject) his/ her photo and personal data. If a mistake was pointed out, the same is corrected immediately resulted in errors being minimized. As a matter of fact, photograph was also shown to the citizen through the same window which helped in better quality of photograph. This significantly reduced the number of errors in license. Earlier, one of the major complaints people had was poor quality of photograph appearing on driving licence. One of the major reasons was improper background and lack of lighting. An innovatively designed high back chair was conceived wherein the person was made to sit while his application was being processed and the same chair was used as background for taking photographs. With these initiatives, the whole process has become more efficient, transparent and citizen friendly. Facility of online appointment/token system further eliminated queues with controlled flow.

To manage these end to end processes, contract has been given to a PSU - Bharat Electronics Ltd (BEL) led consortium. It looks after all hardware, networking and maintenance matters and resources. Currently 35 contractual employees from it are providing their services at RTO, Ahmedabad. The consortium is compensated for each transaction as per service contract.

**Online Appointment System:**

One of the major points of inconvenience to the citizen earlier was long queues at the RTO. Average waiting time used to be 5-6 hours. In addition, an applicant had to stand before queues at multiple windows catering to different activities. Therefore, major focus of the project was to eliminate these queues and thus increase citizens’ convenience and save their precious time. Now, online appointment is given to applicants two months in advance based on his/her preference of date and time. Those who are not comfortable with internet, they can take help from cyber-cafes. For rural citizens, e-Gram Vishwagram mechanism of government of Gujarat has been deployed. These centers established by government at all gram panchayats are being used to facilitate submission of application and obtaining on-line appointment.
Through BISAG network; e-Gram operators, Talati and Sarpanch of entire district have been given requisite training. Still, if some people visit RTO office without online appointment, token system is used to eliminate queues and streamline the entry of applicants to the service zone.

**New document delivery initiatives:**

A large number of people come to RTO to get vital documents. The vital documents issued by RTO include driving license, registration book and permits. It is important that documents are not only error free but are given in a format and shape that is durable and convenient to carry. All documents should also be delivered in time and without hassle. Considering these, the Government took a series of steps to facilitate delivery of these documents to the citizen in a timely manner. These initiatives included re-designing of Learning License from a paper based format to I-card shaped format.

Under this project, delivery of driving licenses is made mandatory through speed post (free of charge) thus hand delivery was totally stopped. This verifies the applicant’s address while delivering documents, thus satisfying an important security aspect. Previously, many case of impersonations existed which were completely prevented. The document is also delivered with a road safety kit and a message from Chief Minister urging the applicant to follow road safety norms. Simultaneously, an online tracking system and SMS intimation system are also initiated to facilitate prompt and accurate delivery of these documents to the citizens. The delivery initiative is an important step in reducing delays and increasing transparency in the whole system.

**Stringent Testing Procedure :**

A person desirous of obtaining a driving license is required to undergo tests in order to prove his knowledge of traffic signage and road behaviour. He is also required to appear for a driving test in order to prove his driving skills. In the earlier system, the testing methods for both lacked stringent norms and were having manual interface resulting into bias and non-transparent behaviour. It was decided to change the system and introduce stringent test methodology designed by NIC while keeping it user friendly. The changes introduced are as under:

**Key features of Knowledge Test:**

- Questions are of objective type only.
- From a question bank of 208 questions, 15 random questions are generated out of which 11 needs to be answered in 10 minutes for obtaining learning license.
These questions are also made available online for applicants to see and practice. This saves them from previous practice of buying a book from RTO office.

Due to randomness, no two candidates have same set of questions.

The test is planned in three languages i.e. Gujarati, Hindi and English so as to benefit cross section of people with varied language skills.

Touch screen has also been kept at select locations to help people with difficulty in dealing with mouse.

CCTV cameras monitor each movement in the hall and the live video is broadcasted in the waiting hall (in front of other applicants waiting outside) which acts as a check and control mechanism.

Result is declared instantly.

**Key features of Driving Test:**

At present, driving test is conducted by RTO inspectors manually. In future, no manual intervention will be involved in this test too. Four automated driving test tracks for LMV and 2-wheelers are under construction, which will be functional from June 2013. Automated tracks are already functional at Gandhinagar RTO. One of the key features of the test is its scope. It will be conducted totally with sensor based technology. Applicant’s skills will be tested by automated sensors and vehicle movements will be monitored by cameras. RTO inspectors will monitor the same at control room. It is expected that such a stringent test will improve standard of drivers in the State and will benefit the country. Applicant will have to register online for driving test. In next phase, automated driving test tracks are proposed for Commercial vehicles as well. Entire technology based testing system will be managed by Silvertouch technologies, Ahmedabad.

**Process Re-engineering**

The old processes were complex, cumbersome and full of redundancies. It was necessary to make them simple and standardized in order to reap full benefits of e-Governance. Earlier, separate forms were used for learning and driving license applications resulting in duplication of efforts and wastage of paper. After lot of discussions, both the forms are subsumed in a single form. Based on this, both online process as well as the off-line process have been completely re-arranged. This resulted in significant saving of paper, higher processing speed and avoiding many redundancies prevalent in process. The table below shows the comparison of old process and the new processes that have been initiated:
### Table 1: An Overview of Reengineered Processes

<table>
<thead>
<tr>
<th>Process</th>
<th>Old</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Submission (for Learning &amp; Permanent License)</td>
<td>Twice</td>
<td>Single</td>
</tr>
<tr>
<td>Attachments Submission</td>
<td>Twice</td>
<td>Once</td>
</tr>
<tr>
<td>Fee Submission</td>
<td>Twice</td>
<td>Once</td>
</tr>
<tr>
<td>Bio-metrics Capture</td>
<td>Twice</td>
<td>Once</td>
</tr>
<tr>
<td>Knowledge Test</td>
<td>Computerised</td>
<td>Computersied (some citizen friendly measures introduced)</td>
</tr>
<tr>
<td>Driving Test</td>
<td>Manually administered</td>
<td>Automated driving test track will be functional from next month</td>
</tr>
<tr>
<td>Method of submission</td>
<td>Manual</td>
<td>Primarily Online</td>
</tr>
<tr>
<td>Waiting</td>
<td>Long queues</td>
<td>Online appointment system/Token</td>
</tr>
</tbody>
</table>

### 5.2. Objectives

The Project aimed to establish the following-

i. Simple and easy processes;

ii. Paperless and IT savvy environment;

iii. Speedier, efficient and transparent services;

iv. Faceless administration to the extent possible;

v. Stringent standards and full proof system; and

vi. Service orientation with better infrastructure for citizen centric services.

### 5.3. Stakeholders

Different stakeholders involved in the process can be divided into two parts:

i. The State government, Commissioner of Transport, RTO Officers and subordinate staff
ii. The vehicle owners, license holders, drivers etc.

5.4. Services Offered

Scope of Project is very wide and covers all aspects of process of issuing driving licence in the Ahmedabad RTO through an integrated IT platform. The project encompasses different processes of driving licence as mentioned below:

i. Learners licence
ii. New Driving Licence
iii. Renewal of Driving Licence
iv. Addition to a category of Driving Licence
v. Duplicate or change of details in a Driving Licence
vi. International Driving Permit

All above processes concerning issue of driving licence include receipt of application with attached documents, collection of fee, test and dispatch of licence to the applicant.

5.5. Outcomes/Benefits

Ahmedabad was the first RTO to implement ‘SWARNIM RTO’ project in Gujarat State and resulted in numerous benefits for different stakeholders. These benefits are summarized below:

**Efficiency Enhancement:** The project has benefited all stakeholders in varying degrees. The simplification of procedures has broadly resulted in reduction of paper work, elimination of queues and better civic amenities. Overall reduction in time taken to service an applicant has resulted in the psychological satisfaction of the applicants, particularly the youth. A comparative analysis of pre and post implementation of the Project in terms of key criteria is indicated below:

**Table 2: SWARNIM RTO - Project Outcome**

<table>
<thead>
<tr>
<th>SNo</th>
<th>Key result area</th>
<th>Before</th>
<th>After</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>a. Paper work</td>
<td>10 pages per application</td>
<td>8 pages submitted once</td>
<td>Saving of 12 pages per application resulting in annual saving of 12 million pages approx.</td>
</tr>
<tr>
<td></td>
<td>(attachment by applicant)</td>
<td>submitted twice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Paper Maintenance</td>
<td>All in</td>
<td></td>
<td>Saving of almost 1.2 million</td>
</tr>
<tr>
<td></td>
<td>works by Department</td>
<td>of paper bound registers and books</td>
<td>electronic format</td>
<td>pages every year along with saving in manual effort involved in writing</td>
</tr>
<tr>
<td>---</td>
<td>---------------------</td>
<td>------------------------------------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2</td>
<td>Time in Queue</td>
<td>Standing before multiple windows</td>
<td>Sitting in AC waiting hall</td>
<td>Saving of 3 hours per person on an average resulting in an annual productivity of 3 million man-hours</td>
</tr>
<tr>
<td></td>
<td>Time in services</td>
<td>Standing before multiple windows</td>
<td>Sitting in front of one counter</td>
<td>Saving of 25 min per person to both system and person</td>
</tr>
<tr>
<td></td>
<td>Time to get delivery of documents</td>
<td>3 to 15 days</td>
<td>1 to 3 days</td>
<td>Improvement in delivery system substantially</td>
</tr>
<tr>
<td>3</td>
<td>Road Safety Awareness</td>
<td>No focus</td>
<td>Waiting time is productively used</td>
<td>Road safety messages are displayed on television in the waiting hall</td>
</tr>
<tr>
<td>4</td>
<td>Service Orientation</td>
<td>No focus</td>
<td>New orientation</td>
<td>Better citizen satisfaction and improved performance</td>
</tr>
<tr>
<td>5</td>
<td>Error free document</td>
<td>Mistakes reported in large number of documents</td>
<td>Fewer mistakes due to double monitors</td>
<td>Citizen dissatisfaction reduced to a large extent</td>
</tr>
<tr>
<td>6</td>
<td>Feel good factor</td>
<td>Lengthy processes, dampening people’s morale</td>
<td>Overall feel good factor</td>
<td>All stakeholders feeling good leading to better environment</td>
</tr>
</tbody>
</table>

Improvement in the delivery time of services as well as provision of other services has enhanced confidence of beneficiaries in government machinery. During
interaction with author, applicants provided excellent feedback about facilities, resources and people. In their opinion, service was beyond their expectations. Some of those who visited earlier for different reasons could not even believe this transformation and attitudinal change among the employees. Earlier, 25 employees of RTO had to work hard from 10 am to minimum 7 pm everyday (beyond office hours) to serve large number of aspirants. After the project implementation, this number reduced to just seven while all remaining employees are transferred to other departments where workload is high. These seven employees are responsible for final approval of data entered by contractual employees at single window.

The project is proving to be environment friendly in a big way. It is resulting in huge saving of papers both for public and government. The amount of paper saved is indicated in performance indicators. It is hoped that it will prove to be one of the green e-Governance project.

**Cost effectiveness:** Issuing driving licenses is a core Government function. Earlier, for obtaining the license, an applicant had to spend significant time and money. One of the main objectives of the project was to reduce this cost and precious time. This project helped in elimination of hidden cost due to transparency brought by new processes. Similarly, the government also saves money on account of faster and efficient processes.

**State-Wide Rollout:** Based on project’s successful implementation at Ahmedabad RTO; State government has already rolled it out in all the 27 RTOs located in different parts of the State. Hitherto, nine other States have also sent their delegation (including ministers and senior officers) to observe this model for possibility of implementation in their States.

**Future Plans:** From April 2013, online appointments will also be given for renewal and endorsement (upgrade) of license too. Another value-addition initiated is the provision of online payment system, for which 10 banks (both public and private sector) are approved by RBI and Govt. of Gujarat. This system will be functional by the end of July 2013. These banks are currently testing their payment gateway system. The department has also prepared an IT road map and integrated IT Solution based on hybrid architecture. This solution will link all RTOs and check-posts to the central server which will also serve as a single gateway for online services. This will help in further reducing the duplication of work and will help cross checking of data and thereby improving efficiency and efficacy of system reducing burden of applicants. Department is also preparing its citizens’ charter in lines with society’s changing expectations and overall environment. It also has a grievance redressal mechanism system but it will be fine-tuned soon.
6. **Issues/Challenges faced during implementation**

Such an ambitious project could not have been possible without hassles. Core group handled each challenge with patience and perseverance and devised appropriate solutions. Some of these are mentioned below:

- Changing the mindset of RTO employees was a major task as they were used to age old practice of license issuing, registration etc. Their buy-in was essential for execution of this project. For this, 3 days Chintan Shibir (brainstorming conclave) was organized at Vadodara in April 2010. This conclave organized on the theme ‘Change’ involved employees of all levels across the State (up to level of clerks). Commissioner then setup seven internal teams to look into each process of issuing licence i.e. data entry, payment, exam etc. Each team dissected, analysed and reexamined each process. With lot of suggestions, each process was redesigned keeping citizens in mind.

- Communication with employees of all 27 RTOs was important. Therefore, Commissioner made personal visits to each RTO and had long sessions with employees. This helped not only in getting additional inputs but also in satisfying various concerns and apprehensions. These were out of vested interests as well as genuine reasons.

- Physical space was a major constraint at Ahmedabad RTO, therefore, some portion of existing building was demolished and with help from external architect and interior designers, new facility was created in almost a year.

- Commissioner exhorted employees to change the image of department internally before external change takes place among citizens and media. One interesting feature of this motivational communication was to challenge employees to create an environment in which they can bring their family members to the office. Multifarious attempts to address the hostile environment (both physical and attitudinal) finally started delivering results. During inauguration of Ahmedabad East office at Vastral and Gandhinagar, family get-together was organized.

- Before inauguration of project in July 2011, team worked hard to incorporate every possible aspect in terms of technological input, process, output, integrity, security, work load on each system etc. However, immediately after inauguration; lot of technical hurdles arose which took almost three months to stabilise. In the initial period, system was very slow because of new workflow.

- Due to this, only 200-400 licenses could be processed in initial days. During this period, sometimes system was closed also and therefore, no application could be processed. In contrast, 600 licenses got processed in manual stream. As a consequence, there was lot of resistance and anger among the common men who visited RTO for various purposes.
Management listened to people patiently and gave them another slot. In the meantime, RTO officials and NIC technical team worked hard to improve the system.

- While there was no overt resistance and active opposition but some dissent came from old RTO employees. They not only needed to learn new workflow but also new software. Lot of consultation and communication was required to change their attitude. For changing mindset, spiritual sessions were also arranged. Their career related matters like promotion etc. were given active consideration.

- For those directly involved with people, training was provided for new functionality. For contractual employees also, training sessions were arranged. This one-week training was provided by RTO officers and company officials. It covered administrative rules as well as relevant software modules.

- Even after training, process was slow in initial days due to new system. Employees were provided support by senior officers and NIC officials. Another challenge was the turnover of contractual employees. In such cases, new employees learnt the functioning by observing old employees for some time.

- Another challenge emerged when online appointment system was introduced. Youngsters found it comfortable but others were suggested to get it through cyber café. For rural citizens, e-Gram channel of government established at each panchayat is leveraged. Operators of e-Gram centres are provided training for that.

- Despite this, if someone comes without online appointment, manual token is issued at RTO office by staff.

- Earlier, computerised exam was not essential in entire Gujarat. When it was made compulsory, people stopped coming due to fear. After persuasion, when they started coming, many of them failed. These people are given multiple chances to clear the exam. Gradually, this number decreased significantly.

7. **Key Lessons**

One of the objectives of this project was to redesign and deliver various services in effective and transparent manner. Key lessons that can be learnt from this case are as follows:

1. Success of e-Governance lies in citizen centric process reengineering and not just in computerization. Technology should follow reengineering exercise else it will simply automate existing archaic and redundant practices.

2. Process reengineering at government departments requires involvement from higher management including political and bureaucratic levels. Lower level people neither have complete picture of organization (therefore lack vision for change) and nor have authority to enforce its execution. For this case, political support came from Chief
Minister and other key ministers while at bureaucratic levels, Addl. Chief Secretary and Finance Secretary etc. were involved. Clear support and approval from them resulted in administrative and legal changes. Subsequently, when government orders, circulars and new rules are communicated, they became binding. This helped in minimising resistance from various stakeholders.

3. For sustenance of e-Gov projects; people, process and technology issues need to be synchronized. Without balancing and addressing either of these, system will collapse.

4. e-Governance projects are not a one-shot affair, rather they are evolved periodically. Based on understanding of day to day functioning, both processes and technology are upgraded. After the launch of project in July 2011, processes were redesigned multiple times which also led to technology changes. From first version of software (v 3.22), NIC Hyderabad has upgraded RTO software multiple times till its recent version 3.56.

5. Most of e-Gov projects now are implemented under public-private partnership (PPP) model. Involvement of private sector in citizen centric process significantly improves service delivery, however, in crucial tasks, some amount of government involvement is essential. For example, at RTO; data entry, biometric capturing, fee collection are outsourced but authentication of record is responsibility of RTO employees. Similarly, printing and dispatch of the cards have been outsourced whereas the core function of verification and approval has been retained by the department.

6. There cannot be a ‘One Size Fits All’ strategy while rolling out project across larger area. After successful implementation of this project at RTO Ahmedabad, when it was decided to replicate this project in other RTOs of State, numerous issues erupted. These were related to physical space, infrastructure, mindset of employees and people and scarcity of technical staff. Each issue was solved appropriately according to context and situation.

8. **Methodology adopted for case writing**

The project adopted the case study method. Initially, author understood the functioning of department from secondary sources like website and publications. Major part of research took place through primary sources. For this, author personally visited Transport Commissioner Office at Gandhinagar and RTO Ahmedabad multiple times. During these visits, observation and interview techniques were used. Undisguised observation was followed at all the places of service encounters. Author interviewed all types of stakeholders involved at Gandhinagar and Ahmedabad. Based on the observation and discussion held during interviews, draft report and final report were prepared.
9. References


- [http://deshgujarat.com/2012/03/01/rto-ahmedabad-launches-online-appointment-system-for-learning-license/](http://deshgujarat.com/2012/03/01/rto-ahmedabad-launches-online-appointment-system-for-learning-license/), 1 March 2012

- https://sarathi.nic.in

- https://vahan.nic.in/nrservices/

Author Details

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<th>Serial No.</th>
<th>Case Author</th>
<th>Project Owner</th>
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### Project Fact Sheet

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<th></th>
<th>Project Name</th>
<th>SWARNIM RTO</th>
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<td>Project launched</td>
<td>01.07.2011</td>
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<td>3.</td>
<td>Coverage</td>
<td>This project covers more than 85 lakh people of Ahmedabad district.</td>
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<td>4.</td>
<td>Services offered</td>
<td>G2C &amp; G2G services</td>
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<td>5.</td>
<td>Uniqueness</td>
<td>The project first such initiative in entire country which is replicated in all the 27 RTOs of Gujarat.</td>
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<td>6.</td>
<td>Technology specifics</td>
<td>Technologies (like Web, MIS, Touch Screen, Biometrics, Vahan, Sarathi etc.)</td>
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Exhibit 3: Air-Conditioned Waiting Lounge

Exhibit 4: Single-Window Counter with Double Monitors & High-Back Chair
Exhibit 5: Candidates Appearing for Knowledge Test