Case Study on implementation of eOffice in Mantralaya, Mumbai

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Abstract

The need for effectiveness and transparency in Government processes and service delivery mechanism is a long-felt one. The physical file movement of these documents incurs a lot of time and requires a continuous monitoring from desk to desk before the final decision is made by the senior officials. Consequently, many crucial decisions get delayed due to the slow movement of files and/or unavailability or absence of the senior officials in the office for clearing these files. Theft and missing of files is also not uncommon in most of the government offices. The immediate need in this scenario was to have a system where an authorized employee can locate the required documents and/or files in the shortest possible time, update and share them with other relevant users and eventually store them with proper reference. This will make the system not only efficient by speeding up the decision making process but also make the office virtually paperless

eOffice is a step forward into an era of paperless administration in Maharashtra. It is a Digital Workplace Solution that replaces the existing manual handling of files and documents with an efficient electronic system. Being an electronic system, it has its inherent advantages such as data is stored digitally with audit trails for every transaction being done. Regular backups and Disaster Recovery systems are in place which ensure that Government files are not damaged in case of any mishap. In addition, this being a web based application, people can access it from anywhere on VPN continue working while at offsite.

Based on this case of eOffice implementation in Mantralaya, Mumbai, this document aims at creating a need for eOffice in the minds of readers while developing an understanding of the 3 stage model of eOffice implementation and revealing the ways to overcome the challenges faced during the implementation.

eywords

eOffice, Mantralaya, DIT Government of Maharashtra, Paperless Administration

Note to the Practitioners

The first thing we see when we enter into the government office is stack of papers and lots of files, piled high on the desks, sometimes making it difficult to find a place or to find a person behind those files. Think about the about the people who work every day with these files – creating, retrieving, signing, moving, storing, and searching.

In a sample study it was found that due to the large number of physical files, the average search time for any document is 18 -20 min minutes and sometimes these files are never found. Misplacement of files is a very common issue and at any given time about 3-5% of organisation's files are lost or misplaced. In organizations where there is lot of paper based work, half of the office's time is spent in handling paper or data entry. In spite of this effort, 92 percent of information is in manila folders.

Physical file management has been a part of Government since ages.Mantralaya was no different in terms of the huge volumes of file movement within departments.Protecting the files kept in record rooms from wear and tear and any misuse was another challenge. In any unforeseen event such as fire, no backups were available for the physical files.

Seeking a way to address the aforementioned factors, Directorate of IT decided to start a Document Journey Management System which involved scanning and digitization of files and receipts so that the same could be tracked with the help of an application. However, the scope of this document tracking application was limited to reducing the time to search a document or file in a particular Department.

The big question was 'how to ensure that intra and inter-departmental file movement is monitored closely so that the time consuming processes and nodal points are weeded out?' So, did Directorate of IT miss the trick? Could there be another solution which could bring a transformation in terms of functioning of State Government Office of Maharashtra comprising 6000 employees? Was it possible to reengineer Government processes, while using standard operating procedures, in a manner that could result in narrowing down the quantum of unproductive and unyielding processes?

The case study of eOffice implementation in Matralaya, Maharashtra will answer all the aforementioned questions and explain how this digital workplace solution has been the one stop solution to migrate into complete electronic File management system and how Government of Maharashtra has taken the leap of transforming the age old system of physical file movement to a fast, transparent and accountable file movement which is electronic in nature. This solution is highly replicable and would give tremendous benefits to Government administration, resulting in a better service delivery to citizens.

Project Description

eOffice, a product developed by National Informatics Center, is helping Government departments go paperless. It is aimed at improving internal efficiencies in an organization through electronic administration. eOffice is a software that defines workflow of Mantralaya and enables departments to work on files through the medium of computers connected via Maharashtra State Wide Area Network or NICNET, a point-to-point connectivity.

At the planning stage of eOffice, Government of Maharashtra had to decide which departments should be taken on board for eOffice implementation on a pilot basis. Considering the fact that eOffice should begin in such a department which defines leadership to implement the change in Government Office functioning, it was decided that eOffice should begin with the Chief Minister's office and Governor's Office. This move helped in spreading the eOffice buzz and interestingly resulted in other departments requesting for speedy eOffice implementation in their offices and organizations. In order to drive an ICT based project like this one, it was imperative to include IT Department in the list of starters while considering the high number of files and letters received in an office, National Rural Health Mission's offices in Mumbai and Pune were selected for pilot implementation. Apart from the current implementation in all Mantralaya departments, the Government of Maharashtra is also planning for this paperless electronic solution of eOffice in districts of Konkan region, MCGM, MMRDA and ZP Sindhudurg etc.

Background

On 21st June 2012, an unforeseen incident of fire break out happened in Mantralaya, Mumbai resulting in loss of massive files belonging to 18 departments. Aftermath of this incident the Maharashtra government has taken an ambitious decision to go paperless. Government of Maharashtra, has undertaken the initiative of digitizing all the closed files since year 2009. However, after June 2012, decision has been taken to move into a end to end digital file management system.

Directorate of IT under the guidance of Hon'ble Secretary has done the study of eFile systems in various states and various products. Digigov from TCS and eOffice from NIC had been evaluated and it was decided to go with implementing eOffice. The decision was based on various reasons including the fact that eOffice is a product of a Central Government organization and hence is more reliable while also appreciating that eOffice, with its six modules covering file management, tour management, leave management, personnel information management system, Collaboration & Messaging Services andKnowledge Management System, has more number of utilitiesand hence will have a greater reach to users.

The First File in e-office at Mantralaya was processed in October 2012 at CM office. Currently all departments of Mantralaya have completed the prerequisites and have started to use eOffice. More than 17,459 files and 1,33,901 receipts have been already been created in eOffice. About 3,01,371 transactions have taken place in eOffice at Mantralaya so far. As on date, all departments are using eFile system in eOffice while a few have started using eLeave and KMS modules.

Project Overview

Objectives

Bringing an institutional systemic change: eOffice is a complete digital work place solution for government offices that is built based on the Central Government Manual of Procedures. By taking up eOffice implementation, Government of Maharashtra, not only implementing the product, but also bringing the radical change in the way government offices function using ICT. In addition eOffice will bring standardization across department – standard file heads; standard way of writing notes; standard way sharing knowledge etc.

eOffice provides an effective monitoring mechanism to monitor the performance of individuals, pendency of files, files cleared, files worked on, leave status etc. on finger tips which was not available earlier. Departments/sections submit their own reports which could not be cross verified. This monitoring mechanism will increase the accountability and responsibility of staff at all levels and bring a positive change in the administrative system.

Making public delivery systems efficient and corruption free: eOffice brings avenues to improve the public delivery and eliminate malpractices in government offices. Speed and efficiency that eOffice brings enables informed and quicker decision making within government offices, which will lead to better public service delivery.

- Empowers users to take faster and right decisions by providing information on finger tips.
- All transactions are captured with audit trails and cannot tampered for ever
- Unproductive, unintended touch points/dealing hands for any file movement are eliminated
- Right file submission path can be tracked and monitored
- Monitoring mechanism available to track file pendency and users can be made accountable for pending files
- Ensure Authenticity of records with use digital signatures
- Faster and efficient File tracking

Readiness to Disasters: As stated in the background, fire accidents can cause loss of physical files, which can never be retrieved. Important decisions, files that can impact citizens or government can be hampered due to loss of files. eOffice as an alternative to physical file movement, will leave no chance for loosing files in disasters. While eOffice implementation is helping the state primarily as the disaster management, it also aims at significantly improving the operational efficiency.

Be a leader in eGovernance and be a Role Model: Government of Maharshtra has always been a leader in ICT and eGovernance initiatives driven by Central and State, as confirmed officially by NASSCOM in its eGovReach initiative.Government of Maharashtra has been in the forefront of adapting to new technologies, new products and being a role model for fellow states. eOffice is a Mission Mode Project by Department of Administrative Reforms and Public Grievance as a part of National eGovernance Plan. Government offices across state provide various citizen services and drive key administrative decisions to run the government. Government of Maharashtra, a leader in eGovernance, shall always strive to lay foundation for eliminating inefficient practices with use of ICT. By implementing eOffice product suite, distance between offices, departments has reduced and file scan be exchanged instantly. This application also acts a global address book to know contact details of any user.

Go paperless and Go Green: As per study, on an average, a document is photocopied 19 times. Paper files get doubled every 3.5 years and paper usage in an average office grows 22 percent a year and doubles every 3.3 years which keeps adding to the new filing cabinets and resources to manage these. A letter has to pass through 41 steps and entered in dozens of the registers before it is answered. The average time to retrieve and file a paper document is 10 minutes. Due to the large number of physical files, average search time for any document is 18 -20 min minutes and sometimes these files are never found. Misplacement of files is a very common issue and at any given time about 3-5% of organization's files are lost or misplaced. In organizations where there is lot of paper based work, half of the office's time is spent in handling paper or data entry. In spite of this effort, 92 percent of information is in manila folders.

If we just glance at the environmental repercussions of the usage of the paper, it would be pertinent to note that only 12500 sheets of paper can be made from a fully grown tree. Now

translating it into the "green damage", it would be noteworthy that on an average 210 billion sheets of paper are sent by fax every year. Leave aside the other paper usage which if quantified will be sufficient to make one faint, imagining the number of trees that are sacrificed for meeting these requirements. What is more disturbing is that about 95% of this paper will eventually be thrown away.

Implementation Strategy

Implementation at Mantralaya has been done in very planned manner. Three phases of planning preparation and Implementation has been identified and activities in each of these are driven by DIT and head of the departments, under the guidance Hon'ble Chief Secretary
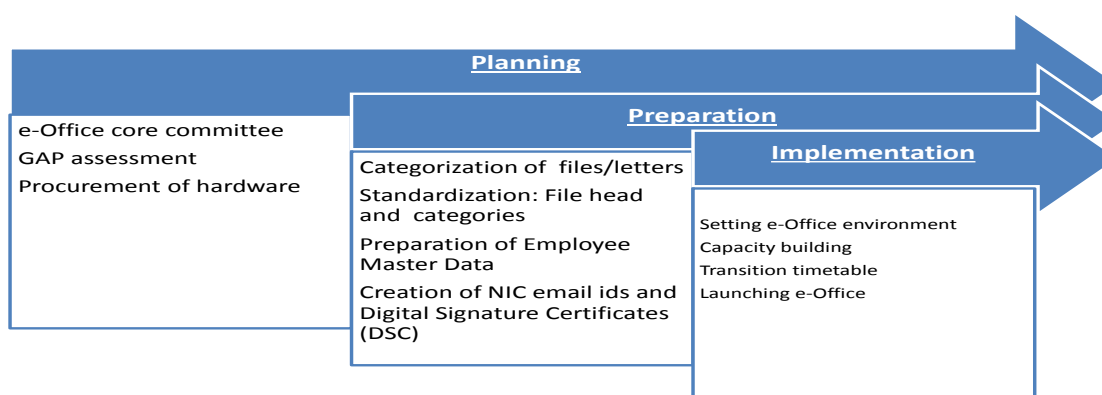

Fig 1: Three Stage Model of eOffice implementation

Activity	Description	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
eOffice Study and assessment	Assessment of products Visit to other sites											
Commitment to eOffice and Agreement with NIC	Meeting with DG, NIC Decision to go with eOffice Government Resolution issued for eOffice implementation and forming committees											
DNS registration and prep work	Installation and Configuration of Servers and Application eOffice Overview training more than 3500 users											
Readiness at Pilot departments	Data Collection of EMDs, file Heads DSC Creation and Configuration					◆						
Implementation at Pilot Departments	Preparation of Roadmap for Implementation Study of the working style , File Naming Convention, Process Mapping, Infrastructure Gap Analysis and filling the gaps; setting up central registry											
Readiness at other departments	Data Collection of EMDs, file Heads DSC Creation and Configuration								◆			
Implementation at other departments	Preparation of Roadmap for Implementation Study of the working style , File Naming Convention, Process Mapping, Infrastructure Gap Analysis and filling the gaps; setting up central registry											◆
Beginning of Application support	Set up support structure											
Capacity building	Setting up of Training Room Training Design Training and Assessment											

Fig 2: snapshot of activities conducted as part of the eOffice Implementation at Mantralaya

Mode of transformation &Strategies adopted for transformation

eOffice project is a flagship project of Government of Maharashtra under the close monitoring of Hon'ble Chief Minister and Hon'ble Chief Secretary. RajBhavan (Governor House), Chief Minister's office, Chief Secretary's office are first few offices to start eOffice implementation. Hon'ble Chief Secretary, former Additional Chief Secretary, Public Health Departments, has seen the benefits of eOffice at NRHM and has decided to implement eOffice in Mantralaya and all other offices of state government to bring a digital workplace in all government offices. Hon'ble Chief Secretary, along with Director General NIC tracks the progress of the project periodically and issues orders and guidance to implementation. Chief Secretary's office issued circulars for making eOffice mandatory for all departments in Mantralaya.
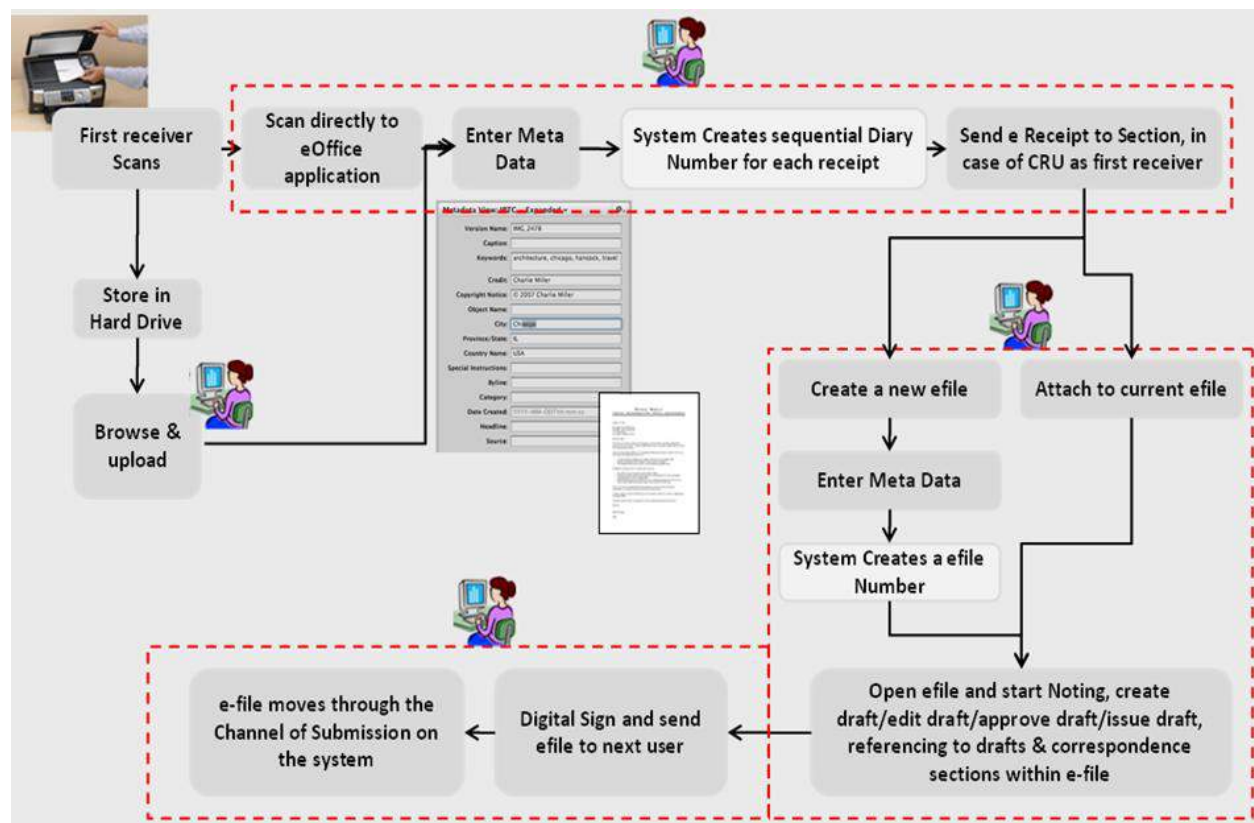
Fig 3: eFile Workflow

Continuous Capacity Building and Change Management:eOffice at Mantralaya is one of the largest implementation in the countryand transformation from paper based office to a paperless office requires huge focus for capacity building and change Management. Using eOffice in day to day activities is a paradigm shift in government offices. Until users are comfortable with basic skills on computers and typing, taking a leap towards eOffice is not possible. Hence to bring the awareness and to encourage users to use computers more often DIT undertook several initiatives such as Workshops on basics of Computers are Workshops on Marathi typing , ISM tool training, Tech Saturday programs etc along with eOffice training at various levels.In Mantralaya, a dedicated state of the art training room has been set up DIT to provide eOffice training to all Mantralaya users.

Overview training sessions 3500 employees during Phase 1

Hands on training 5000 users during Phase II

eOffice Champions training 20 nodal officers at Delhi

Exposure /visits to other eOffice Implementations at other locations

Role based trainings for all PA s, all Registry clerks, Minister Staff etc during Phase III

Refresher courses for 500 users in Phase III

Detailed training by Director IT to Secretaries, nodal officers

In addition, on demand trainings, user manuals, FAQs, Usage Guidelines are developed and circulated to all users time to time.

Support in Local Language: The system supports local level adaptation as the same is compatible with Unicode system. Key features of the system were made available the in Marathi. This gives users ease to work in eOffice. DIT, CDAC Marathi Center of Excellence and NIC working together to improve the localization in the application.

Strong Support Mechanism: NIC as an implementation partner has deployed necessary manpower to implement eOffice. There is multi layered support available by NIC team for ever user. eOffice support portal is also made available online so that users can report the problems online and track the tickets. Support desk has been made operational on extended hours on week days and weekends and holidays.

Stake holders Involvement: For all the eOffice implementations in the state of Maharashtra, nodal officer from the departments, and core implementation committees have been formed to ensure right stake holder participation and structured decision making. For Mantralaya implementation, at the beginning of the project 3 committees have been formed as listed below:

Steering Committee	Support Group	Implementation Group & Task force
Hon'ble Chief Secretary Director General .NIC Principal Secretary, General Administration Department Secretary, IT Addl. Chief Secretary GAD(*O&M) Principle Secretary to Hon'ble CM Director, NRHM District Collector, Sindhudurg	Deputy Secretary,I.T Deputy Secretary, GAD, O&M Deputy Secretary ,GAD, Services	Under Secretary-IT Asst. Director NRHM One section officer from GAD (services) 1-2 members from NIC Principal.Consultant, DIT And Project management consultants

Monthly meetings of the committees under the chairmanship of Hon'ble Chief Secretary, and weekly/bi-weekly meetings with nodal officers under the chairmanship of Director, I.T to track the progress and address issues.

Phasing out of DJMS and integration with other applications

All 7 Modules of eOffice provide a complete set of uniform and standard applications for running a government administrative procedures. Leave Management, Tour Management, Service Book maintenance, Leave management are simplified and automated in eOffice. In order to bring the unified standard approach, parallel systems are being phased out and Integration other applications is in progress.

Mantralaya was using Document Journey Management System to track the file journey. File tracking is just one of the functionalities of eOffice. Other than file tracking, eOffice has resulted in shaping up a better administration since pendency reports can be generated for files and these can be used to monitor the time taken by an employee to work on the file. As eOffice has replaced the functionality of this application and has much more utilities, DJMS is phased out gradually. The integration of scanned files uploaded in DJMS server are being integrated with eOffice in a manner such that there is no data loss which also ensuring that files are properly indexed i.e. Noting and Correspondence sections of each file are placed correctly and sequentially. Similarly, in Sindhudurg District applications used to track the fileshave now been replaced with eOffice.

Requirement analysis and study is underway to integrate eOffice with Sevarth (a payroll system of Government of Maharashtra), Biometric Attendance System, Budget Distribution system, etc.

Outcomes

Transparency & Accountability has been the one of the best advantages brought by eOffice. The documents or the files are preserved forever. There are no chances of the files being misplaced, modified or lost. There is an absolute transparency as anything once written on the file cannot be changed or undone. The files cannot be kept pending as the system is designed to give feedback and monitoring mechanism

Quick disposal of files and systematic, timely Monitoring of pending files has been the other immediate advantage of eOffice. Exact position of receipts and files are available at any point time to all required employees, which made file tracing lot simpler and easier.

Instant file exchange: The files from other districts can be received with in fraction of seconds, which previously use to take number of days. This has also reduced the financial burden related to transport expenditures of the staff moving to and fro with the documents. eOffice gives a Single Employee directory that aids better communication.

Knowledge Repository: As we know Knowledge is wealth and now using KMS knowledge can be preserved in an organized fashion in KMS (Knowledge Management System),which has a centralized, easily accessible knowledge base for all our employees. Documents like GRs, circulars etc. can easily be accessed through KMS.

Simplification and standardization of government processes and procedures, elimination of unproductive/ non-value-adding work, and reduction in paperwork has been other advantage of eOffice.

Remote usage: High profile users work on files remotely when they are away from office. Commissioner (FW) & Mission Director, NRHM says "During my Uttar Pradesh tour, I approved around 360 files remotely related to both Mumbai and Pune NRHM offices. This was not possible during my earlier tours."

Instant leave approvals during emergency: In the leave management system, Leave Records are updated instantly and there is need to maintain a separate leave record. Also leave orders are generated immediately from the system. This saved lot of time and effort of establishment department.

In addition to the above benefits long terms results of the eOffice have been as below
- Seamless integration of various other applications with eOffice
- Creating an e-environment for the employees
- Simplifying the future with good infrastructure and increased awareness on computers
- Building a Citizen interface to facilitate the whereabouts and action taken on grievances, applications, petitions, RTI, etc.
- Paving a way for the transition to a Paperless/ Less Paper Office

Key Lessons and Achievements

Achievements

- More than 6000 users in one instance, Maharashtra Secretariat is the ***largest ever eOffice implementation*** so far in the country. All levels of users from assistants, clerks to Secretaries, and Hon'ble State Ministers and cabinet ministers and their staff have been brought on board

- 35 district collectors, 35 RDCs, 8 divisional commissioners, deputy Divisional commissioners exchange files with Mantralaya instantly. IAS officers across the state exchange files via eOffice. Even officers apply for leaves remotely using eOffice

- Extensive capacity building ,change management, infrastructure support, implementation support provided by DIT

- District consultants, District Project Managers, Departmental consultants appointed by DIT have been the extended arm for eOffice implementation team

- Synergy in all eOffice implementations is being brought by hosting the application at SDC and sharing the resources and knowledge gained. Interoperability, integration, Innovation and technology advancement is the way ahead for eOffice in the state

- During Session assembly (Adhiveshan) sending LAQ's has become so easy by e-file, it hardly takes any time. LAQ's are sent within 5 minutes!! Even the follow up of the same can be taken easily.

eOffice at Mantralaya has won the Jury's choice award for best G2G initiative of the year by eMaharashtra.
eOffice at Mantralaya has been awarded Order of Merit by Skoch

Lessons Learnt

Phase-wise implementation:eOffice roll out should be planned in such a manner that it is implemented either department wise or subject wise. In department wise approach, departments should be categorized in terms of different phases of implementation and 'Go Live' dates for each phase should be declared in advance. The alternate way is to implement eOffice for only a

selected number of subjects in all departments so that file movement takes place end to end and atleastemployees start getting hands on experience on eOffice.

Make Top Officials the Nodal Officers: Top officials should be assigned the role of eOffice Nodal Officers. They should review the progress of eOffice implementation in their respective departments. In Mantralaya, only Deputy Secretaries or Joint Secretaries have been appointed as Nodal Officers for each department.

Top-down approach: eOffice cannot be implemented if it is not driven from the top. A bottom-up approach is not the right fit for the smooth implementation of eOffice. It may be noted that if Secretaries of each department instruct their staff to take up eOffice working style religiously, it is much easier for the operations team to drive the project in a lesser time frame.

Issuance of GRs and circulars: The apex body in an organization must issue Government Resolutions and Circulars which define digitization strategy to be adopted and the necessary actions to be undertaken by organizations as initial steps towards eOffice. To facilitate the implementation of eOffice in the state government offices and departments, Chief Secretary's Office had issued a GR on 20th August, 2013 which is available on the official website and provides guidelines to the organizations interested in implementing eOffice for undertaking requisite preparations. Similarly many circulars were issued to departments as measures to implement eOffice.

Discourage use of printers: Printers should not be used by departments unless due to emergency. There are several ways in which printer usage can be reduced in a Government set up. E.g. 'paper less environment drive' was initiated by Director-IT as a result of which all staff members discarded unwanted papers, thus ensuring a clean and paperless desk; printers were also withdrawn from departments which had an excess number of printers and the same were redistributed to the ones with lesser than sufficient number of printers.

Change Management and capacity building: Changing attitude of people at all levels to change a 200 year old file movement system has been a challenge. Re-engineering of mindset of employees is necessary in order to drive eOffice environment. In this regard, regular training programmesneed to be conducted. Initial trainings should be imparted to fresh users for demonstrating eOffice suite in detail while refresher trainings should beimparted to ensure that all queries of users, who have started using eOffice, are addressed.

Setting up of an eOffice Support Team: An eOffice Support Team along with Facility Management Services team should be put in place for providing eOffice handholding and support services. There should also be an eOffice Support Help Desk which the users may contact via email or phone for reporting eOffice related issues

Readiness Status and Gap Analysis: Departments should ensure that they meet the pre-requisites in terms of infrastructure (comprising scanners, computers, etc) and employee readiness status (comprising DSC issuance and eOffice login issuance) before implementing eOffice. A proper gap analysis report must be maintained and all the gaps must be filled before implementing eOffice.

Parallel movement of physical files should stop: It was often noted that eOffice was used as a file tracking system for physical files only (which can be marked as received in the eOffice application) while physical files are actually processed. Since eOffice, in its real purpose, involves movement of only electronicfiles, departments must ensure that a cutoff time is set before moving into eOffice. This cutoff date should signify the date after whichno physical filemoves along with electronic file.

Financial Provision for IT upgradation: Since technologies keep changing rapidly, it is imperative to ensure sufficient financial resources for upgradation of IT Infrastructure including computers, scanners, bandwidth of network connectivity, etc.

References

http://eoffice.gov.in

http://darpg.gov.in/darpgwebsite_cms/Document/file/CSMOP.pdf

http://eOffice.maharashtra.gov.in

Profile of the authors

1. Shri Rajesh Aggarwal (IAS), Secretary IT, Government of Maharashtra

   Mr. Rajesh Aggarwal, an IAS officer of the 1989 batch, is presently Secretary IT and Accounts and Treasuries with Govt. of Maharashtra. A B.Tech. in Computer Science from IIT Delhi (1983-87), he has been a technology enthusiast focusing on a wide array of aspects including Natural Language Understanding, Algorithms, Artificial

Intelligence, Fuzzy matching and de-duplication of databases, GIS, Analytics and has the experience of working with very large citizen databases.

As Secretary to Government of Maharashtra over the last few years, he has been instrumental in successfully leading multiple large initiatives like implementation of UIDand Financial Inclusion, Direct Benefit Transfer, e-Office implementation, e-Tendering, implementation of State e-Governance Policy, focus on Accessibility and localization, Training and Capacity building in e-Governance, delivery of e-Services to citizens, implementation of Common Service Centers to ensure citizen services are available at the doorsteps of citizens and implementation of Govt. cloud. Under his leadership, the State Government has been rated as a leader in National e-Readiness Surveys of Govt. of India and has received more than 60 national and international awards for e-Governance in the last 2 years, including the prestigious National Award for Innovation in UID being conferred on him by the Hon. Prime Minister in 2012.

He is also a prolific writer and has written numerous articles and papers on e-Governance, including the much acclaimed paper titled 'e-Gov 0.0 – the fundamentals of e-Governance'.

2. Shri Virendra Singh (IAS), Director IT, Government of Maharashtra

   Mr. Virendra Singh, an IAS officer of the 2006 batch, is presently Director IT with Govt. of Maharashtra. With over 15 years of experience of working with various Government organizations, he has been instrumental in implementation various large e-Governance initiatives including e-Office. Earlier, as District Collector Sindhudurg and CEO ZillaParishad in Solapur, he had successfully implemented various e-Governance initiatives including e-Drug Inventory for an entire district, which is now getting replicated across the State. He has won multiple awards at national forums for the work done in implementing e-Office, wherein Sindhudurg became the first district in the country to become paperless.

3. Sudhanshu Bohra (Consultant, DIT, Mantralaya, Mumbai)

   Mr. Sudhanshu Bohra is a Consultant handling the various facets of the e-Office project in Maharashtra

Project Case Fact Sheet

Fact Summary
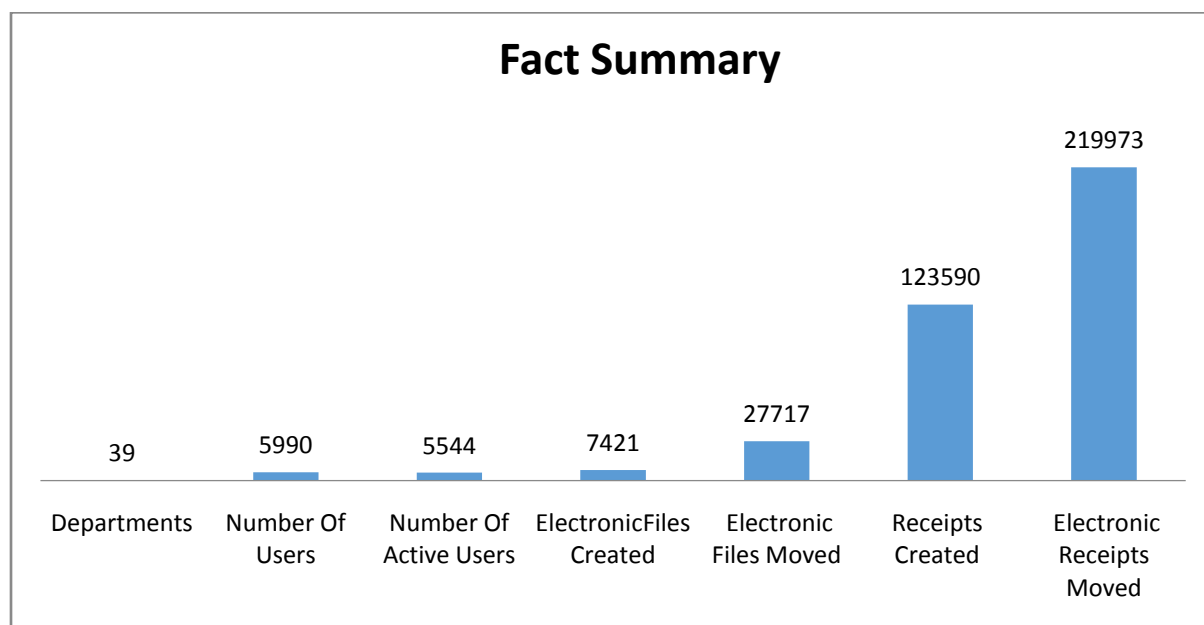
The list of top 10 performing departments is given below:

S.No.	Department Name	Total Files moved	Total Receipts moved	Total Files & Receipts movement
1	CM Office	573	47791	48364
2	Home Department	1845	31443	33288
3	CS Office	107	14522	14629
4	Finance Department	984	12024	13008
5	DIT	958	4401	5359
6	General Administration	1155	3554	4709
7	Rajbhawan	1200	3356	4556
8	School and Education	689	3400	4089
9	DGIPR	1012	2912	3924
10	Women and Child Development	331	3371	3702