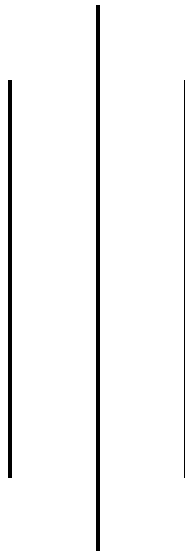




(Affiliated to Tribhuvan University)

**A Case Study Report on E-governance**

**Report on: Computer-Aided Administration of Registration Department  
(CARD)**



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## **Introduction:**

CARD (Computer-aided Administration of Registration Department) is designed to eliminate the maladies affecting the conventional registration system by introducing electronic delivery of all registration services. [1]

CARD (Computer-aided Administration of Registration Department) project was originally conceived in August 1996 and implemented at two test sites at Registrar Office, Hyderabad and Benefits and Costs Sub Registrar Office, Banjara Hills in August/September 1997. Judging the project by its initial success and the immense potential it has in transforming the concept of public service, the Six months following the Government decided to replicate it all over the State.

The CARD project aimed at the complete computerization of the land registration process the time required for AP. The case highlights the problems faced by the citizens of AP before the implementation of registered documents CARD. The CARD Project provides a transparent method of valuation of properties and ECs are now issued calculation of stamp duties, simplified the registration procedures, enhanced speed, reliability, and consistency of the system. It reduced delays by replacing the manual systems of copy hours, whereas earlier indexing and accounting. Retrieval of the documents and obtaining copies is made instantaneous. The overall effect is a smooth public interface. A highly complex but friendly CARD Software was developed by the team of National Informatics Centre generated a modest in Hyderabad. The required hardware for the implementation of the CARD Project has been through A.P. Technology Services Limited, Hyderabad.

## **Previous Situation:**

Computer-aided Administration of Registration Department (CARD) project has brought about computerized counters at land registration offices throughout Andhra Pradesh. The project aimed at altering the antiquated procedures that had governed the registration system of the state, which included the laborious copying, and indexing of documents as well as their unscientific space-consuming preservation in ill-maintained backrooms. The state had a flourishing business of brokers and middlemen who exploited citizens selling or buying property. The CARD project is an attempt to reform this system through the use of IT. With the introduction of CARD, citizens now complete registration formalities within a few hours. The CARD project illustrates some of the key implementation issues the state and national governments may face in their efforts to use IT to improve citizen-government interfaces and serves as a best practice to be replicated by them.

The manual system in all the activities caused long delays, red-tape and corrupt practices. The project aimed at altering the antiquated procedures that had governed the registration system of the state, which included the laborious copying, and indexing of documents as well as their unscientific space consuming preservation in ill-maintained backrooms. The CARD project is an attempt to reform this system.

The CARD project aims at providing improved quality of services at the registration department by providing a computer interface between citizens and government. The tedious procedures that took weeks have been replaced by a system that can be accomplished in just a few minutes. The market value assistance and issue of the Encumbrance Certificate (EC)

takes five minutes each. The sale of stamp papers, document writing and registration of the documents takes ten minutes, thirty minutes and one hour respectively.

## **The New Approach:**

CARD is a catchy name given to the comprehensive project of computerizing one of the oldest wings of the Government namely, "The Registration and Stamps Department". The project was originally conceived in August 1996 and implemented at two test sites in August /September, 1997. Judging the project by its initial success and the immense potential it has in transforming the concept of public service, the Government decided to replicate it all over the state. Thus, began an intensive and dedicated effort which is now the watchword of the Department...CARD.

The Registration Department of the Government of Andhra Pradesh performs the function of registration of deeds, valuation of immovable property, collection of revenue (stamp duty and registration fee), preservation of copies of documents, issuance of certified copies of documents, issue of encumbrance certificates and registration of societies, firms, marriages etc. The department has 387 Sub Registrar Offices (SRO) in 23 districts of Andhra Pradesh. The gross revenue earned by the department is Rs. 12 billion. The Computer-aided Administration of Registration Department (CARD) project was conceptualized to computerize all the activities and procedures of the Registration Department. A pilot was conducted at two SROs in August-September, 1997. The project was started on 4th November, 1998. Presently, the project covers the whole state of Andhra Pradesh.

### ***Goals of the Reform***

- To simplify the registration procedure.
- To enhance the speed, reliability and consistency of the system.
- To provide transparency in valuation.
- To replace copying/filing systems with imaging.
- To preserve documents on CDs.
- To automate all back-office functions.
- To enable a system that enables setting time and quality standards.
- To smoothen the government-citizen interface.

## **Implementation Strategies:**

### **Planning**

After the success of the two pilots, the project was scaled up in two phases. In the year 2000, the first phase was extended to 181 SROs. In the year 2001, the second phase was extended to 249 SROs. By the time of the study, all 387 SROs were covered under the CARD project.

### **Services Provided**

All the services of the Registration Department are provided to citizens in a short period for nominal user charges. The most popular services are registration of deeds, issue of encumbrance certificates and market value searches. Prevalent user charges are: Rs 95 for

registration of documents (maximum of 10 pages with Rs 5 for every additional page), Rs 10 for motor vehicle (MV) search certificates, Rs 20 for encumbrance certificates and Rs 20 for certified copies of the documents.

### ***Anywhere Registration***

- Under Anywhere Registration, the general public have the option of getting their document registered at the Sub-Registrar office of their choice (or) at any Sub-Registrar office near to them.
- Under Anywhere Registration of the 13 Revenue Districts in the State of Andhra Pradesh, 12 Revenue Districts are treated as one Registration District and the District of Srikakulam as one Registration District.
- This brings in transparency and reliability in the services delivered.
- Helps in improving services at uniform scale across all Sub-Registrar offices.

### ***Aadhar Integration***

- For the identification of registering public the Aadhar number is used as the Unique ID, where in the Aadhar data is used in compliance of Aadhar act and IT act.
- In case of NRIs' who doesn't have Aadhar No. the Pass Port No. is used at the time of Registration.
- With Aadhar integration the cases of impersonation and false personating could be avoided.
- Integration of the individual details with PAN data has been done.

### ***Integration with Web Land data of Revenue department***

- At the time of Registration of Agricultural properties, the verification of the ownership details of the executants is done with the Web land data of Revenue department.
- This ensures compliance with the ROR Act, of the Revenue department.
- It helps in curtailing double registrations and fraud registrations pertaining to agricultural properties.
- It simplifies mutation of agricultural properties.

### ***Verification of Urban Local Bodies Data before Registration***

- The Urban Local Bodies data (Linked with assessment No. of the property) is made available to Sub-Registrar offices to cross check the names of the transferor and property details.
- This simplifies the mutation of properties to be carried out by the Municipal Administration department.
- This helps in ensuring house Tax compliance for the Municipal Administration department.

### ***Online Registration/ Online Payments***

- Under the option of “prepare your own document” provided in the Registration and Stamps department web site, the individual can prepare his own document, make online payments of the statutory fees and book a slot for getting his document registered.
- This gives the individual option of getting his document registered at a specified time and reduces the time to be spent at Sub-Registrar office.

### ***Online Registration of Firms and Societies***

- The manual registration of Firms and Societies has been dispensed off.
- The individuals can apply for Online registration directly or through the Mee-Seva centers.
- The individual can also obtain the certified copies by making the payment online.

### ***Web Services provided in the Department web site***

- Digitally available encumbrance data and certified copies of documents are being provided online free of cost from 01-01-2018.
- Duty fee calculator which provides for the amount of Stamp Duty, Registration Fee, Transfer Duty, etc., to be paid.
- Market Values of the properties.
- Prohibited properties.
- Find your Sub-Registrar office, etc.

### ***Insertion of New section 22-B in the Registration Act, 1908***

- Apart from section 22-A of the Registration Act, applicable to the State of Andhra Pradesh, which deals with Registration of Prohibited properties.
- A new section 22-B was added which deals with “Non-acceptance of Registration of document regarding the property already conveyed by a registered document by the same person”.
- It prohibits the registering officer from accepting of any document for registration relating to sale of any immovable property, if the property has been already conveyed or permanently alienated.

### ***Target Group and Intended Beneficiaries***

The intended beneficiaries are all the citizens who want to register their deeds, get a valuation of their immovable property, certified copies of documents, encumbrance certificates and to register societies, firms, marriages, etc.

### ***Institutional Arrangements***

The Inspector General of Registration and Stamps heads the project, supported by the Technical Director (of the National Information Centre or NIC), Chief Information Officer and Deputy Inspector General. Each District Registrar is responsible for the functioning of CARD in the SROs under the district. One official from each DRO, at the rank of a senior clerk, takes up the task of DPO for two to five SROs, after intensive training. Each SRO has at least two Data Entry Operators (one clerk and one section writer). All the hardware and

maintenance of the LAN is handled by WIPRO, a private IT company, which has been awarded a maintenance contract for five years. All the software upgrades are done by the NIC.

## **Technologies**

The project works on a LAN. On every 387 SRO CARD office centres there is provision for one server and four computers (three for B category SRO centres, two for C, D, E category SRO centres and one for F category centres). Each centre is provided with a scanner, a laser printer, a dot matrix printer and a UPS. The server uses Linux Operating System along with Oracle 8i for databases. The client end uses Developer 2000 whereas the front end is Window 98/95 Operating System as well as Window, 98 for Scanning. The uptime of the system is more than 98 percent, owing to the effective maintenance contract. Each district office is linked through a network, through dial-up connectivity to the Inspector General of Registration and Stamps office server. The software takes care of security through a username and password and also maintains an audit for all activities. Automatic backup of documents operates at client end and at server end.

## **Primary Access Points**

Primary access points for the citizens are the 387 SROs in the state.

## **Capacity Building**

The project is implemented and managed by in-house staff. There are two clerks in all SROs. In all, 1,400 clerks/section writers have been given two-week training to take up the job of Data Entry Operators; 76 senior clerks have been given 10-week training to take up the job of Data Processing Operator job; 67 Assistant District Registrars have been given three-week training; and 40 District Registrars have been given one-week training. Roughly, 3,811 man weeks (76 man years) of training have been imparted so far. Technical staff has also been given training on the CARD software. User manuals on CARD and the imaging software have also been issued.

Some legislation such as the Registration and Stamps Act, Urban Land Ceiling Act, Surplus Agriculture Land Act, Endowment Property Act, and the Property Act needed a change to accommodate the new procedure. The Government of Andhra Pradesh issued a governmental circular to provide the legal sanction for the scanned documents. All the registered documents and deeds of the previous 13 years had to be coded and digitized to ensure encumbrance certificates were valid. The properties change names, type, size and utility over time and there are discrepancies in different departmental documents. The codification of all the property types was a huge task. Similarly, guidelines for the costs of the land and buildings as well as for the different purposes and areas covered had to be digitized. The guidelines for the market rates for Municipal Corporation, Municipality, other urban areas, major Gram Panchayats, minor Gram Panchayats, and Cantonment Board were decided differently for 80 land types (such as residential, commercial, industrial, agriculture, dry land etc).

The Registration Act of 1908, which is a legislation of the Union of India does not provide for handling the registration process on computers. The Registration Act, 1908, in its application to the state of Andhra Pradesh, has been amended to provide for the following:

- The process of registration of any category of documents may be completed and copying done with the help of electronic devices like computers, scanners and CDs and copies preserved and retrieved when required.
- Copies of documents registered and stored electronically, retrieved, printed and certified by the sub-registrar shall be received as evidence.
- The software to be used for registration shall be prescribed by the Inspector General.

It took over a year for the amendment to become effective across the state. It is essential to recognize that the respective states have to make concerted efforts to put the enablers in position to ensure successful replication within a limited time frame. Finally, the elimination of human interface would lead to removal of speed money, which is rampant in the manual system.

The documents and deeds registered since 1983 has already been scanned and stored in a CD format. The problem of shifting from the manual system to the new system was solved by computerizing all processes and procedures required at all the steps from acknowledgement of receipt to issue of registered document. More than 5,000 government staff was trained in the new system. Maintenance of hardware, especially in remote rural areas, was arranged for by signing a maintenance contract with WIPRO. Power cuts of more than 12 hours were mitigated by installing UPSs at all the offices.

The project has increased the speed of registering property and producing related documents. Previously, citizens had to wait for three to seven days to obtain encumbrance certificates. After the CARD system was implemented, they received such certificates in just 10 minutes. Similarly, certified copies of the documents were issued after seven days, while through CARD; citizens can now get them in only 15 minutes. The time taken to register a deed or a document has been reduced from three to seven days to one day. The CARD project registers 1.18 million documents and serves 5 million citizens in a year. Since the inception of the project, 4 million documents have been registered, 2.16 million encumbrance certificates have been issued, 3.73 million registration check slips have been issued, and 75,907 certified copies have been provided to the public.

All the services of the Registration Department are provided to citizens in a short period for nominal user charges. The most popular services are registration of deeds, issue of encumbrance certificates and market value searches. Prevalent user charges are: Rs 95 for registration of documents (maximum of 10 pages with Rs 5 for every additional page), Rs 10 for motor vehicle (MV) search certificates, Rs 20 for encumbrance certificates and Rs 20 for certified copies of the documents.

The intended beneficiaries are all the citizens who want to register their deeds, get a valuation of their immovable property, certified copies of documents, encumbrance certificates and to register societies, firms, marriages, etc. [2]

### ***Quantitative Benefits of CARD***

Description of registration services	Time taken in manual services	Time taken in CARD system
Encumbrance Certificate	1 to 5 days	10 minutes
Valuation of properties	1 hour	10 minutes
Sale of stamp paper	30 minutes	10 minutes
Document writing	1 day	30 minutes
Registration	1 to 7 days	1 hour
Certified copies of documents(registration under CARD)	1 to 3 days	10 minutes

*Source :Based on CARD*

### **Achievements/Results:**

The project has been successfully implemented state-wide at a minimum cost. It shows that e-government solutions can be implemented in a span of three to four years, even with innumerable complications and procedures. The project also proves the hypothesis that e-government could be implemented by just training the existing staff, without adding new technical staff. Another lesson is that in the absence of PPP, public finances can be mobilized to get projects implemented.

The project has improved the government-citizen interface. Around Rs 300 million has been spent on the project, but no impact assessment had been carried out by the time of the study. The increase in revenue collection through CARD has still not been proven, but the project has generated more than it has invested since 1999. Rs 380 million have been generated from the registration of documents, Rs 37million from the issuance of registration check slips, Rs 43 million from encumbrance certificates and Rs 1 million from certified copies. Up to the time of the study, the project had earned Rs 475 million against a one-time investment of Rs 300 million. The project will become further sustainable if all the services could be successfully made available on-line.

The project has been already implemented in all the SRO centers in the state. Now, it is planned to network all the SRO centers to the district Registrar Offices through 64 Kbps dedicated leased lines whereas all the District Registrar Offices (DROs) with state servers through 128 Kbps dedicated leased lines. It is also planned to install network-monitoring software in the system as well as to introduce storage of scanned documents in the form of microfilms. Similarly, the department aims to provide record of documents on the Web. The long-term vision is to provide all the services of the Registration Departments through the Web.



## **Replicability:**

The project has been replicated in the states of Maharashtra and Punjab with few modifications. In Maharashtra, the whole project is implemented in an innovative PPP. This highly visible project has tremendous replication potential all over India.

## **Impact of the Reform:**

The CARD project was adjudged one of the ten finalists in the International Innovation awards program instituted by the Commonwealth Association for Public Administration and Management (CAPAM).

CARD project has also received Oracle e-Governance excellence awards under IT service delivery system from Oracle.

## **Conclusion:**

In summary, this study highlights the different stages of e-government implementation, advantages and barriers to successful implementation of e-government system. It is clear that e-government involves multiple stages or phases of development and it has many advantages to all sectors of government, citizens and business. However, the implementation of e-government is not an easy job it faces many challenges and barriers which have to be treated very carefully.

## **Reference:**

- [1] NIUA, "Computer-Aided Administration of Registration Department (CARD)," National Institute of Urban Affairs (NIUA), New Delhi, 2022.
- [2] J. Satyanarayana, "Computer aided Administration of Registration Department (CARD)".