Case Study
E Governance, The Journey Ahead: *E – Lokshahi* Project

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ABSTRACT

In today's knowledge driven business world, companies are employing varied methods and technologies to facilitate fast and easy flow of information among the stakeholders of their enterprise system. Not very far behind are a number of government agencies and departments also in the knowledge race. These initiatives are carving a niche for themselves by using many innovative methods. One such government department that is in the process of adopting the ICT for the purpose of e-Governance is, Jalgaon's District Collector's Office in the Indian state of Maharashtra.

Keywords: IVRS (Interactive Voice Response System), ICT (Information Communication Technology), DC Office (District Collector's Office)

INTRODUCTION:

This paper adopts a narrative case study approach in tracing the odyssey of the Jalgaon District Collector Office's journey towards e-Governance. The paper will bring forth and present

(1) Similar initiatives taken by other Government agencies and have met with success.
(2) How e-Governance can involve in the citizens more and more in public administration.
(3) How e-Governance can bring in transparency in the local district administration
(4) The speed with which district administration authorities can effectively respond to the needs of the citizens by and large.

Jalgoan, a small district in Maharashtra, India has realized the importance of information dissemination and has moved away from the main stream government's typical way of working. This has made them move far ahead of others in the information journey. Evangelization of e-Governance in the rest of the country will surely make things easy for the common man to interact with the Government Agencies.

Jalgoan DC Office, is one of the few government departments in the country to have been awarded with ISO – 9001 certification for its structured and innovative methods of functioning. Besides having a very informative website, e-Library etc, Jalgaon's collector office has added another feather to its success cap by initiating public grievance redressal system named e***-Lokshahi*** Project.

The project aims at changing the way people communicate and interact with the district authorities. Instead of the normal manual system, which involves several trips to the local tahsildar's office; with the uncertainty of meeting the right government official when needed; and moving from one desk to another just to get a property document; people can interact with the officials over the phone by means of the IVR facility that converges several communication technologies advantageously.

Background:

With the advent of World Wide Web, increasingly governments across the globe have deployed IT

(Data Quest, 2003) for G2C (*Government to Citizen*) interactions, with the promise of the good governance. There is a paradigm shift in the Governments' thinking that it can redefine the public governance enhanced by efficiency, transparency, and accountability in adopting an IT enabled governance.

Indian Genesis:

In India e-Governance started in the 1970s. Much of the IT enabling was in the area of Military & Defence, Economic Policy Tracking & Supervision and for the purpose of data-intensive applications such as elections, census, tax management etc. While there were efforts from state governments to network the district headquarters, in the 1980s, it was a futile one. A renewed endeavor to use IT for wider application, with a focus on reaching out polices to the rural areas the government is making all efforts to take the inputs from NGOs and private sector as well. These have been matched many an international patron agencies such as the UNDP, G-8 and the World bank among many others.

India today has perhaps the most ambitious e-Governance plan (Sadagopan, 2009). At the highest level in the Government, there is a separate Secretary-level official, there is an approved budget of more than 50 crores at the Central Government; there are Secretary-level officials in every State Government with additional (though small compared to Central budget) budget. Conferences on e-Governance are annually held at the Regional, National and even International levels. With a major thrust towards Public-Private-Partnership (PPP), many Indian IT service majors, TCS and Wipro, for example and MNC firms IBM and Sun, for example have shown interest in the Government initiatives in the direction of e-Governance. These companies have dedicated teams to address the growing e-Governance market in India. There has been some success stories in the e-Governance – viz., e-Seva, CARDS, Bhoomi, Bangalore-One and Passport office computerization - that the media has lapped up and given good advertising, there by increasing the visibility of such government initiatives. In fact the Andhra Pradesh Government with public-private-partnership model with NASSCOM, has set up an Institute, NISG (National Institute of Smart Governance).

The key emphasis of IT in the State Governments, initially was on automating and computerizing their offices. But gradually the shift of the State governments endeavour to use IT as an enabler for connectivity, networking, information processing, and delivering the government services to its citizens, was seen. In a small way the individual government departments at the state-level and district-level have started electronic data processing, file handling, public grievance systems, routine bill payment transactions, access to entitlements documents and provision of market information. The thrust has varied across initiatives, with some focusing on enabling the citizen-state interface for various government services, and others focusing on bettering livelihoods.

The e-Lokshahi Project:

It is interesting to note why this e-Governance project, initiated by the District Office of Jalgoan, Maharashtra, is called as *e-Lokshahi*. In State of Maharashtra, every first Monday of the month is declared as *Lokshahi Din* i.e the day for the citizens to register their grievances. On this day a citizen may visit the District Magistrate Office and submit her grievances in person, in front of the grievance committee. The committee discusses the grievance and forwards it to the concerned department. As a resolution of this day, the time frame, for the disposal of the grievances is defined as 30 days (Time bound disposal). The day has been popularized in Maharashtra State for this very purpose.

The project *e-Lokshahi* has redefined the functions of *Lokshahi Din* in a better way by use of IT as enabler. The citizen need not have to visit the District Magistrate Office (Borole, 2009), she can register her grievances from her home and get a token number. This system too has a time-bound grievance disposal mechanism as part of it. The grievances are routinely escalated, by the system to the higher officer after a defined period. Considering this fact towards transparent citizen centric administration, the project is befitting named *e-Lokshahi*. ***e*** representing the e-governance.

The Jalgoan District in the north-west region of Maharashtra State has been a pioneer in more than one ways. Ensconced in Satpuda mountain ranges

in the north, Ajanta mountain ranges in the south, with the World famous Heritage site Ajanta Caves just 50 kms away, Jalgoan is one of major International Tourist hub. Its production of bananas and cotton through drip irrigation has been cited as a role model for cultivators in other parts of India.

Now the district, with a population of around four million, is changing the way people communicate and interact (Simhan, 2009) with the district administration through the e-Lokshahi project. e-Lokshahi is an IVR System, the District Collector Office Jalgoan has developed to provide a 24 hour online public grievance re-dressal system and a FAQ forum that can be used widely through telephone and mobile. To access the service the citizens have to dial a local number. Except the ordinary telephone call charges there is no other charges laid down for this service.

e-Lokshahi – Macro picture of the System

* People can query and lodge grievances using IVR (Interactive Voice Response System) by just dialing to a number – (0257) 2222222.
* After registering the grievance, the system acknowledges the caller with a token number.
* Using the token number, people can track the status of their request by dialing to the same IVR system.
* The concerned officers will get the query/ complaint and are expected to address the same within a given time frame. Officers will update the status of the query on the web using the login id and password provided to each employee.
* In case the complaint is not attended in the given frame of time, it gets escalated to the next higher level. In case the complaint is not closed within a predefined time frame, even the District Collector gets the alert.

A graphic representation of how the service is offered. Is shown in Figure 1 (Source: The Hindu, May 2009)

Problems faced hitherto in the Manual system:

* All the citizens had to travel to the Tashil offices,

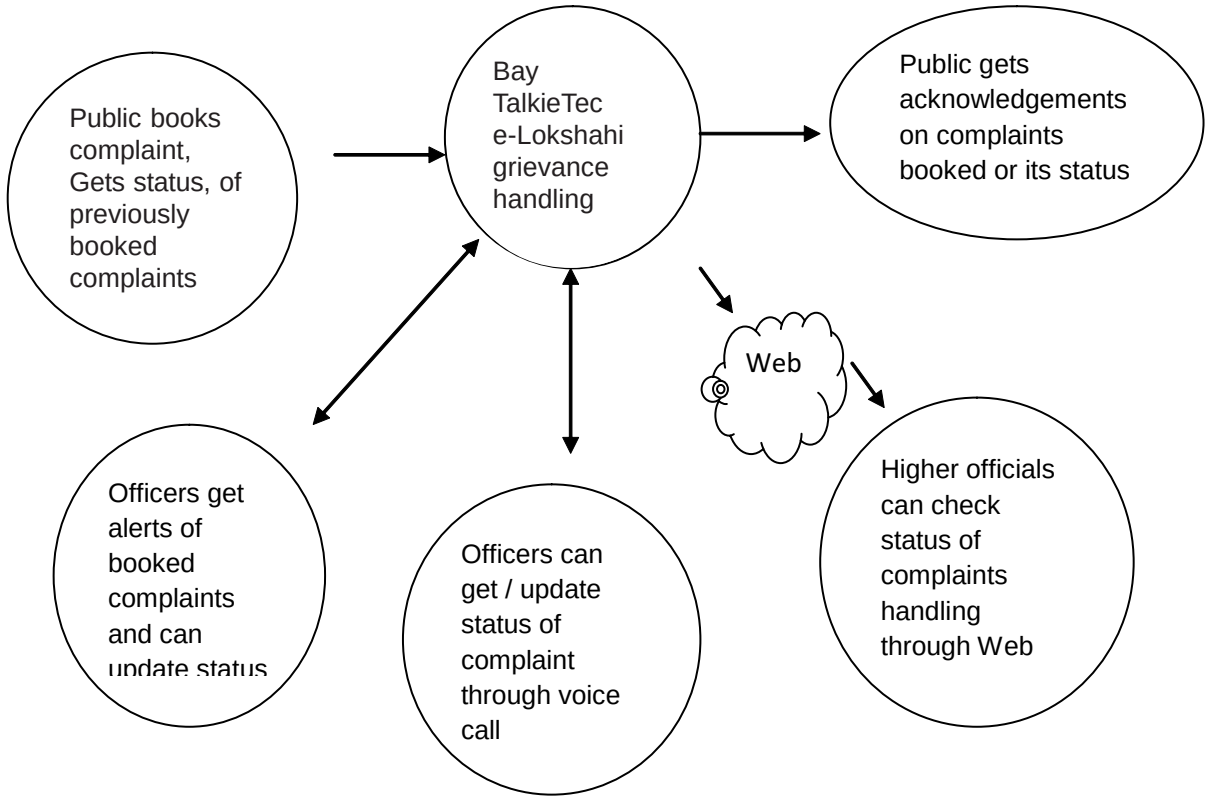

Figure 1. Graphic representation of service delivery

Collector office & other offices for getting primary information (FAQ) about their work. Even though they travel long distances, sometimes they could not meet the concerned person or officer.

* Regarding grievances the citizens had to orally or in writing give it to the concerned officer in his office, if he happens to meet the citizen.
* The given grievance was not properly acknowledged to the citizen. So the record of the grievance was not maintained.
* The given grievance used to remain with that officer and the higher officers were not aware about it till the citizen comes and meets them.
* It was difficult to prioritize grievances in particular areas or services in the district.

Features of the New System:

* This system is technically fully automated without human intervention, so it is made operational 365 x 24 x 7.
* Access to the service to the citizen is by, only dialing to a number (0257) – 2222222, therefore except the ordinary telephone call charges there is no other charge laid down for this service.
* No geographical limitations to access the service, citizens can register grievances and track them from their home or any other place. For every type of grievances, time schedule is given for the officers to reply. If not replied in the stipulated time, the system generated SMS will be sent to senior level officer. Such four levels of officers are defined for every type. This keeps officers on the vigil and helps the citizens to get a quick response to their queries.
* The other very important and distinguishing feature is that, the service does not require any additional technical setup / infrastructure for using it. Unlike many other online redressal services available, which requires computers, internet connectivity etc, this project requires a very ordinary telephone or a mobile phone. This makes the service available to grass root, which otherwise was restricted only to the urban citizens.
* Another distinguishing feature is the multi language interface provided to the citizens, viz. Marathi, Hindi and English. People can interact with the system in the language in which they are acquainted.

Key People:

Connecting with the District Administration is just a phone call away, according to the District Collector (DC), Mr. Kunal Kumar who is the key person in initiating the Project and is additionally the Head of the Project – Concept, Responsibility fixation, Monitoring. Another principal player, Mr. Pramod Borole, designated District Informatics Officer, NIC (National Informatics Centre) Jalgoan is responsible for the Technical design, Documentation and Implementation and troubleshooting. Mr. Ganesh Patil, Additional Collector, of the district finalized the list of FAQ (Frequently Asked Questions) and its details, Grievances Topic lists. The project has been implemented by the Chennai-based company, Bay Talkitec. The company has experience in the IVR technology and Customer Interaction Management space. It also equipped itself with the required domain knowledge of the procedures in the District Collector's Office. The company worked more as part of the team rather than as outside system vendor and completed the project in time as per the DC.

The project, according to the DC, provides an opportunity for citizens to interact with the District Authorities regardless of where they are. Queries and complaints can be made through a phone call. The callers are then given a token number using which they can check the status of their request later by dialing into the IVR (interactive voice recording) system. The officer concerned needs to address the issue within a time frame, failing which it gets escalated to the next higher level. If a complaint is not closed within a pre-defined time frame, even the District Collector gets the alert. Prior to the implementation of this system, people needed to wait anywhere between seven days and seven months for a property document. Often, they would make several trips to the tahsildar's office.

Now, citizens wanting service will only need to call in, get a token number and let the process take its course. There are over 90 services offered including queries over government fee or frequently asked questions. Motivated by the project, the District Collector of Jalgaon showcased it to the Maharashtra government, which now plans to install the e-lokshahi project in all district headquarters.

Technology used:

Interactive Voice Response (IVR) is an interactive telephone technology that allows a computer to detect voice and keypad inputs. IVR does note require human interaction over the telephone and allows customers to access a company's database via a telephone touchtone keypad, after which they can service their own enquiries by following the instructions. IVR systems can respond with pre-recorded or dynamically generated audio to further direct users on how to proceed. IVR systems can be used to control almost any function where the interface can be broken down into a series of simple menu choices. The e-Lokshahi project, which basically provides information about frequently asked questions and a mechanism for grievance redressal, all the possible options are broken down into series of choices, which the user has to select. Presently the project is catering to 42 types of grievances and 57 FAQs. The information about all the FAQs and grievance has been stored in the server database; the appropriate one gets accessed, depending on the choice selected by the user.

Short message service (SMS) is a method of communication that sends text messages between cell phones. Typically, SMS gateway provider facilitate transmission of SMS from a one cell to another, but using technologies like GPRS (General Packet Radio Service) Modems, it is possible to send SMS from a computer to the cell phone. In e-Lokshahi project, with a view to provide citizen centric service, GPRS modem has been configured at the server end, which in conjunction with server database, generates SMS on the fly and sends it to the citizens as acknowledgement for the grievance registered. Likewise the same SMS technology is used to send alerts to officers regarding the grievance registered.

A ***website*** (wikipedia) is a collection of related web pages, images, videos or other digital assets that are addressed with a common domain name or IP address in an Internet Protocol-based network. Website architecture basically encompasses three layers, the user- interface, the business logic and the backend database. Though the main interface for access e-Lokshahi, is the telephone/Cell phone, it also consists of a web site (www.jalgoan.gov.in/elokshahi) , which is used by the officers to view and update the status of the registered grievances.

A ***Database*** (Wikipedia) is an integrated collection of logically related records or files that are stored in a computer system which consolidates records previously stored in separate files into a common pool of data records that provides data for many applications. Many a database management software are available with different capacities and limitations. For e-Lokshahi project, MS – Access has been used as a backend. The interesting aspect of the e-Lokshahi project's architecture is that, it uses a unified database, which is used from all, the three technologies used viz. IVR, SMS and Web interface. The transaction between the citizen and IVR is captured in the database, SMS software used on the server, accesses it to generate SMS, and the higher officers accesses the same from a more user friendly web interface.

The grievances description (*Table 1*) and FAQ (*Table 2*) which is primary information about availing services of the nine departments is stored in a database.

Table 1 - Department Information

Competent Officer /Authority
Whom to Apply
Where to Apply
Prescribe time period for service
Documents required along with application
Service charges (Approved by Govt.)

Table 2 - Grievance Description

Complaint No.
Taluka
Department
Booded Date
Complaint Type
Complainer Name
Address
Recorded Complaint
Telephone Number
Level 1 Officer Remark
Level 2 Officer Remark
Level 3 Officer Remark Level 4 Officer Remark
Complaint Status
Complaint Remark
Escalation date, time of SMS to higher officer

Pitfalls of e-Governance in general:

However, there are a few downsides to this encouraging scenario. In many cases, the government system / website rarely gets updated thereby making the public information outdated. The connectivity to mobile cell / Internet and the problem of the last mile also is another issue. Added to this is the distorted pattern of the tele-density in India and the rural illiteracy, which means the reach of the telecom / Internet remains limited. This also means that online information put out by governments may not actually be accessed, nor enough publicity is given to the services that can be availed by the public through such e-Governance initiatives.

Any change in the way a system operates can bring in risk with it. Risks could include misuse of private information bases like land records and demographic profiles, privacy and confidentiality issues arising from the lack of protection to personal identities of the citizens (for example, citizen profiles can be sold to corporates for marketing purposes). Another risk could be reinvented touts or middle-men in the form of kiosk operators who may overcharge, or demand kickbacks for procurement of IT hardware and software.

Conclusion:

The e-Governance projects are in reality sporadic successes. A swift study of the existing situation exposes that states are by and large, not responsive. For example, though many of the key political figures, such as our ministers and MPs and Chief Ministers have their email addresses published on the e-Governance website, in reality, most do not respond to e- mails from the citizens. E-governance brings forth the transparency and accountability of the government concerned. Robert Klitgaard of RAND Corporation (Data Quest, 2003) had an interesting equation to explain corruption: C = M + D - T. Corruption = Monopoly + Discretion - Transparency. The state machinery in India has a monopoly over most of the basic services delivery. For most of the citizens e-governance can bring in far-reaching changes. The government too can truly claim to have brought in transparency in the way it governs by way of its jurisdiction. In the Indian scene, as this case study further progresses, one can see the showcasing of a few pioneering initiatives, to accentuate the effectiveness of technology to enhance transparency and accountability in matters of governance.

The Way Forward:

What e-Governance can do (Sadagopan, 2009) is to utilize the will of the people power and civil society to engage the government in a healthy debate and hold on to the inquiry of accountability of our elected leaders. Such a sustained effort in the long run would help change the mind-set of the political class. For example, the e-Lokshahi IVRS Project itself is such a system in which a grievance that is not addressed by the District administration is escalated to the next higher official. Thus state agencies are made more accountable for the kind of services they render to the citizens.

References:

Borole, P. (2009, May). *http://jalgaon.nic.in/Html/Pdf/eprojectenglish.pdf.* Retrieved July 2009, from jalgaon.nic.in: http://jalgaon.nic.in

Centre for Management Research. (2004). *http://www.icmrindia.org/casestudies/catalogue/Innovation/BREP008.htm.* Retrieved 2009, from icmrindia.org: http://www.icmrindia.org

Data Quest. (2003, October 15). *http://dqindia.ciol.com/content/top_stories/103101501.asp.* Retrieved July 09, 2009, from dqindia.ciol.com: http://dqindia.ciol.com

eindia.net.in. (2009). *http://www.eindia.net.in/2009/egov/index.asp.* Retrieved July 09, 2009, from eindia.net.in: http://www.eindia.net.in

Low, C. (2009, July 07). *http://www.futuregov.net/articles/2009/jul/07/indias-traffic-department-embarks-e-records-drive/.* Retrieved July 09, 2009, from futuregov.net: http://www.futuregov.net

Sadagopan, S. (2009, Feb). *http://www.egovonline.net/articles/article-details.asp?Title=e-Governance-in-India—Challenges-Opportunities&ArticalID=2203&Type=COLUMNS.* Retrieved July 09, 2009, from egovonline.net: http://www.egovonline.net

Simhan, T. R. (2009, May 25). *http://www.thehindubusinessline.com/ew/2009/05/25/stories/2009052550100300.htm.* Retrieved July 09, 2009, from thehindubusinessline.com: http://www.thehindubusinessline.com

Wikipedia. (n.d.). *http://en.wikipedia.org/wiki/Database.* Retrieved July 10, 2009, from wikipedia.org: http://en.wikipedia.org

Wikipedia. (n.d.). *http://en.wikipedia.org/wiki/Website.* Retrieved July 10, 2009, from wikipedia.org: http://en.wikipedia.org

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