

DC*Suite–Suite of Applications for e-Collectorate⁺

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ABSTRACT

Titled 'DC* Suite' envisages an integrated suite of applications for the Collectorate. The programme is aimed at making all services more accessible to the citizens. DC*Suite is based on an integrated solution architecture covering all functional areas and activities in the Collectorate.

Fig. 1 *DC*Suite components*



⁺ CSI Nihilent e-Governance Awards 2006–07, G2G/G2E – Joint Winner.

Twenty-one functional areas identified including Workflow based File Management System, Public Grievances Monitoring System, and Revenue Recovery Management etc. In addition, there are add-on optional modules for Knowledge Management, District Portals etc. Public Access, Transparent Administration and Service Delivery are the key features of the project. The applications which are of public interest are given access through INTERNET, IVRS and Touch Screens based Kiosks using standard software and web interfaces. Information are also made available through multi-channel service delivery access points like inter-active voice response system, SMS, service counters, e-mail and Internet kiosks. Agencies such as FRIENDS, Akshaya Centres and Kudumbasree units will also become service delivery points.

1. Introduction

Project conceptualization

The work for the total computerization of the Collectorate, under the Modernising Government Programme, began in May 2003 after the Government accorded sanction for the project. The Status paper on Service Delivery Project in Revenue Sector by MGP has identified the scope for improvements in Service delivery by computerization, infrastructure improvement including buildings and furniture, communication facilities, etc.

DC*Suite is an integrated suite of applications for the Collectorate. DC*Suite is based on an integrated solution architecture covering all functional areas and activities in the Collectorate. Twenty-one functional areas identified including work flow-based file management system, public grievances monitoring system, and revenue recovery management, etc. In addition, there are add-on optional modules for knowledge management, district portals, etc. Generally priority is given for areas where common people interact with the Collectorate or Government.

Major areas covered in DC*Suite is given below:

- File management
- License information
- Natural calamity management
- Public grievances
- Revenue recovery management
- Pay roll and personnel management
- Land management
- Inventory management
- Financial management
- Certificates
- Pension schemes
- Court case management
- Housing

- Assets management
- Natural resource management
- Elections and electoral analysis
- Law and order
- National security
- Development works
- Public information portals and district portals

The work structure has been modified scientifically and systematically for the benefit of citizens. Information are made available through multi-channel service delivery access points like touch screen kiosks, inter-active voice response system, SMS, service counters, email and Internet. Agencies such as SWAN, FRIENDS, Akshaya Centres and Kudumbasree units will also become service delivery points.

2. Project Vision, Stakeholders, Objectives and Services

Project Vision and Objectives

- Better working ambiance
- Quick access to information
- Common discussion facility
- Common VC facility
- Continuous training facility
- Better records maintenance
- Traceability
- Less paper
- Better collaboration
- Correspondence in local language.
- 24 × 7 Citizen Services
- State of the art infrastructure as foundation for service delivery
- Service extension to taluks, blocks, villages and panchayats

Stakeholders

- District Collectorates
- Taluk Offices
- Village Offices
- Citizens

Services

- 24 × 7 × 365 Availability with disaster recovery at Collector's camp office
- Acknowledgment of letters, emails, fax
- Services through Internet, kiosks and counters

- Help Desk
- Intranet for the employees
- News, Notice Board
- E-Mail, Messaging
- Chat, Forum, Gallery
- References, Health Corner
- Government Order Search

3. Public Private Partnership (PPP)

DC*Suite is fully owned by Government of Kerala.

4. Necessity/Needs

- By digitalizing the basic data available in the district administration, information can be made available through multi-channel service delivery access points like Touch Screen Kiosks, Inter-active Voice Response System, SMS, Service Counters, email and Internet
- By improving the infrastructure including Buildings and Furniture, Communication facilities, etc., in the in Revenue Sector, the scope of service delivery to the public can be improved
- With the total computerization of the district administration, people would be able to track the status of a file or an application in the Collectorate from anywhere in the world.
- By modifying the work structure scientifically and systematically the services to the citizens can be improved

5. Project Plan

Re-engineering process and legal framework

- Re-structuring of Collectorate activities were done for achieving better working ambience
- Re-organization of the seats and subjects were carried out
- Office Order was issued to enforce same in tune with computerisation
- Uniform subject code introduced across the state
- Suggestions on changes required in DOM (District Office Manual) to incorporate fileflow-based process and to maintain file in electronic form were submitted to Government. Government of Kerala has passed the Order to effect the changes for the smooth running of the DC*Suite

6. DC*Suite Architecture

- E-Services layer is the front-end layer of DC*Suite which interacts with citizens and offer services to the citizens. There are several methods proposed in DC*Suite. The services is offered over touch screen kiosks, Interactive voice response system, Internet and front-end counters.
- Middle layer is the Intranet Services layer which offers lot of collaboration services and tools. email, messaging, chat, video conferencing, bulletin boards are few worth mentioning.
- Back Office layer is the key functional area comprising of all 21 functional modules with which the government staff work and carry out the backend operations.

Fig. 2

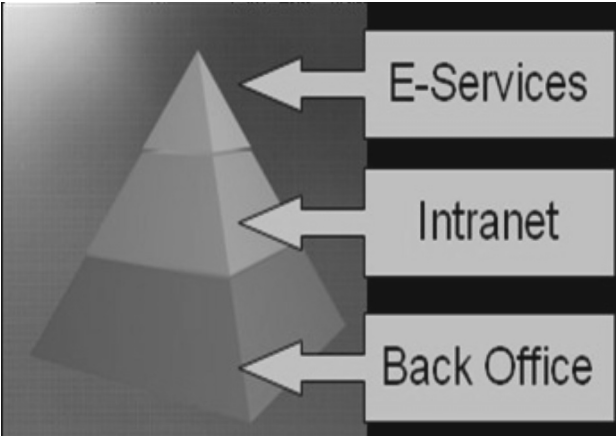
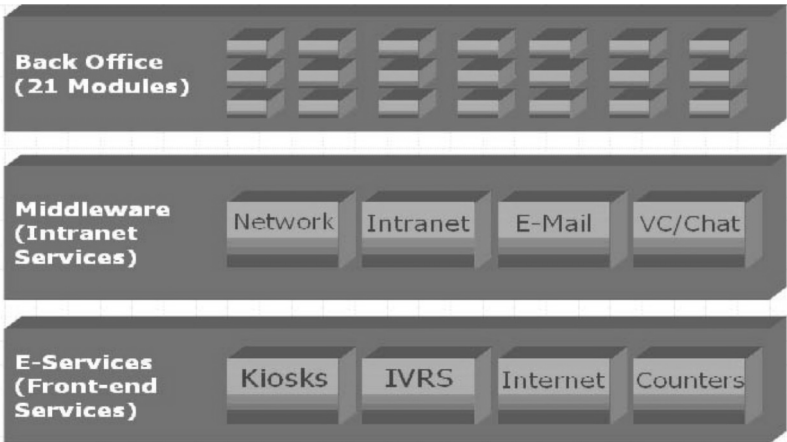


Fig. 3



7. Platform/Technology used in the Project

The software is developed using Web and Portals technologies along with approval of RDBMS. Open Software Technologies is utilized wherever appropriate. The applications, which are of public interest, will be given access through INTERNET, IVRS and Touch Screens based Kiosks using standard software and web interfaces. DC*Suite is developed in Linux-Apache-MySQLPHP(LAMP).

8. Milestones

Achieved milestones

- DC*Suite Open Source software for paperless office management
- Video conference facility at the Collectorate
- Discussion room
- DC*Suite academic centre
- LAN for the entire Collectorate with computers to all employees
- DC*Suite District Data Centre
- DC*Suite touch screen services
- DC*Suite portal services
- DC*Suite SMS Service
- DC*Suite Disaster Recovery Centre
- Project management structure

DC*Suite is a joint venture of IT Department, Revenue Department, National Informatics Centre and NICSI. Ownership is entrusted jointly with IT and Revenue Departments. Respective District Collectorate is the implementing agency. State level and District level Core Committees are formed for guiding, reviewing and assisting the project implementation. DC*Suite is implemented in 6 districts of Kerala and others are in the process of implementing.

9. Implementation

Strategy for pilot to rollout

As pilot phase, the project has been successfully implemented at District Collectorate, Palakkad having about 150 client computers. After the success of the pilot phase, the project is now in the roll out stage. As of now 6 out of 14 districts of Kerala has been covered under DC*Suite and the remaining districts are in the process of implementing.

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channel service delivery access points like touch screen kiosks, inter-active voice response system, SMS, service counters, email and Internet kiosks. Agencies such as SWAN, FRIENDS, Akshaya Centres and Kudumbasree units will also become service delivery points.

10. Capacity Building

Governance structure, Project management teams, Exit management team, Change management and training

Six Management Divisions were formed depending on the major activities in Collectorate—grouping together the related Major Subject Heads

- Personal management
- Civil management
- Land management
- Revenue recovery management
- Election management
- Finance management
- Re-organization of the seats and subjects were carried out and an Office Order has issued to enforce same in tune with computerization.
- Every employee of Collectorate is provided with a PC/Thin client to access the Intranet.
- Every Section/is provided with a printer and Scanner as a part of the network
- Thin clients are provided with OS images to suite Unicode Malayalam (local language) support and Mapped to Rack Server through Samba
- Systematic training programmes were arranged as follows
- Identifying few Master Trainers and given training to the Master Trainers in DC*Suite
- All staff of Collectorate given training in batches (18 persons in one batch)
- All Officers were given training separately
- Continuous training is given on DC*Suite as Refresh programme and for New users
- Every Staff is well trained in Open Office 2.0 with Malayalam
- Self tutors are prepared for the major modules and applications
- Disaster Recovery Centre is established with replication in geographically different locations

11. Evaluation and Measurement

Evaluation

- By taking the opinion and suggestions from the Collectorate staff

- Reviewing the customer feed back
- Transparent Administration
- Employee Empowerment
- Centralized Services for offices at District Level

Measurement

- Providing G2G, G2E and G2C services like
- G2C
- Acknowledgement of letters, emails, fax
- Current Status of files
- Beneficiary Search
- GO Search
- Employee and Office finder
- Detailed Collectorate Services
- Help Desk
- Services through Internet, Kiosks, SMS and Counters
- G2E
- Intranet for the employees
- News, Notice Board
- Email, Messaging
- Chat, Forum, Gallery
- References, Health Corner
- Searches on Status of Files, letters received
- GO Search
- Employee Search
- Other information on Land Records, RTI, Election
- G2G
- 24 × 7 × 365 availability
- User based login for others offices role-based system extended to Taluks
- Revenue recovery details for all requisitioning departments

12. Issues and their Solutions

Success factors

- Employees acceptance to DC*Suite
- Building the automation in file flow
- Implement with flexibility at the first instant
- Make it transparent for citizen
- Build various delivery models to reach out
- Allow citizen to drive the system
- Allow socio-economic group to evaluate/validate and suggest mechanisms based on the needs

- Re-engineer as per the needs of citizen
 - Build with standards, quality, security and certifications
- Implement policies with iron hand
- Failure factors
- No previous model to follow
- Lack of infrastructure
- Fear of computerization among staff of Collectorate
- Lack of computer knowledge
- Networking entire Collectorate so as to implement e-file movement
- Constraints to give facility to write file notes/drafts in regional language
- Modifications in the District office manual and office structure and the authenticity of the digital files.

Replication in other states

The concept of DC*Suite has been taken up by many states. The DC*Suite application has been demonstrated to IT Secretaries and Collectors in the states of Orissa, Rajasthan and Uttaranchal. Respective Governments are planning to replicate DC*Suite in these states.

Road ahead

- Taluk integration
- Village integration
- AKSHAYA/FRIEND integration
- CSC/SDC integration
- SWAN integration
- NICNET integration

13. Status and Results

Present status

DC*Suite has been successfully implemented at District Collectorate, Palakkad having about 150 client computers. After the success of the pilot phase, the project is now in the roll out stage. As of now 6 out of 14 districts of Kerala has been covered under DC*Suite.

14. Specific Achievements during the Year 2006-07

- Covered 5 more districts of Kerala
- 100% open source implementation in Kasargod and Kannur districts with more than 300 desktop systems

- 100% open office implementation in all the 6 DC*Suite implemented Collectorates
- SMS services through DC*Suite
- DC*Suite services through Internet

15. Future Plans for Readers Seeking more Information on Project

- Visit the site <http://www.kannurservices.gov.in> for information about DC*Suite services in Kannur Collectorate.
- Visit <http://www.dcsuiteservices.nic.in>