Case study on Department of Registration and Stamps:
Project i-Sarita
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Bhavna Ghatge
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Project i-SARITA

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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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Abstract

The last two decades have been a real challenge for the Government of India, as the citizens now expect the governments to be more transparent and approachable. Governance of citizen centric activities, systems and utilities has been under criticism for quite some time now. Information Technology is being considered as a weapon to gain competitive advantage and use it for the benefit of common man for example, in this case IT is helping in fighting frauds and any kind of disputes through e Search as 90 % data from 2002-12 has been digitized and presently all the data is available in real time. “Department of Registration and Stamps”, Govt. of Maharashtra, started its humble journey in the domain of e Governance by opting to serve its stakeholders in the best possible way. The advent of the new user-friendly technology and policy reforms by the government clubbed with all the problems faced using the manual mode, gave way to the first computerized application called as SARITA (Stamp And Registration Information Technology Application) in the state of Maharashtra in 2002. Slowly the need for utilization of better technology and understanding of e Gov reforms led to the web based application of i-SARITA in 2012. While introducing this new system, the vision and mission of the department had remained same and provided efficient and effective services to the citizens. The project utilized ICT for storage, retrieval, transmission or receipt of digital data. Lot of understanding on evolution of e-Governance concepts and clarity in thinking coupled with technology advancements and strong leadership support has certainly bettered the model i-SARITA, as it is evident that earlier version was stand alone and has it’s own limitation and as the understanding on the project grew it has become a centralized product now. i-SARITA project has come out as one of the most successful e-Governance project of Government of Maharashtra due to proper formulation and implementation of IT linked to policy reforms.

Note to Practitioners/Instructors

The instructors can create a discussion among the participants to think about the project around the following areas:

1. Can there be any other model for this project?
2. What went wrong with M/s Tulip and how did it affect the project? What would you (Participants) suggest?
3. How important is it for the RFP for PPP to be well drafted?
4. It is easy getting into Public Private Partnership but difficult to terminate the contract. Justify.
Note for the Instructors

Instructors need to emphasize the concept of PPP and the pitfalls that one would be trapped. Here in this case, the private partner had an audacity to refuse/delay in providing the consumables to the SRO (Sub Registrar office). It is understood that PPP can go up to the extent of not providing the Service. In worst cases, the PPP would not listen to field level officers and in such scenario the field staff is forced to manage things at their own end. This would lead to various dubious ways of getting the work done. Once such practice is initiated then there is no stopping.

- What should the Departments do to avoid getting into such situations? Instructors can provide an environment for fruitful discussion.
- Also should the department end up selecting a sub partner of PPP too?
- Where ever departments are providing G2C services, is it necessary to provide the services the way it is happening in the country? Can there be another way to look into?

Project Context

The revolutionary growth in Information Technology has led to a smaller global world that has its people closely and more connected to each other through the Internet based social networks. This led to nationwide reforms like adoption of e-governance concept as means to transform various departments within the country, which gave birth to National e Governance Plan (NeGP) in the year 2007. Various departments embracing e-governance moved towards adopting Information Communication Technology in delivering services in a much better fashion these times.

One such department of the State Govt of Maharashtra is “Department of Registration and Stamps” which is 200 years old, having its roots during the British Rule in India. Over the years, this department has progressed to become one of the most important department of the State Governments in India. While initially it was involved only in registering and preserving of the records, later it started collecting revenue as one of its major functions.

The main functions performed by the department are:

- Registration of documents
- Preservation of the registration documents
- Collection of stamp duty and registration fees

Auxiliary functions but mandatory under the Registration Act are:

- Providing certified copies of the registration documents
• Property search report

Vision of the department:

e-Governance Vision of the department

Automate the following core functions of the department using ICT-

• Registration of documents
• Verification and scrutiny of documents
• Valuation of properties
• Capturing and preserving copies of all registered documents
• Property transactions search report
• Receiving payment of stamp duty and registration fee
• Stamp inventory management

The department was heavily into manual ways of working, not only in the State of Maharashtra but elsewhere in the country too. Presently where technology led reforms are taking place across the country and the awareness of the citizens has increased manifold, the department started looking inwards and analyzed what problems the stakeholders are facing.

Some of which were like:

• There was a long waiting time for completion of the registration process at the offices of Sub-Registrar
• The process was not fully transparent and involved various middlemen dealing in land related issues
• The analysis of the transactions for any decision-making was difficult.
• There was scope for wrong valuation.
• Wastage of paper and money on photocopies of the documents.
• Difficult to find the transaction history of a property due to increased number of transaction after the economic reform of 90’s. Manual system was not able to cope up with such higher number of records.
• Takes a lot of time to search and possibility of missing some transactions were there.
With the advent of the new user-friendly technology and policy reforms by the government, all the problems faced using the manual mode gave way to the first computerized application called as SARITA (Stamp And Registration Information Technology Application) under the leadership of Dr. Nitin Kareer, IGR in 2000, who could think of implementing the project at the right time as the entire country was undergoing technological transformation. During this period, SARITA was rolled out as a standalone computer based application at every Sub Registrar’s office in the state of Maharashtra.

PPP as a business model was introduced in the Department Of Registration and Stamps for the first time in the year 2002 with the roll out of SARITA project. The PPP were appointed on BOT basis through tendering process to provide hardware, manpower and consumable support for 5 years while the application software was developed by CDAC.

During the implementation of the SARITA project, the department realized the importance of further developments in Information Communication Technology space (ICT), and going forward launched SARITA 2 and SARITA 3 in few offices as a pilot project. A need for a better application that could use the technology to the already computerized but stand -alone department activities to a centralized, real time web based one was thought of as the future for the department. This technological up gradation led to the web based application of i-SARITA in 2012. While introducing this new system the vision and mission of the department has remained same leading to the objectives of efficient and effective services to the citizens, but the modalities of achieving these objectives have changed with the implementation of i-SARITA.

The leadership as IGR (Inspector General Of Registration) during the process of transformation from manual to i-SARITA:

- Dr. Nitin Kareer-2000-2004, during his tenure has introduced for the first time computerization in the dept. called the project as “SARITA”.
- Mr. Gupta – 2004-2007, helped in maintaining and sustaining the project
- Mr. Shingare -2007-2010, during his tenure he has introduced e Stepin a value added service to the existing SARITA
- Mr. S.Chockalingam -2010 till date has improved upon the project manifold and made it a centralized one.
FIGURE-1 Organization chart.

Project overview:

Starting in 2002 from where it has undergone notable developmental stages in administration, technological advancement and implementation of change, the “Department of Registration and Stamps” in the State of Maharashtra has adopted e-Governance in a big way. During its progressive journey it has come up with a technology driven application and named it i-SARITA as its e-governance initiative with various other innovative offerings to make it more citizen friendly and also to reduce the administrative burden on its employees.

i-SARITA started in the year 2012 with a new well-connected network to centralize the whole administration and implementation of the registration process. i-SARITA is a web-based application developed by NIC which connects the 480 Sub Registrar offices in the State of Maharashtra. It is a step forward from mere computerization of data to complete digitization of registration process. Wherein all the data collected during registration process at any Sub Registrar office is saved to the central server.
**FIGURE-2-**Development Stages: Department Of Registration and Stamps, Govt. of Maharashtra.

Source: DIT Maharashtra Website

**i-SARITA was implemented with the objectives of providing:**

- Centralized data collection for better analysis and other administrative offices decision making
- Completing the registration process in 20 minutes or less.
- Centralized e-Storage of data
- Online payment of the stamp duty and registration fees
- Online valuation of property
- Providing transactional history of the property at the click of the button to prevent frauds.
- Increased transparency.
- Empowering citizen by providing data entry into govt records by citizen.
- Having a negative list to prevent public lands being transacted without govt permission
- Possibility of identity verification thru UID
Tie up with land records for accurate data transfer and protection of rights.

The project aimed to provide transparent, cost effective and efficient service to the citizen. This is being realized through integration of various e-services like:

- **Public Data Dntry**-online data entry
- **e-Stepin**- online time slot booking system
- **e-Payment**- online payment of stamp duty and registration fees

For better administrative control and ease of implementation of i-SARITA, the State of Maharashtra has been divided into 5 work divisions i.e. Pune, Mumbai, Thane, Nashik & Nagpur. The development of software was by NIC, Pune. Department purchased hardware through DGS&D & DIT, GoM rate contracts. Provision of manpower, consumables and MPLS VPN connectivity is to be provided by PPP. The tendering process organized in the year 2011 resulted in award of contract to two PPP vendors namely M/s Consortium led by SM Computers and M/s. Vakrangee Software Limited. Both the vendors initially chose M/s Tulip as the service provider for providing VPN connectivity for the whole project, but presently the connectivity is being provided by BSNL. The department has also established a Project Management Unit with the help of consultants and with their own staff.

i-SARITA is highly IT enabled with online public data entry system and online payment of stamp duty with features like Help Desk, Call Centre and Control Centers for providing better services to the citizens. The project i-SARITA was rolled out on 12th July 2012. The project went through a lot of teething troubles with respect to connectivity for the offices. The vendors were supposed to provide connectivity within a time span of 8 weeks as mentioned in RFP. As far as hardware is concerned, common hardware at the SDC was used to start with, but that was replaced by Department’s own new and better-configured hardware that helped in improving the whole system of i-SARITA.

**Stakeholders**

The following are the Stakeholders of the i-SARITA project:

- Citizens
- The employees of the Department Of Registration And Stamp
- PPP vendor.
- National Informatics Centre
- Finance Dept (Government Receipt and Accounting System)

The envisaged objectives aim to serve these stakeholders better.
Government Process Re-engineering (GPR)

While transforming from manual way of working to SARITA and to present i-SARITA some rudimentary GPR was done for achieving the best results in the new system. The process was aimed to be more citizen centric, transparent and fast.

GPR in i-SARITA

Since the department is guided by subordinate legislation and statutory guidelines, the processes could not be re-engineered. Hence, it was thought of enabling IT to achieve the objectives through the following add on features:

- **Public data entry system**: Data entry was the most time consuming and error prone activity in the process. So Department re-engineered this activity into Public Data Entry module, enabling the citizens to enter and control their data fully. This avoids unnecessary rework at Sub Registrar’s office.

- Introducing e-Stepin allows the citizen to book the appointment at the Sub Registrar office online to reduce waiting time during registration. Otherwise, the citizen would have to go to Sub-Registrar’s office and wait in office which would take anywhere between 1 hour to 5 hours depending on day and time of business.

- Mandatory collection of photocopies of documents during registration process has been replaced with the scanned copies of the original documents. Thus reducing the consumption of paper and reducing expenses during registration.

- Use **e-Stepin, e-Payment, public data entry** for the registration process has accelerated the process.

- Citizens are given thumbnail print of their documents and also a soft copy on the CD for easy storage & quick reference of document in future.

- The registration process has to be completed within the office working hours, as the system does not take any entry after office hours. This feature has helped to curb any kind of dubious activities that might happen at the Sub Registrar Office.

- The documents were printed on one side of the paper to facilitate scanning using flat bed scanners during earlier SARITA project which was also time consuming. In i-SARITA, duplex ADF scanner was introduced which could scan back-to-back and this helped in reducing the time of scanning.
FIGURE-3- Registration Process

<table>
<thead>
<tr>
<th>Registration process started</th>
<th>Valuation scrutiny</th>
<th>Technical scrutiny</th>
<th>Check on support document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collect fees &amp; issue receipt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admission, Identification, Registration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scan &amp; Archival</td>
<td>Return of Original Document (thumbnail printout &amp; mini cd)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Dept of Registration and Stamps

**Business Model components of i-SARITA and PPP**

The following are the major components

1. Procurement of additional IT infrastructure to meet the SLA’s
2. Management of maintenance of IT infrastructure including provision of consumables like paper for printing, CD’s etc.
3. Manpower at Sub Registrar office for doing data entry & other clerical work
4. Setting up of MPLS VPN
5. Project Management of i-SARITA

The bid process towards the selection of PPP for i-SARITA was executed in the year 2011 and ended with selection of two vendors. The two vendors were for various work divisions:

**M/s. SM CONSORTIUM limited** for Mumbai, Pune, Thane and Nashik

**M/s. VAKRANGE SOFTWARE LIMITED** for Nagpur

These vendors were appointed to be a part of i-SARITA and help achieve the goal of better service delivery to the citizen. The selection was based on technical vetting first followed by fully financial (L1) model. Commercial was based on charges per document. The scope of work of the PPP vendors was changed from that during the SARITA to i-SARITA. The present
scope did not have supply of hardware but included giving CD of the scanned documents, thumbnail prints of the scanned documents, supply of manpower like data entry operators, maintenance engineers and managers for:

- Proper monitoring of work
- Maintenance of hardware and provision of consumables
- For carrying out the analysis of work done by the BOT manpower at Sub Registrar and DIGR levels.

The vendors were supposed to provide connectivity and both the vendors have chosen M/s Tulip as their service provider for providing connectivity for the whole project. Later M/s Tulip was replaced with BSNL as the earlier TSP was failing financially. Other reason for failure seems that acceptance the work at a low cost was found not viable for M/s. TULIP to carryout the task in hand. They were laying the cables over ground that is not an acceptable practice. Most of the time the authorities removed the cables, as they were not authorized leading to disruption of services. There would always be certain pitfalls when a project is of this size is handled, in terms of dealing with sub partners and other vendors as their SLA’s and issues affect the running of the project. In this project the vendor- sub partner of PPP was chosen basically on financial reasons who did not have the wherewithal to carryout the project as per expected requirement.

**Capacity Building and Change Management**

During the implementation of earlier SARITA project, an awareness generation campaign was conducted to motivate the employees towards the computerization of the registration process. Also, the leadership has thought of carrying out series of workshops and application trainings to all the concerned officers to handle the standalone Project. The data on the number of workshops conducted for SARITA was not available. With the launch of i-SARITA the employees were aware about the ongoing change since they are already familiar with the earlier project. Capacity building was done by conducting workshops and training for the Sub Registrars and Joint District Registrars (JDR) across the State focussing on application and its usage and user manuals were distributed for ready reference. Awareness was created amongst the citizens, advocates and builders through brochures, advertisements and seminars.

The following are the capacity building initiatives of the Dept.
1. Training on e-Stamping, e-StepIn and Valuation- 31 Jan 2010 – Approx. 50 officials attended
2. Masters training program - 17 July 2010 at NIC Pune - 16 officials attended
4. Banker's meet to discuss e-payment on 24 Jan 2013
5. Workshop on e-filing - 9th April 2013
6. Workshop on eSBTR - 26th April 2013 - for Bank officials
7. Workshop for banks, advocates and common citizen - 31st October 2013 on Sub-Agent to eSBTR
8. Training for SRs and JDRs in November 2013 on e-gov initiatives of the Department
9. Training for JDRs from 13th Jan 2014 to 17th Jan 2014 on various e-gov initiatives of Department.

Use of ICT

The project utilized the ICT for storage, retrieval, transmission or receipt of digital data. During the earlier SARITA project, the traditional computer-based technology was implemented as a standalone system at each Sub Registrar office whereas i-SARITA project uses improved digital communication technology with a web based solution. It has a 3-tier web based centralized application and web servers. It uses Postgre SQL 8.4 open source database. Network Connectivity is MPLS VPN (secured pipeline connectivity) with 2Mbps bandwidth through which more than 520 offices (including Admin offices) of department are connected. Initially the infrastructure was shared, but now Department of Registration and Stamps in the State of Maharashtra has purchased 9 physical servers virtualized them into 15 (Physical 5 + 10 virtual) servers located at the SDC, Mumbai. This department has a Near Disaster Recovery site at Mumbai and DR site is at Pune.
Role of leadership

The first seed to be sown to make the department IT friendly and to bear the fruits of technology was by then IGR Dr. Nitin Kareer, in the year 2002 when SARITA was born. This was the time where all activities pertaining to introduction of e-Governance in the country was happening. Taking the cue to be future ready and flow with the tide, the leadership took the decision to bring in technology led reforms in the department. While much of understanding on future of technology, evolution e-Governance concept was not available/understood at that time, still SARITA made good progress.

The present incumbent Mr. S. Chockalingam, IGR since 2010, worked on the existing model and took it to the next level. Lot of understanding on evolution of e-Governance concepts and clarity in thinking coupled with technology advancements has certainly bettered the model as he implemented i-SARITA. Since, the development from stand alone to web based thinking has come much later after many other Govt. depts. have created a better web based front end and over a period of time and the learning’s from various projects were well understood by the year 2010 year. The leader having trained himself into e Governance
understanding and it’s thought process set an example by converting thoughts into implementation.

- **Help people to get information at the click of button** - *Creation of centralized database*

- **Provide power into the hands of citizen** - *for Integrity of data and documents scanned*

- **Provide a mechanism to the citizen to search the data related to transactions** - *Creation of e-Search also allows download of documents*

- **This in fact led to reduction in turn over time at offices**

- **Usage of less paper in the offices** - *leading to less storage space*

- Introduction of UID integration for authentication as well as for fetching demographic details

- **Creation of NDR for hassle free transactions**

- Integration with the e-Payment gateway of State of Maharashtra

- Payment verification has become part and parcel of automatic verification process

Above all the one great aspect of the present leadership had been listening to the problems of the department and having the conviction to convert the problems and issues into an implementable model. Public Data Entry (PDE) is an example of converting issues into advantages. PDE was introduced with the aim of reducing load on the servers during officer hours. It helped in empowering the citizens and in reducing the turnover time for transactions in office.

**Outcomes and Benefits**

i-SARITA project has come out as one of the most successful e-Governance project of Government of Maharashtra. Department Of Registration and Stamps has shown consistent growth from manual to computerized to web enabled e-services. This success of i-SARITA is the outcome of proper formulation and implementation of IT, linked to policy reforms. Various diagrams in the annexure support this.

**e-Services in i-SARITA:**

**Public data entry:** * Expedite Registration Through Online Data Entry*

The following are the features:
• Entering of data by the stakeholders related to registration of document before visiting the Sub Registrar office

• The data can be entered online from home, office, cyber café at anytime

• The data can be entered both in English and Marathi

• The data entered is presumed to be more authentic and correct since the parties themselves enter and later crosschecked and validated at Sub registrar’ office.

**FIGURE 5-Registration using Public Data Entry**

![Flowchart of Registration Process]

Source: Dept of Registration and Stamps

**e-Stepin – Online time slot booking**

The following are the salient features where in a citizen can carryout:

• This facility has started from 2009

• Book online a time slot for registration at the sub registrar’ office

• Upper limit for booking is 30 days and lower limit is 2 days

• Currently any time slot during the first three working hours can be booked with initial one and half hours reserved for e-Payment

• A token is generated after booking

• It can be done only after the public data entry code has been generated

• Rebooking is possible if earlier booked slot has not been utilized

• Maximum 2 bookings are allowed daily for an individual

**e-Payment – anywhere anytime payment of stamp duty and registration fees**

The following are the salient features where in a citizen can carryout:

• Payments are made through Government Receipt Accounting System (GRAS)
- The payment can also be done using online payment through internet banking and debit cards

- The payment can be made across the counter (ATC) payment at designated bank branches. Presently the following Banks are providing SBI, IDBI and Bank of Maharashtra. This is done taking into consideration the peculiarities of Indian Society where most of the people do not use Internet banking. But, at the same time Government processes would be simpler through e-Payment

- e-Challan generated using GRAS will be recognized at the sub registrar offices as a mode of payment.

- It is a safe, secure, accurate and easy mode of payment

- Payment without any ceiling can also be made

**FIGURE 6-e-Payment AT I-SARITA**

<table>
<thead>
<tr>
<th>Visit GRAS</th>
<th>Prepare Challan</th>
<th>Choose Mode of Payment</th>
<th>Take printout of Draft Challan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate e-Challan</td>
<td>Make Payment</td>
<td>Generate e-Challan</td>
<td>Take printout of Draft Challan</td>
</tr>
</tbody>
</table>

Source: Dept. of Registrations and Stamps

**Troubleshoot and Support**

**Call Center:**

Since i-SARITA aims at digitization of the registration process through the web-based application, there were problems like network disruption, hardware failure, software corruptions. These problems need to be resolved promptly to prevent the whole system from crashing and disruption. For the project i-SARITA to take care of all such issues faced by the department employees, a provision for call centre had been established and is located at the IGR office Pune. This call centre is supposed to be manned with a data entry operators (DEO) provided by the PPP, who co-ordinates with various vendors for the
problem resolution. This call centre also controls the various control centers located at every JDR office (located at District offices). These control centers are manned with an engineer and a manager to look after and resolve various technical and administrative problems respectively. The PPP vendor is responsible for ensuring the manpower and maintenance of these control centers and Call Centre. As of now the department officials with 3 technical hands from NIC are operating the call center. The call center operates from 0930 hrs till 1800hrs daily. On an average this center receives 50 calls a day basically dealing with system based queries which got reduced to around 25 presently. This call centre provides solutions at application level and is not linked as of now to handle SDC related issues and near DR site issues.

**Helpdesk:**

To make the system more citizen centric the project has an option of help desk for the citizen problem solving, an in house mechanism. This help desk is a central point located at the IGR office in Pune. It is manned with a data entry operator provided by the PPP vendor. This is operational and at present and looks after e Payment related issues only.

**Employee control system and vendor management system:**

Dashboards are developed in the web-based i-SARITA project. These dashboards are control tools that help in continuous monitoring of the activities of all Sub Registrar offices in the State at a click of a button. The activities like opening and closing of office, attendance of employees (using bio-metric devices), the registration of documents, scanning of documents with the time details can be monitored and administered by the IGR through his office.

The system also generates daily reports on various activities. Thus helping to control any non-compliance immediately.
Further screen shots and graphs are placed at Annexure-1 to this document

Project benefits

- Centralization of the back-office management of the department.
- Synchronization of the back office and front office management using ICT.
- Transparent process of registration and stamp duty collection
- Reduced time and convenience of registration to the citizen
- Better data representation of data for analysis, decision making for both the department heads and for the citizens.
- Presently the registration time has been reduced to 1 hr (envisaged-20 mins) from days.
- More authentic recording of the data through public data entry.
- Reduced consumption of paper due to the thumbnail printing in ¼ page format
- More secured data on the server
- More work per man-hour /day.
- Better employee and vendor management across the department
• Any change and amendments in the rules and regulations can be immediately updated on the web and circulated easily throughout all the Sub-Registrar offices. This information can be sent through SMS to every office through this application.

All these e-services have made the Department Of Registration And Stamp transparent and more efficient.

**Issues and Challenges**

In the process of implementation of i-SARITA project, the department has undergone a transformation from simple stand-alone computer application to web based application. This transformation involved various issues and challenges like:

(i) **Delay in the connectivity of the offices:** Both the PPP vendors chose to work with M/s Tulip for network connectivity.

The vendors were supposed to appoint a sub vendor or partner and get the connectivity through a service provider for i-SARITA within 8 weeks of the work order. The clause of penalty was added in the work order in case of non-completion of connectivity within 24 weeks. After which the termination clause would be invoked/s. Vakrangee software limited could abide by the contract and complete its work of providing connectivity within the allotted 24 weeks but there was non-compliance on the part of M/S .SMC consortium. The department invoked the clause of termination due to non-compliance, and terminated the contract. Of M/s SM consortium went to court and the matter are subjudice. This resulted in with non-availability of connectivity to the department for a while. Presently the Consortium is providing services.

(ii) **Network disruptions**

During the initial days of i-SARITA there were many network disruption problems. The connectivity provided was not of the bandwidth specified in the work order and also of poor quality that led to no network from 3-4hrs per day to 8hrs per day. It was also observed that there was no connectivity in some offices for days together. In many of the taluka places the connectivity was very poor initially, which caused lot of problems in implementation. This problem has been comparatively reduced from Jul 2013 and the system is moving ahead smoothly. Some of the reasons for such disruptions are:

- Selection of wrong partner
- Unable to handle the partner
• Trying to take shelter under the language used in the contract (taking advantage of interpreting the contract in different way than it should be)

(iii) Less manpower to meet the requirement

There is a specific number of manpower to be provided at each Sub-Registrar office, IGR office- Pune, Control Centers, Call Centre and Help Desk as specified in the RFP. There is a non-compliance on part of the PPP vendor and the manpower is either less than the required number or yet to be in place. This defeats the idea of effective and efficient system. Whenever there is an increase in workload at Sub Registrar’s office, the manpower of PPP is not sufficient to meet the requirement, though the clause of increase as per requirement is mentioned in the contract the PPP is unable to provide and office work suffers.

Hardware that was initially supplied by the PPP vendors during SARITA that was 10 year old, life was over and not fit to be used. They were lying at concerned SRO’s as full data from them are yet to copied to central servers. The department purchased its own hardware for i-SARITA.

(iv) Software application related issues

NIC has developed the software application, approved and tested in house but had teething troubles during the real-time application deployment. But the system had stabilized soon and working fine.

(v) Preservation of data

Department of Registration and Stamps was able to reduce the number of pages used to preserve the registration documents but has not been able to complete do away with it.

In i-SARITA all the documents are scanned stored in the central server, though this has helped department in physical storage space concern for security of this is prevalent. There is an apprehension about data loss due corruption of software or incompatibility of the system due to future technological developments. Therefore, still the system of preservation of all the documents in hardcopies is prevalent in spite of digitization.

(vi) Consumables

PPP is not supplying genuine toners, right quality of paper, providing regular size CD instead of mini CD are few issues that are still plaguing the department.
Actions taken by the IGR against issues and challenges:

- The contract of M/s. SMC consortium was terminated after the 24 weeks period on the basis of non-compliance and dissatisfactory work performance in terms of delay in work, poor performance in terms of connectivity, not providing the CD and the thumbnail prints of the scanned documents to the citizens.

- Regarding network disruptions, most of the issues were ironed out slowly and as of now large disruptions are not noticed and about 95% offices are running smoothly. Disruptions are almost nil wherever new TSP has provided connectivity.

- The issue of replacing original consumables by the PPP is still there and this is a bottleneck the department is facing.

- Data entry by the public and MKCLIs encouraged. Department had entered into an agreement with M/s. MKCL to provide data entry help to citizens by charging the citizens some money. This agency charges citizen for the data entry per document, the department fixes the rates. This facility is not much used by the citizens. PDE has become more popular.

Key Lessons

- Choosing a model for implementation is the prime task. Certain amount of Risk should be taken while choosing the model.

- Capacity building is good and should be done but expecting that the employees would take over completely from the PPP and run a project is difficult.

- Choosing a correct ISP/PPP is very necessary and if need be maximum time to be spent

- We need to question ourselves as to how much are we relying on the PPP and are we conscious about our sovereign work.

- Making the staff understand the meanings of technical terminology is very important else they would come up with answers like server down/ Application is down for any disruptions.

- Every govt. department should look for solutions to deal with citizens directly and carry out such project.

- The department offices were renovated along side the project that gave a feel good factor for the employees. Make sure that some attention is paid to the environment in which our offices look.
Key Success Factors

- Automated process of calculation of Stamp Duty and Registration fees.
- Facility of online payment by citizens and verification of payment by Sub-Registrars.
- Empowerment to registrants to search previous transactions, and control their data.
- Centralized monitoring and informed decision-making through dashboard.
- Public awareness campaign through newspaper advertisements and brochures.
**Methodology**

The methodology adopted for creating this case study involved extensive interviews with departmental heads including IGR himself. This case study has been developed using Qualitative research and observatory research. The research aimed at understanding of the e-Governance project, i-SARITA by the Department Of Registration And Stamps, Government of Maharashtra. The data collection for the case study was done using survey method where in the interviews were done using a structured questionnaire among the employees at various sub registrar offices at Pune and the public users (citizens). This survey was followed up with analyzing the challenges and issues that were observed while writing the case and also how effectively the project was providing the services to the citizens. The follow up interviews were organized with the heads of various departments and the Inspector General Of Registration (IGR), Maharashtra for validation of the data collected.

Administering a questionnaire through email and getting the information. Meeting the various stakeholders and ascertain the factual information. Through secondary data that was available and also from various pamphlets and brochures created by the department.

**References**

- Various presentations of the department
- Department web site: [www.igrmaharashtra.gov.in](http://www.igrmaharashtra.gov.in)
- Publicity material for promotion and awareness created by the department

**Details of the Authors**

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Way forward for the department

The following projects have been envisaged as way forward by the department.

e-Search – online property transactions search report:

It is a standalone project not a part of i-SARITA that started with digitization of 10 yr old data and scope was expanded to 25 years, this was kick started by the department with the help of NIC. The data is in form of images of the documents for the years 1988 to 2001 and there is digitized data and images of documents from 2002 onwards with the department.

- Property wise or Document wise search
- Search 24 * 7 hrs available
- Citizen can search online from any convenient place by paying fees online (right now freely available)
- No Need to visit multiple offices
- Citizen’s visits minimized reducing rush in SRO
- Search of Index-II of already registered document available

![eSearch](image)

e-Registration

The Department Of Registration and Stamps of Maharashtra has a vision of implementing e-Registration for complete transparency and high efficiency. In this system of e-Registration the citizens can prepare their documents online, make necessary payment online, and
submit the document for registration. The department shall register the document and send the registered document electronically.

For citizen’s registering themselves without assistance of appointed agencies, the minimum requirement is - Web Camera, Fingerprint reader and Class III Digital Signature, of all parties [including witnesses and identifiers (optional)]

- **Vision - Registration anytime anywhere**
- **Pilot model with Leave & License type of document**
- **First to form Legal framework for e-**

This is a third party model which is not being persued as of now.

**e-Filing**

This is a system through which the citizens can file their documents for guarantee through the banks in case of mortgage, using UID as the proof of identity.

**GOING FURTHER**

Prevention of frauds- Gives information about the authenticity of the property.

Providing alerts between search and registration

Creation of a database where in identifying of a persons property based on previous transactions of the same person using biometric finger print and photographic matching.

**Annexure-1-** Refers to various dashboards used to monitor the dept

Report on documents Registered
Graph of documents registered in a day

Report on documents Registered – SR wise
Revenue Collection Report

Revenue Collection – SRO wise
Report on Offices open before 9:30

Report on open offices in a day
Report on Offices closed before 5:30

Report on Documents Pending for Scanning
Report on Documents Pending for Registration