

# **SOUVENIR**

## **NCEGOVS-2010**

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**National Conference on E-Government & E-Society****Patrons**

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Er. Ratnesh Mishra, BIT Mesra Ranchi (Allahabad Campus)

**Prof. P Trimurthy**  
**President**  
**Computer Society of India**



### **MESSAGE**

Hearty Congratulations to Allahabad Chapter of CSI on successfully planning and organizing a National Conference on E-Government & E-Society (NCEGOVS-2010) in association with Computer Society of India, Division-III (Sc. Applications) & CSI SIG on E-Governance during December 11-12, 2010 at Allahabad (U.P.).

I appreciate the efforts put in by the organizing Chair Shri D.K. Dwivedi, Program Chair Smt. Shailaja Gupta, SIG convener Maj. Gen.(Retd.) Dr.R.K.Bagga, CSI conference Chair Shri M.D.Agrawal, Division III Chair Prof. S.Subramanian, Managing Committee of CSI Allahabad Chapter lead by Mr. Zafar Aslam and Mr. Anupam Agrawal and their team for bringing up the event, involving the practitioners of E-Governance.

I would like to thank the resource persons for their kind contributions. I hope that the deliberations at the event would help in sharing the knowledge and enrich the budding professionals with insight into new technologies for developing e-Governance applications in the country to improve the quality of services to the people at large.

I wish the National Conference, a grand success.

**Prof Thrimurthy**

**M D Agrawal**  
**Vice President Cum President elect**  
**Computer Society of India**



CSI takes a key role in organizing many programs for promoting ICT for enabling Society and also tries to provide a rich platform for knowledge sharing and promoting new initiatives / technologies and solutions. Thru CSI's E-governance Special interest group initiatives, CSI plays a lead role in promoting effective use of ICT for various government initiatives for citizen governance and effective management. By organizing various seminars, knowledge sharing summits, study groups and Award/ Recognitions, SIG E Gov initiatives has empowered various government bodies with good knowledge and practices about ICT for effective governance

Data Security and Cyber Security has always been the key agenda for CSI activities. Thoughtfully, many activities are being done by various chapters and Institution members to create rightful awareness about this subject and hone skills among IT professionals. Thanks to the rich heritage of CSI for promoting IT for addressing nation's problems and empowering government organizations, corporate, academic institutions and individual members with the latest trends and solutions with a business and societal perspective.

A lot needs to be done.

Former President of India, His Excellency Dr. APJ Kalam, has expressed in his book - Vision 2020 - a plan for India to take its place amongst the developed nations. The book is voluminous of challenges to be taken up towards realization of that goal. Agriculture, education, healthcare and engineering & technology are the areas to be focused to in this plan. He has followed up that study with another strategy called PURA i.e. Providing Urban-amenities to Rural Areas, another explicit indication that India is still underdeveloped in the Rural Areas. Our E-governance and E-society initiatives will take a closer look on ideas and studies shared in this and subsequent studies as well.

I am proud to be part of this big event - National Conference on E-Government & E-Society, which is being organized by our Allahabad Chapter in collaboration with CSI E-Gov Sig & Div III, by putting up a rich and useful 2-day program on 11-12th Dec, 2010 at Education and Judicial seat of Utter Pradesh, Allahabad. I am sure, the fruitful deliberations in this seminar will lead to excellent ideas and provide immense opportunities for collaboration with the corporate, the government as well as with the ministry to take ahead our mission of empowering Nation with good knowledge of ICT.

I appreciate the hard work put in by our CSI team at Allahabad in preparing for this event. My special thanks goes to Shri D.K. Dwivedi, Past Chairman of Allahabad chapter, who has spearheaded this task of organizing - NCEGOVS-2010 on Dec.11-12, 2010 at Allahabad.

My hearty good wishes for all round success of this program.

**M D Agrawal**

**Dr S Subramanian**  
**Chairman Div III**  
**Computer Society of India**



I am extremely happy to note that the proposed **National Conference on E-Government & E-Society** to be held at Allahabad has been planned very well. Application of IT in Government sector is vital for ensuring speed and transparency. In today's context where corruption in government sector has taken an important place in everyday life, it is essential to educate the public about the advantages of IT application in Government transactions. This would also make the Government officials more accountable and act on time in the service of the people. I am sure conference such as this would pave the way of enhancing the quality of life for ordinary citizens.

I wish the conference all success

Dr S Subramanian

**Maj. Gen. (Retd.) R K Bagga**  
Chairman, CSI SIG on E-Governance



The last decade has witnessed e-Governance penetrating India in both Urban and Rural areas, primarily due availability of affordable Information and Communication (ICT) solutions. Both Central and States Governments have announced National e-Governance plan (NeGP), with well defined e-Governance policies. The total investments of over 40,000 crores being made to implement these initiatives are huge, and are impacting the domestic ICT market ,and the Society at large. IT spending in our country is being driven primarily by this governmental initiative and is impacting the lives of ordinary citizen, across the country in a very positive fashion.

I am extremely happy that Allahbad Chapter of CSI is taking the lead in conducting this National Conference on e-Government & e-Society (NCEGOVS-2010) on 11 and 12 Dec 2010, focusing on "sangam" of e-Governance and Society, particularly with Judiciary. Governments are under pressure to deliver a range of services in a timely, efficiently, economical, equitable, and transparent and corruption free manner to its citizens. E-Governance can have a profound impact on the poor and ultimately on the economic output and growth of the country as a whole. Information Technology Act(as amended in 2008), is a revolutionary legislation in bridging the digital divide,along with the implementation of Right to Information Act(RTI).

Computer Society of India's Special Interest Group on e-Governance (SIGeGOV) formed in 2007 has rendered yeoman service in encouraging e-Governance initiative in the country, since its inception. The website for the Special Interest Group ([www.csi-sigegov.org](http://www.csi-sigegov.org)) acts as knowledge portal for selected e-Governance initiatives in India. It has been also conducting e-Governance Awards since 2003 and holding Knowledge Sharing Summits in different States. Based on, pioneering research work undertaken at NISG/IIIT Hyderabad on Evaluation of e-Governance projects for Awards, Field visits and Analytical Hierarchy Process(AHP) was implemented. This made the Awards process transparent, unbiased and acceptable to all. CSI brand image has improved with the Governments in a significant manner.

I am confident that this Conference with galaxy of experts, both from Government and Society,will benefit the delegates in a big way!

**Maj. Gen. (Retd.) R K Bagga**

**D.K. Dwivedi**

Chairman,  
Organising Committee,  
NCEGOVS

**Shailaja Gupta**

Chairperson,  
Programme Committee  
NCEGOVS



E-Government aims to make the interaction between Government and citizens (G2C), Government and business enterprises (G2B), and inter-agency relationships (G2G) more friendly, convenient, transparent, and inexpensive. Implementation of e-Governance can bring about: **1.** Efficient delivery of Government services to citizens **2.** Improved interactions with Business and Industry **3.** Empowerment of citizens for access to information **4.** More efficiency for Administration & Management of routine business of Government.

The resulting benefits can be: increased efficiency and effectiveness, lesser corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions for both citizens and the Government itself. With emerging Information and Communication Technologies (ICTs) & Ubiquitous Technologies, it is now possible for common man to locate Common Service Centres including Touch Screen Information Kiosks in very close proximity from where so many Government Services and utility services can be availed from single window under one roof very conveniently. Many of such Services can also be available even on the hand-held devices sitting at one's own place.

Despite the benefits of E-Government – increased Government Accountability to citizens, greater public access to information and a more efficient, cost-effective Government – implementation is not yet wide & sufficient enough to cater the overall needs. High costs of deployment and management is one such major factor. Despite the enormous benefits, OSS/FS is still struggling to out compete proprietary software in E-Governance and other related e-applications.

Government of India have launched several Mission Mode E-Governance Projects on PPP Model under the NeGP Programme. Aims & Objectives of these Projects are intended to provide better service to Citizens and bring about efficiency in the System. But, the implementing agencies of such projects if not carefully monitoring the outsourcing agencies who are ultimately responsible the execution of the E-Governance projects, lead to mere wastage of huge money giving no substantial results. Many of these Projects are rolled out without considering the ground realities such as non-availability of basic infrastructure such Site, continuous power supply, trained technical manpower and not consulting domain experts and prospective users at the conceptual stage.

We hope during the two day National Conference, lot of deliberations are going to be made on the varied issues by the leading Researchers/ Practitioners/ Policy makers which will ultimately bring out some concrete suggestions for future guidance for the successful implementation of the E-Governance Projects and the dream of E-Society may come true. Many of the Projects being discussed here have already won prestigious Awards from CSI as well as other professional bodies.

At last, we would like to warmly welcome to our CSI National Office Bearers, Invited Speakers and Delegates who despite being at very responsible and senior positions have agreed to spend their weekends with us sacrificing their comforts of home and many of them performing long journeys from different state of the Country. We hope outstation participants will enjoy their stay at Sangam City of Allahabad.

# National Conference on E- Governance & E- Society (NCEGOVS-2010)

Venue-Hotel Allahabad Regency, Civil Lines, Allahabad

## **Programme Schedule**

**Saturday December 11, 2010**

**9:00 AM to 10:30AM** Registration of Delegates

**9:30 AM to 10:30 AM** Tea

### **Inaugural Session**

**10:30 AM Saraswati Vandana**

**10:35 AM Lighting of the Lamp**

**10:40 AM Welcome Address**

By Sri D.K. Dwivedi,

Chairman, Organising Committee, NCEGOVS-2010

**10:45 AM About National Conference on E-Government & E-Society**

By Smt. Shailaja Gupta,

Chairperson, Programme Committee , NCEGOVS-2010

**10:50 AM Theme Address**

By Maj. General (Retd.) R.K. Bagga,

Chairman, CSI-SIG on E-Governance, Computer Society of India

**11:15 AM Keynote Address**

By Sri M.D. Agrawal

Vice President (President Designate), Computer Society of India

**11:40 AM Address**

By Prof. B.D. Chaudhary

Director, MNNIT, Allahabad

By Sri S.B. Singh

Dy. Director General & State Informatics Officer, NIC, UP

By Sri Prashant Shukla

Chief Operating Officer (COO), CMC Limited



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**12:30 PM Address by Chief Guest**

Hon'ble Mr. Justice Rajesh Tandon  
Cyber Appellate Tribunal, New Delhi

**12:55 PM Presidential Address**

By Hon'ble Mr. Justice Yatindra Singh,  
Judge, Allahabad High Court

**01:20 PM Vote of Thanks**

By Sri Zafar Aslam,  
Chairman, CSI, Allahabad Chapter

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**01:25 PM to 2:30 PM : Lunch Break**

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**Technical Session-I**  
**E-Governance –Current Status, Issues & Challenges**

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**2:30PM E-Court Project & ICT Applications in Judiciary**  
**to****3:30PM**

By Hon'ble Mr. Justice Sunil Ambwani,  
Judge, Allahabad High Court

**Allahabad High Court Web Portal : e-Gov Initiative for  
Integrated Service Delivery to all Stakeholders**

By Sri D.K. Dwivedi & Sri Ashwini Kumar  
High Court, Allahabad

**eLegalix – Allahabad High Court Judgement Information  
System**

By Sri Arindam Lahiri  
High Court, Allahabad

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**Knowledge Management for effective E-Commerce**

By Sri VSR Krishnaiah,  
Senior Technical Director, NIC, New Delhi

**E-Governance Initiative of STPI**

By Sri Praveen Dwivedi,  
Additional Director, STPI, Bangalore

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**3:30PM**  
**to**  
**3:45PM****Tea Break**

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**03:45PM to 04:45PM**    **Application of cryptography in a Transaction System in E-Governance Environment**

By Sri Siddharth Sen,  
NIC Purulia & Prof. Sripati Mukhopadhyay, University of Burdwan, Burdwan

**A Cryptographic Protocol through Recursive Transposition and cascaded Operation on pairs of Bits**

By Prof. Pawan Kumar Jha, Purbanchal University, Biratnagar, Nepal  
Prof. A.K. Nayak & IIBM, Patna  
Prof. G.P. Sharma, Purbanchal University, Biratnagar, Nepal

**Contributory Papers**

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**6:00PM to 9:30PM**

**Evening Programme**

- Music Programme
- AGM of CSI Allahabad Chapter & close interaction of members of CSI Allahabad Chapter with Vice President (President Designate), CSI, Chairman, CSI-SIG on E-Governance & other CSI Dignitaries
- Networking with Delegates & Guests
- Lucky Draws
- Dinner

**Sunday December 12, 2010**

**9:30AM to 10:00AM**

**Tea Break**

**10:00AM to 11:50PM**

**Technical Session-II  
Best Practices in E-Governance**

**E-Governance Initiative in Public Distribution Area in UP**

By Sri Rajeev Agarwal, Commisioner, Aligarh

**Jhansi Jan Suvidha Kendra JJSK- Telephone Based G2C e-Governance Initiative**

By Sri Raj Shekhar, District Magistrate, Jhansi  
By Sri Deepak Saxena, Technical Director, NIC Jhansi  
Md. Asif Khan, Scientist "D" / PSA, NIC, Jhansi

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**Information Commission Online**

By Nita Verma, D.P.Misra, K. Kamalakannan, NIC New Delhi/Chennai

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**Contributory Papers**

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**11:50AM  
to  
12:10PM****Tea**

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**12:10PM  
to  
02:00PM**

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**Technical Session-III  
Best Practices in E-Governance**

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**E-Governance: An Agenda for Management Education**

By Prof. Sanjiv D. Vaidya, IIM, Kolkatta

**E-Governance Standards**

By Ms. Anita Mittal,

Senior Consultant, Project Management Unit, NeGP, DIT, MoICT, Govt. of India

**E- Procurement**

By Mr. Bhardawaj,

IES, Dy. Director, DG&amp;SD, Ministry of Commerce, Govt. Of India

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**Contributory Papers**

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**2:00PM to 3:00 PM : Lunch Break**

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**3:00PM  
to  
3:55PM****Valedictory Session****Panel Discussion**

Topic: Success stories, Issues &amp; Challenges in the Implementation of E-Governance Projects

Hon'ble Mr. Justice Dilip Gupta

Judge, High Court Allahabad

**Prize Distribution for Best Presentation/ Paper****4:00 PM Vote of Thanks**

By Dr. Jayant Nath Tripathi,

Hony. Secretary, CSI Allahabad Chapter

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# Computer Society of India

## Allahabad Chapter

Web-Site: <http://www.csi-allahabad.org>, e-mail: [csialld@rediffmail.com](mailto:csialld@rediffmail.com)

CSI HQ Web-Site : <http://www.csi-india.org>, e-mail: [hq@csi-india.org](mailto:hq@csi-india.org)

Computer Society of India (CSI) is a body of computer professionals from Academics, Industries, Government, IT firms and consultancy services etc. Computer Society of India has about 50,000 professional and student members. CSI has 66 Chapters, 381 Student Branches and more than 550 institutional members. CSI promotes interchange of information amongst the experts by holding seminars/conferences etc., CSI has affiliations with international computer societies, professional bodies and organizations such as IEEE, CICC, Japan, IFIP, SEARCC, ASIA ACT and sponsors its representatives and extends travel support to its members to participate in international events/conference.

CSI Allahabad Chapter was established in the year 1979. Prof. Ashok Sharma was the founder Chairman of CSI Allahabad Chapter. Chapter has been regularly conducting short-term courses for students/bank employees, examination of CSI Education Directorate and organizing National and Regional level Seminars/Conferences/ Workshops in association with other local educational institutions and professional bodies. Chapter also regularly organizes presentations of leading managers of IT firms on current trends of technologies and invites experts for delivering talks on various technical topics for the benefit of the professional and student members of the Chapter. CSI Allahabad Chapter publishes a monthly/ bimonthly newsletter.

CSI Allahabad Chapter has 10 Institutional members (CORE, IFFCO, AREVA T&D Ltd., OBEETEE, ECC, SIET, ITM Gorakhpur, ITW Gorakhpur, AAIDU, MMMEC Gorakhpur). Chapter is proud of having Dr. K.K. Bhutani & Prof. B.D. Chaudhary as Fellow of CSI and Chapter is proud of having Prof. A.K. Vanwasi, Er. U.C. Dubey and Er. M.Y. Khan as Patron of Chapters. Chapter is proud of having its members as representative in IFIP and National EXECOM of CSI. Chapter is proud of having CICC trainees amongst its members.

CSI Allahabad Chapter received 'Best Chapter of Northern Region' in the year 2001-2002, 2002-2003, 2003-2004, 2006-2007 and 2006-2008. CSI Allahabad Chapter has also received 'Best Newsletter' Award for the years 2001-2002, 2002-2003.

### **Office Bearers of CSI Allahabad Chapter for the year 2010-2011/12**

<b>Chairman</b>	<b>: Zafar Aslam, CMC Limited, Allahabad</b>
<b>Vice Chairman</b>	<b>: Dr. Anupam Agarwal, IIIT, Allahabad</b>
<b>Hony. Secretary</b>	<b>: Prof. J. N. Tripathi, Allahabad University</b>
<b>Hony. Treasurer</b>	<b>: Er. N.K. Agarwal, ITI Limited, Naini</b>

# Abstracts/ Papers

## **OPEN SOURCE, OPEN FORMAT FOR BETTER E-GOVERNANCE**

**Justice Yatindra Singh**  
Judge, Allahabad High Court, Allahabad.  
ysingh@allahabadhighcourt.in

The beginning of the last century witnessed the emergence of a semi-clad Indian, referred to as 'half naked Fakir' by Winston Churchill. His philosophy was,

'Means are more important than the end: it is only with the right means that the desired end will follow.'

To the charge that 'means are after all means', he would say, 'means are, after all, everything'. His name was Mohandas Karamchandra Gandhi – known to the World as Mahatma Gandhi, father of the Indian nation.

Gandhi's philosophy is deep rooted in law too. Lord Denning, one of the greatest judge of 20<sup>th</sup> century, in R Vs IRC Exparte Rossminster Ltd 1979 (3) All ELR 385 held,

'But it is fundamental in our law that the means that are adopted ... should be lawful means. A good end does not justify bad means.'

In a society based on E-governance,

- The end is dissemination and communication of information; and
- The means are, how to achieve it, implement it; the kinds of software to use, the kinds of standards to adopt, the kind of formats to employ?

### **WHAT IS OPEN SOURCE SOFTWARE (OSS)?**

The software consists of two parts

- Source code; and
- Object code.

Nowadays, computer programmes are written in high level computer languages using compact English words. This can be understood by humans and not by computers. This is known as the source code.

The languages also have a programme called compiler and with its help, source code is compiled into the language that computers can understand. This is called object code or machine code. This runs the computer or any application therein.

### **Protection - Object Code**

There was some debate as to how the object code is protected but Article 11 of the TRIPS mandates its members to provide authors with the right to authorise or to

prohibit commercial rental of at least computer programmes and cinematographic works. This has also been so provided under Section 14(b) of the Copyright Act and now in our country, as in almost all other countries in the world, the object code is protected as copyright.

### **Protection - Source code**

Source code is a kind of description. Copyright lies in the description and source code of a computer programme—being description—is a literary work within the meaning of Copyright Act. If it is not published then it is protected as a trade secret. In case it is published it is protected as a copyright and it may also be protected as a patent.

### **Copylefted, Free, and Gpled software**

Everyone is not using Intellectual Property Rights (IPRs) to hoard rights in the software. Some are using them in such a way that no one is able to hoard them. Using copyright, they are doing a thing that is its opposite. It is for this reason it is called copylefting. This happens if software has the following conditions:

- i. The software is royalty free and no fee is charged for the same;
- ii. The source code is disclosed;
- iii. There is freedom to modify the software; and
- iv. Anyone who redistributes the software, with or without changes, must pass along similar freedom to others i.e. disclose the source code and permit further modification.

Copylefted software is also called free software as there is freedom to modify it. General public licence (GPL) contains conditions that copylefts a software. Software, under a GPL licence, is also known as Gpled software.

### **Open Source Software (OSS)**

The philosophy of copylefted/free/Gled software conveyed an anti-business message. Though it not so: it is merely a way of doing business. In the late 1990's, a group of free software enthusias got together in California and started a consortium – called Open Source Initiative (OSI). They also drafted ten guidelines and if the license or conditions under which the software has been released satisfies these guidelines then they called it Open Source Software (OSS). Among the ten conditions, the three important ones are,

- i. The software is royalty free and no fee is charged for the same;
- ii. The source code is disclosed; and
- iii. There is freedom to modify the software.

The guidelines do not contain the fourth condition of Free Software. Thus OSS is more comprehensive. All Copylefted/ free/Gled software is OSS but all OSS is not Copylefted/ free/Gled software. The sphere of OSS is bigger than Copylefted/ free/Gled software.

Anyone can copy, distribute or modify OSS. No one infringes copyright by merely using or modifying it. This does not mean that it has no copyright. There is copyright in OSS. In fact, OSS is copylefted by using copyright. Anyone who uses OSS contrary to the conditions governing the license, not only breaches the contract but also infringes the copyright. This has also been so held by the US Court of Appeals for the federal circuit in Robert Jacobson Vs Matthew Katzer on 13. 8 2008 (<http://www.ca9c.uscourts.gov/opinions/08-1001.pdf>).

### **Advantages of OSS**

- i. *No Copyright infringement in using or modifying it:* There is copyright in the OSS. In fact, OSS is copylefted by using copyright. However in terms of the license conditions, there is no copyright infringement in merely using or modifying it. Copyright infringement due to unauthorised use is a global issue and adopting OSS will obviate this aspect of it.
- ii. *Lesser cost:* OSS is royalty free; it does not cost anything. The only cost is for services or support for the same. Utilising OSS will reduce the cost of any project. The cost reduction has an impact on the proprietary software too. In order to be competitive, their cost is being reduced.
- iii. *Service sector:* Due to historical reason, our English and Maths have always been a plus point. These subjects are necessary for providing services in the IT sector. Adoptions of OSS may open new job opportunities in the service sector.
- iv. *Customise software:* Software can be modified if source code is disclosed and there is permission to modify the same. In OSS, source code is disclosed and there is permission to modify the software. This permits everyone to participate in the software movement and also provides opportunity to everyone to customise software. Today, OSS is not only available in our national language but also in almost all regional languages; its adoption offers us opportunity to take IT movement to the grass root level.
- v. *Avoids IPR:* It is possible to have IPR in the modified software created from OSS but the authors of any OSS do not claim any IPR in the OSS in anyone using and modifying it (though there are some conditions). This is clear from the fact that they permit everyone to use/ modify/ distribute it without any royalty. This not only leads to reduction in the IT cost but avoids future conflicts in IPR area.
- vi. *Different licenses:* There are many licenses that are certified by OSI. This creates some difficulties but different licenses have their advantages too. They can be adopted for different business models:
  - a. GPL is viral: a business model centered around programming and support services should be adopted.
  - b. BSD type licenses are at the other end: they permit creation of proprietary software. The Macintosh Operating System (a proprietary software) is partly based on BSD licensed code.

The other licenses lie between these two and may be chosen by the companies/software developers according to their need.



- vii. *Stable*: Virus is nothing but a computer programme which effects any other computer programme or computer data. In OSS there can be viruses however there have been only a few viruses in OSS. This is because its source code is open/published. Experts say that it is safe and provides stable environment. This is also strengthened by the fact that Apache (an OSS) web servers are the most popular ones.

Let me explain it with the help of a story from 'Panchtantra': this has common thread in all cultures. It is a story of a hare and a tortoise.

### **THE TORTOISE AND THE HARE**

One day, the hare and the tortoise decided to race against each other. The hare obviously took the lead; he thought of relaxing and went off to sleep. The tortoise, walking slowly but steadily, overtook the hare and won the race. The moral is,

'Slow but steady wins the race'.

In recent time, some new chapters have been added.

The hare was perturbed by the defeat. He asked the tortoise to race again. This time he did not take rest and won the race easily. The moral is,

'It is better to be fast and reliable'.

But, this is not the end of the story.

After some days, the tortoise asked the hare to race once again but with a condition that the course will be chosen by him. The hare, who was confident of his victory, gave him a free hand. This time the course included a river. The hare ran up to the river and then stopped. The tortoise came and swam across the river to win the race. The moral is,

'Every one has weak and strong points – play on your strong side.'

However, the story still does not end here.

After some days, the tortoise and the hare repeated the race over the same course but the rules were changed. This time they decided run it as a team. On the ground, the hare carried the tortoise on his back and on the river, the tortoise carried the hare on his back. The result was that both of them reached the destination quickly, saved time and enjoyed the race too. The moral is,

'It is best to consolidate everyone's strong points'.

### **WHAT IS OPEN FORMAT?**

Formats are particular way of encoding or a method of storing information so that a computer programme or a device may, understand, reproduce, and, if the need be, render it for modifications.

Formats may be proprietary. They could be,

- Secret and protected as a trade secret; or

- Published and yet protected as a patent (as was the gif format for images).

This is not true for open formats. They are,

- i. Documented and published - sufficient to implement them in any computer programme or device.
- ii. Made available irrevocably to everyone without any royalty or fee.
- iii. Maintained by a neutral body, where decisions are taken with consensus or majority thus catering to the needs of all.

### **Advantages of Open Format**

Open formats, not only avoid monopoly but encourage healthy competition. Information technology has best flourished in the open formats/ standards: the Internet, the web, the protocol transfer are all based on open formats/ standards. Apart from other advantages,

- i. There is no fear of patents or licensing;
- ii. Open source software supporting ODF exists for every operating system; they work across the operating systems.
- iii. The files can never be lost as they will always be accessible.
- iv. They can be implemented in any software making the users true owners of their files.

Let me explain the importance of open format with the help of another story—this time a science fiction by Jayant V. Narlikar. He is a leading Astrophysicist in the word. He has worked with Fred Hoyle and like him writes science fiction. He has written a novel by the name of 'The Return of Vaman'.

### **THE RETURN OF VAMAN**

The novel revolves around three characters: an archeologist, a physicist, and a computer scientist. The physicist wanted to experiment with gravity and a deep hole was being dug. In the process, the team came across a plaque first and then a cube. They could neither understand the script written on the plaque nor the figures on the cube. It was a perfect cube of unknown substance. They knew that it came from some advanced civilisation. They decided to open the cube but could not make head or tail out of it.

There was a figure on the cube showing two elephants pulling the cube in the opposite direction without any success. They were reminded of an experiment done in the seventeenth century by the German scientist Otto Von Guericke in Magdeburg Germany. He had joined the two copper hemispheres of 51 cm diameter and pumped the air outside. Thereafter 8 horses on each side could not pull them apart. The team realised that the air from the cube has been removed. A thin hole was drilled, the air entered inside, and the cube opened instantly.

It was a time capsule, informing about the advance civilisation that existed twenty thousand years ago. There was no indication as to how it came to an end or what

happened to it. The time capsule also informed them how to make an advanced computer. They make it and name it 'Guru'—the teacher.

'Guru' tells them how to make a meter high advance Robot. This robot is like the robot 'Andrew' (starring Robin Williams) in the science fiction film 'Bicentennial Man' (based on the story 'The Bicentennial Man' and the novel 'The Positronic Man' written by Isaac Asimov). It is named 'Vaman' (वामन) after Hindu mythological story. Vaman, (like Andrew), is extremely advanced; learnt quickly and is able to take independent decisions. But his intentions are different. 'Vaman' keeps on requesting his creators to teach him how to replicate itself so that humanity may be served better. This was not being done. The team was observing caution as there was no trace of the advanced civilisation. A conspiracy was hatched: Vaman gets itself stolen by others on the promise that it will be taught replication.

The answer to the mystery, as to how that advanced civilisation perished, lay in the plaque that was also found. But no one could understand the script. It was only when the script was deciphered that the reason could be known—too many Vamans serving the humanity and what happens if they go on strike. Utopia, if there is one, is end of life. It became imperative to destroy the Vaman so that it may not replicate itself.

This is the broad plot of the novel but the reason that I narrated this story is,

In the physical world, the information lies in the script. Loose the ability to read the script: you loose the information.

In the digital world the information lies in the format. If the format is closed then the information may be lost forever.

It is better to store information in open format: it is only then we can be sure of owning information.

### **OPEN STANDARDS, FORMATS – GOOD MEANS**

This is, what the open source and open formats are about. They,

- Consolidate strong points;
- Use the IPR to prevent the hoarding of technology;
- Invite others to participate in its development;
- The permit us to own the information.

It is 'Make love, not war' in atypical way. In terms of Gandhi's philosophy, they are the right means for e-governance and are the key to the future: they will lead us to the desired end.

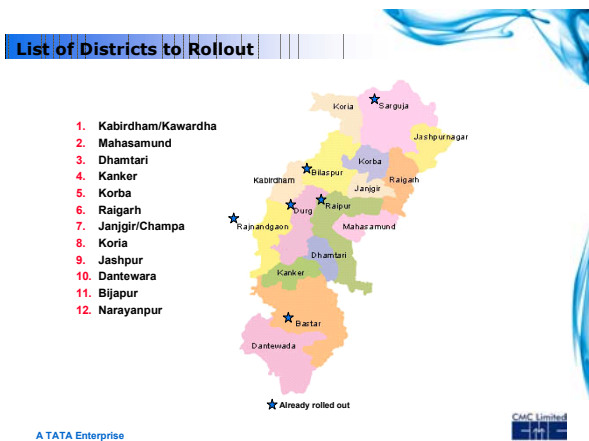
# CHOICE

 – an e-governance initiative

**Prashant Shukla**  
Chief Operating Officer, CMC Ltd.

Chhattisgarh Online Information System for Citizen Empowerment project is a citizen (interface) services solution aimed at providing government to citizens (G2C) services with a community participation wherein a private citizen becomes a notarized agent to handle government documents.

CHOICE project is successfully running in 6 district locations at Raipur, Durg/Bhilai, Rajnandgaon, Ambikapur (Sarguja), Bilaspur, Jagdalpur (Bastar). The project is implemented for providing citizen services for the urban bodies such as the Municipal Corporation, Collectorate and Tahsil office. In the rollout phase all the 5 district locations were inaugurated online and have been successfully running since Oct' 2008. This includes planned participation of nearly 100 CHOICE (KIOSK) Agents, more than 150 active users and training to about 400 persons. Since the rollout there has been encouraging usage and citizens are being issued various digitally signed certificates across all the 6 district location in all about 140 services can be activated. In Chhattisgarh usage of about 20 most commonly used services has generated more than 3.5 Lakhs digital certificates to citizens. The status of the project roll out in the remaining 12 districts is under implementation for state wide roll out.



How does the process work for CHOICE Agents?

The citizens are notified through an advertisement in the local dailies to apply for the appointment of a CHOICE/KIOSK Agents. The district administrative head (Nodal Officer) is the director of the project for the district to make suitable appointments. After due diligence and infrastructure readiness of the KIOSK Agents and the government officials, they work in a digital work flow seamlessly. The appointment of

KIOSK Agents, provision of digitally signed certificates etc. are covered under statutory legal and regulatory framework.

How does a CHOICE/KIOSK Agents work?

To use CHOICE, Qualified Citizen has to be appointed by State Govt. through District Collectorate after that he has to register with CHiPS as a CHOICE Agent/KIOSK Operator.

CHOICE Agent is the person, who will submit the various applications like Birth, Death, SCST, OBC, Income, Domicile Certificate etc. on behalf of citizen. As a citizen, people can also connect to CHOICE website to know their application status and other important information provided by CHIPS. (fig 1.1 & 1.2)

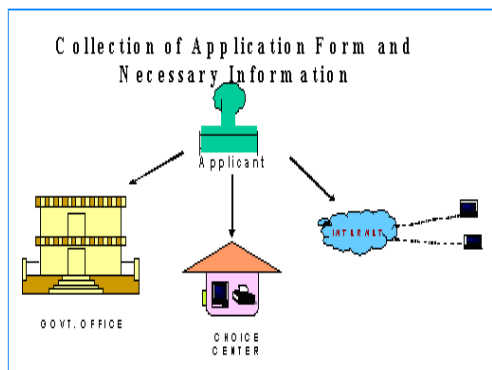


Fig. 1.1

**Business Process at KIOSK**

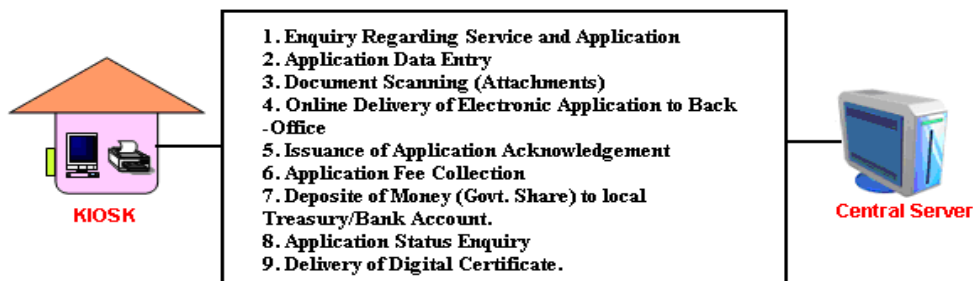
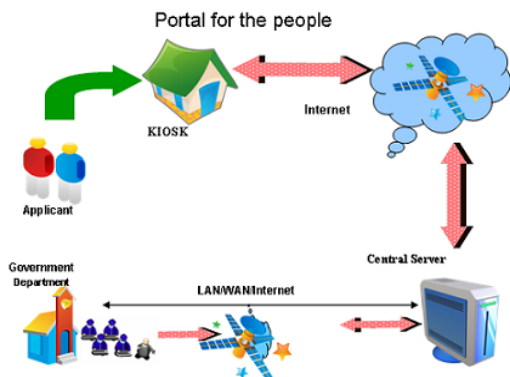


Fig. 1.2

How can I (citizen) use CHOICE services?



To use one of the CHOICE services you have to go to the nearest neighborhood CHOICE Service Center/KIOSK Center.

CHOICE agent will submit the application on behalf of you. As per your requirement, Kiosk Agent will submit the application for you. All you need to do is you have to provide sufficient & correct information to KIOSK operator and pay a small money as a service charge which is already pre-approved by the state government notification (Please refer Fig 2.1).

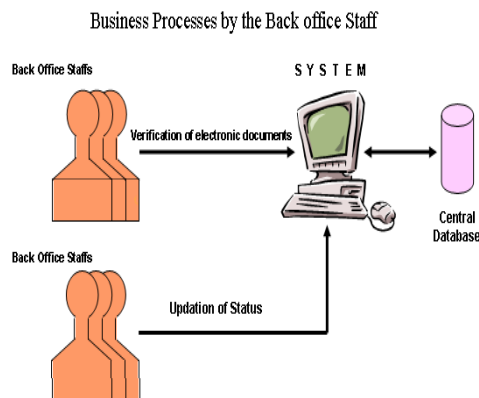
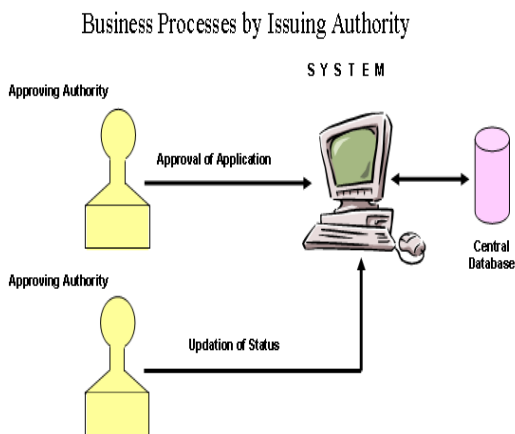
**Back office**

The government officials working in the back office logs in to the system by using their User ID, Password and Biometric fingerprint Authentication. Based on the role govt. user will be able to see the relevant applications uploaded by KIOSK Agents. The govt. user can now take decision (Return/Approve/Reject/Pending) based on

the business/work flow rules on the digital forms (with all relevant information and attachments) uploaded by kiosk operator.

If the need arises government user/officials has the provision for physical verification of the applicant and record its comments in the digital work flow. Therefore, in the digital work flow any certificate can be issued within few minutes after the application is uploaded and seen by the government user (Fig 3.1 & 3.2).

Fig. 3.2



This process in the earlier days used to take at least one month where in a citizen had to make several rounds of trip to government departments and would be subjected to delays or lack of information available on the status of their applications. Similarly, several other services across the urban bodies can be provided.

The benefits that has accrued to the citizens & state is, therefore, implementing the concept of anytime anywhere government, provision of live li-

hood to common citizens and making them participate in the government machinery, reduction of the transaction time for provision of services and encouraging transparency in information dissemination.

1. Transparency between Citizen and Government in various departments.
2. No need to go government office for your application status enquiry, you can do online status query for application.
3. You can submit your application from any CHOICE center.
4. Cutting the costs of the citizens as well as for the Government.
5. Enhancement in quality of life.
6. Reducing the delays in decisions as the required data would be available instantly.
7. CHOICE allows citizens to access and use government information and services.
8. Availability of 24\*7 online government Services.

## Type of Services

CHOICE has about 140 services which can be activated. It is our experience that 22 services across the urban bodies are actively used, some of the popular services are:

### \* KIOSK Agent Registration

<b>G2C services:</b>	
<b>Municipal Corporation</b> <ol style="list-style-type: none"> <li>1.</li> <li>2. Birth Registration</li> <li>3. Birth Name Inclusion</li> <li>4. Birth Data Correction</li> <li>5. Death Registration</li> <li>6. Death Data Correction</li> <li>7. Issue New Ration Card</li> <li>8. Issue Duplicate Ration Card</li> <li>9. Surrender Ration Card</li> </ol>	<ol style="list-style-type: none"> <li>10. Alter Ration Card</li> <li>11. Issue Gomasta/Trade License</li> <li>12. Renew Gomasta/Trade License</li> <li>13. Cancel Gomasta /Trade License</li> <li>14. Duplicate Gomasta /Trade License</li> <li>15. Alteration of Gomasta /Trade License</li> <li>16. BPL Survey Data Entry</li> <li>17. Grievance (RMC)</li> <li>18. Marriage Registration</li> </ol>
<b>Collectorate</b> <ol style="list-style-type: none"> <li>1. SC/ST Certificate</li> <li>2. OBC Certificate</li> <li>3. Income Certificate</li> <li>4. Local Resident (Domicile) Certificate</li> <li>5. Grievance (Collectorate)</li> </ol>	<b>Online Payment G2C Services</b> <ol style="list-style-type: none"> <li>1. Electricity Bill Payment Collection for CSEB</li> </ol>

## MIS Reports

An important aspect of any system is to provide accurate information across all the levels of hierarchy. In the Choice project highest levels of authority at the state both administrative and political can view status of citizen services being provided and take corrective action, remove bottlenecks etc. in making an efficient system. Some examples of these reports are:

### 1. Service Wise Time Analysis Report

This link is used to show the report of all services like how many applications was approved, rejected, back, pending etc.... for a particular month of year for a particular district.

### 2. Performing Monitoring Report

This link is used to show the report of particular service in between to dates for a particular district.

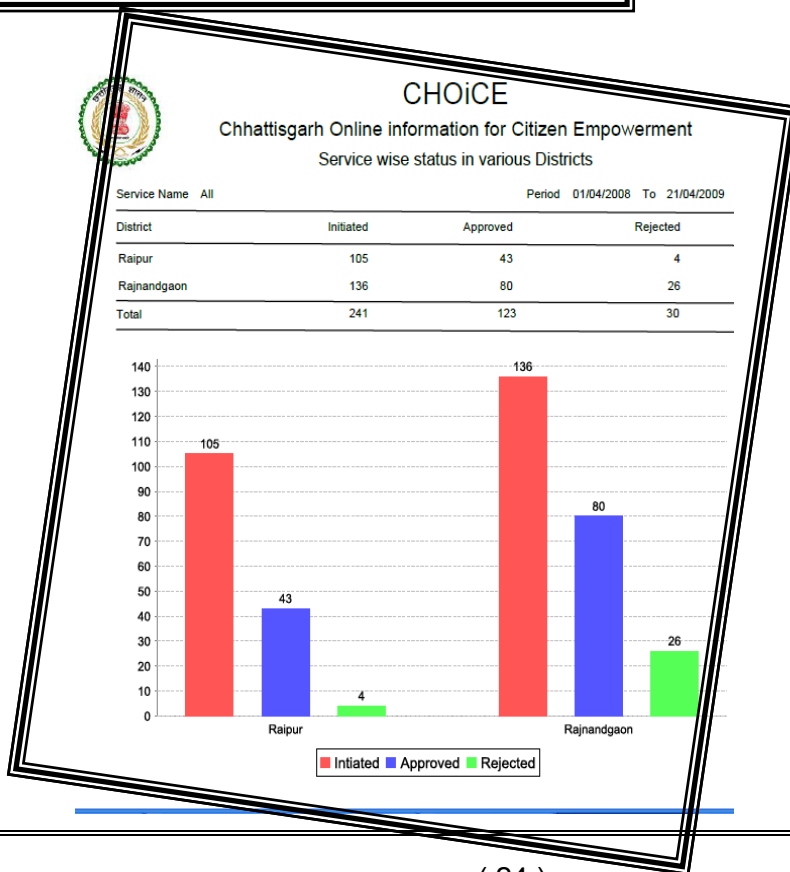
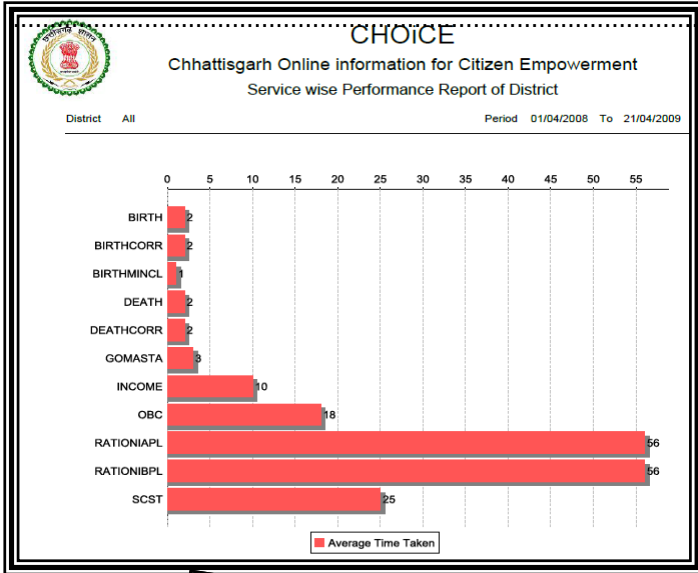
### 3. Daily Summary Report

This link is used to show the report of particular service for a particular date for a particular district.

### 4. Information Report for CHOICE Agent

This link is used to show the report of particular service for a particular date for a particular district.

and many more





## The Road Ahead

The framework of the CHOICE program is under state level implementation. According to information available through CHiPS the project will be extended to cater CSC (Citizen or Common Service Center) model for the implementation of rural CHOICE program and extend its reach to the villages.



CMC Limited has taken up this project on a turnkey basis and has received appreciation and commendation in providing a world class solution for the e-government citizen services model by CHiPS. (Ref. <http://www.choice.gov.in>)

[The project has received Skoch Challenger Award 2007 in the category of Best of Open Source project and CSI Nihilent egovernance award 2010](#)

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## Knowledge Management for Effective E-Governance

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Knowledge management is the big buzz-word in organizations today, especially in very large enterprises. It is said that an organisation that is not managing the explicit and tacit knowledge it has available, is not really recognizing the full potential of its capabilities, or harnessing the brainpower within them. Governments across the globe are the biggest source of information and knowledge by virtue of their size and complexity of processes. Inadequate or no knowledge management practices within the Government generally lead to loss of opportunity as a result of lost institutional memory, knowledge gaps and non-availability of appropriate inputs for decision making.

The Second Administrative Reforms Commission, set up by the Government of India, is of the view that Knowledge Management is central to governance reforms in general and e-Governance reforms in particular. Therefore, it recommended in its report to the government that "the Union and the State Governments should take proactive steps in establishing Knowledge Management systems as a pivotal step in the implementation of e-Governance initiatives".

As government activities increasingly shift to the web, the challenge facing government administration is providing quality services by responding observantly to the needs of the public. A good knowledge management strategy can help achieve this goal. Therefore, it is important to understand how governments can successfully implement knowledge management programs that will help them to gain citizenry satisfaction and expectations.

## **Allahabad High Court Web Portal : e-Gov Initiative for Integrated Service Delivery to all Stakeholders**

**D. K. Dwivedi, Ashwini Kumar, Gyanuji Srivastava**  
Allahabad High Court

As e-Government initiatives are enhancing the quality of Government services, ICT applications have also revolutionised Justice Delivery System. Justice at the doorstep of Citizen is only possible with the proper use of ICT Applications. Uttar Pradesh being the most populous state of the country is the facing the challenge of management of the database of largest number of pending Cases in the Country at the level of High Court as well as Subordinate Courts.

At Allahabad High Court, several G2C, G2B, G2E and G2G Applications have been developed which are being extensively used for the routine management of the daily business of the Court by the stakeholders. All such Applications are integrated and interface is available to end users through Intranet Link or Web portal of the Allahabad High Court. Services such as Cause List, Judgements/ Order, Case Status, Status of Cases, Folio Applications for Authenticated copies of the Judgements/ Orders, PIS of Judicial Officers, Database of Judges/ Advocates, Recruitments, RTI, Web Diary etc.

Case Information System provides latest information of cases filed at Allahabad High Court & its Bench at Lucknow and is based on the base Judicial Application which involves computerisation of scheduling of cases to be heard by the Courts. The system facilitates retrieval of information through Web/POATs/KIOSKs using various search criteria. Litigants/Advocates can get the real time information about cases being heard by respective courts through Digital Display Boards installed in premises of the court and also through SMS.

State of Art technology is being used at Allahabad High Court. Allahabad High Court is the only High Court in the Country to have installed its own Web Servers in its premises and Web-Site of the Court is hosted in Court's own Servers.

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### **eLegalix**

## **Allahabad High Court Judgment Information System**

**Arindam Lahiri**

High Court of Judicature at Allahabad  
arindamlahiri@allahabadhighcourt.in

### **Motivation**

The Judiciary has acquired enormous trust from the people and power from our constitution. With trust, faith and power comes responsibility. Allahabad High Court is witnessing exponential growth in filing of cases. Many hundreds of cases are decided daily but there was considerable delay in getting certified copy of these Judgments/Orders due to sheer ever increasing volume of applications and man

power problems. Also there was considerable demand for uncertified copies of Judgments/Order from the legal fraternity and litigants for reference purposes.

### **Problem Statement**

Making available certified and uncertified copies of Judgments/Orders quickly was a big challenge due to the big volume of Judgments/Orders pronounced every single day, large file movement, large number of users, high number of requisition applications for certified copy of Judgments/Orders, etc. To overcome the problem, *eLegalix – Allahabad High Court Judgment Information System* was developed and introduced at Allahabad High Court and Its Bench at Lucknow.

### **Approach**

eLegalix is a web based system developed using classical Model View Controller (MVC) architecture. At present, the system has Judgment Upload Module, Computerized Copying Module, Inquiry Module, Administration Module and a dedicated portal for dissemination of Judgments/Orders on internet (portal is available at <http://elegalix.allahabadhighcourt.in>).

### **Results**

More than 2000 Judgments/Orders are uploaded daily in real-time from Allahabad High Court and Its Bench at Lucknow. The database has more than 9 lacs of Judgments/Orders at present. Presently more than 7000 uncertified copies of Judgments/Orders are downloaded through this portal daily. On an average, around 2000+ Authenticated (certified) copies of Judgments/Orders are made available to litigants and counsels at both Allahabad and Lucknow using the system.

### **Conclusions**

The essence of our motto "*Litigants interest is Supreme*" is based on the premise that the rules and procedures are transparent, clearly defined and understood by those aggrieved litigants and its execution is both quick and smooth. eLegalix system in this context has empowered the general public, litigants and counsels by making Judgments/Orders available for its quick implementation and understanding.

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## **E-Governance Initiative of STPI**

**Praveen Dwivedi**

Additional Director, STPI, Bangalore

Software Technology Parks of India (STPI), is an organization set up by the Ministry of Information Technology, Government of India in 1991, with the objective of encouraging, promoting and boosting the Software Exports from India.

India has earned itself a reputation of an IT superpower. Software Technology Parks of India has played a seminal role in accomplishing this status. Today, STPIs across over the country are synonymous with excellent Infrastructure and Statutory support aimed at furthering growth of Information Technology in the country.

In tune with our mandate to cater to 100% export oriented units, STPI broadly provides services specially tailored for Software exporters in the region. Over a

Decade's experience of providing world class services ensures total satisfaction.

- Data Center and DR Services
- Incubation Services
- Internet Services
- PMC Services
- Statutory Services

STPI maintains internal engineering resources to provide consulting, training and implementation services. Services cover Network Design, System Integration, Installation, Operations and maintenance of application networks and facilities in varied areas.

**The following are the list of prime importance projects executed by STPI in the field DataCom and IT Consultancy Services/e-governance.**

1.0 Khajane NET (The Treasury Department, Govt. of Karnataka)

2.0 Commercial Tax Department, Govt. of Karnataka

3.0 Communication System Monitoring Equipment (CSME) for Europe Star Satellite

4.0 Carrier Monitoring System (CMS) for PanAmSat Satellites

5.0 Nortel Networks HUB at STPI

6.0 NICNET

7.0 Business Parks of Mauritius Ltd (BPML) – International Project

**STPI's Role in the Project:**

- Project Management and consultation
- Identification of Network & Communication Infrastructure.
- Identification of Office Infrastructure
- Integration of Network operations center
- Display System for monitoring network components

8.0 SWAN Projects

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## **Application of Cryptography in a Transaction System in E-Governance Environment**

**Siddhartha Sen<sup>1</sup> and Sripati Mukhopadhyay<sup>2</sup>**

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A transaction model for E-Governance environment, based on combination of AES and RSA algorithm for secured transaction between two parties through an unsecured channel, has been proposed. Effectiveness in terms of simplicity for using AES and RSA has been discussed, and explained with illustration.

**Keywords:** E-Governance, Cryptography, Secured transaction, ICT

## **A cryptographic Protocol through Recursive Transposition and cascaded Arithmetic Operation on pairs of Bits (RTCAOP)**

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The technique considers a message as binary string on which a Recursive Transposition Operation (RTCAOP) is applied. A block of n bits is taken as an input stream, where n varies from 8 to 256, from a continuous stream of bits and the technique operates on it to generate the intermediate encrypted stream. The same operation is performed repeatedly for different block sizes as per the specification of a session key of a session to generate the final encrypted stream.

It is a kind of block cipher and symmetric in nature hence, decoding is done following the same procedure.

A comparison of the proposed technique with existing and industrially accepted RSA has also been done in terms of frequency distribution and homogeneity of source and encrypted files.

**Key words:** A cryptographic Protocol through Recursive Transposition and cascaded Arithmetic Operation on pairs of Bits (RTCAOP), Cipher text, Block cipher, Session key.

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## **e-Governance Initiative in Public Distribution Area**

### **Transparent Targeted Public Distribution System of Food & Civil Supplies Department – Uttar Pradesh**

**Rajeev Agarwal,**  
Commissioner, Aligarh

A significant part of the challenges in the PDS system emanates from Bogus (ration cards belonging to fictitious families) and Shadow (genuine ration cards used by someone else) ration cards in the system. If the bogus cards can be substantially weeded out and a mechanism put in place to positively confirm and track the availability of essential commodities for individual beneficiary off-take on monthly basis, the problems relating to PDS leakage would become more difficult to hide.

This initiative of the department focused on improving the quality of the beneficiary database and empowering the beneficiary with information regarding availability coupled with a computerized MIS system that has effectively improved the PDS system.

The Food & Civil Supplies Department, as part of the Targeted Public Distribution System (TPDS) operates through a network of 73,000 Fair Price Shops.

IT-enabled services being provided by the Food & Civil Supplies department of UP have an impact on all three categories – G2C (BPL, Antyodaya, APL card holders, farmers), G2B (Transport Contractors, Rice Milers, FPS Owners etc.) & G2G (Administrators, District Authorities, Govt. Officials). The initiatives taken to date have brought in a paradigm change in the functioning of the department. ICT is being used to provide the following services.

For ex. Under G2C Citizens and ration card holders are provided correct and timely information free-of-cost through sms alerts on lifting of food grains, sugar, kerosene oil and other essential commodities supplied through the TPDS, They also get to know if their FPS dealer has been suspended, and which FPS dealer will distribute their rations.

Under G2B FPS dealers are no more at the mercy of the officials as action by them has been mandated to be brought online. Under G2G the database of ration cards is being used for linking with the ambitious UID project, Other departments, such as Rural Development, are using the exhaustive database in their own schemes.

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## **JHANSI JAN SUVIDHA KENDRA (JJSK)**

### **- Telephone based G2C e-Governance initiative**

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#### **AFFILIATIONS :**

**Jhansi Jan Suvidha Kendra (JJSK), Jhansi**  
**Country – INDIA**

The District Administration of Jhansi with the technical assistance of N.I.C., Jhansi has developed a telephone/mobile based public grievance redressal system for redressing public grievances effectively. The most unique feature of this project/system is its free, reliable, transparent, user friendly, effective and available 24x7. The project is named as Jhansi Jan Suvidha Kendra (JJSK).

In this system any person anytime and from anywhere can lodge his grievance through his land line/mobile phone 24x7 and the operator/ officer/ staff present in the Control Room (JJSK) picks the call and registers his grievance in the master register and meanwhile the voice logger automatically records the whole

conversation and this particular data is saved in the software. Some vital data from this conversation is entered into the online software developed by N.I.C., Jhansi. An automatic print out having all details of grievance registered and with a scanned signature of the District Magistrate is generated which is dispatched to the concerned officer immediately through special messenger/post/FAX depending on the severity of grievance. The concerned district level officer/department/officer-in-charge is intimated on his mobile/land line phone (Call & SMS) regarding the grievance number, aggrieved person's name and his contact number, brief summary of the grievance and is asked for quick action simultaneously. The concerned officer contacts the aggrieved person on his contact number and takes more details of the grievance and disposes it quickly and sends a written compliance report to the Control Room (JJSK) to be updated and give a call to aggrieved person intimating him regarding the action taken so that the aggrieved person is aware of the disposal status of his grievance. For easy monitoring, grievances are categorised under 3 categories, A, B and C. The "A" category grievances are (of urgent nature) to be disposed off in 24 hours, category "B" (important) to be disposed off in 3 days and category "C" are (normal) to be disposed off in 7 days.

SMS based module is also incorporated in Jhansi Jan Suvidha Kendra (JJSK) system. This module comprises of the following features -

- intimating the concerned citizen regarding details of his registered grievance
- intimating the concerned officer regarding registered grievance
- intimating the citizen regarding the status of disposal of his registered grievance
- daily an individual SMS message is sent to all concerned officers mentioning *respective* total grievances, pending grievances & default grievances

Daily an individual SMS message is sent to District Magistrate (DM) and other senior administrative officers concerned with JJSK mentioning total grievances, pending grievances & default grievances.

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## Leveraging ICT – Towards Enabling

### Online Filing of RTI Complaints and Appeals

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The statement "NeGP (National e-Governance Plan) aims at integrating information network at the district, states and national level to a common e-information grid, which would help faster and transparent dissemination of information to the citizens" – Dr. A. P. J. Abdul Kalam, former President of India on 14th October, 2006; encourages fusion of e-Governance with Right to Information. The



Constitution of India has declared that fundamental right to speech and expression and also the fundamental right to life and liberty should include the right of the citizen to access information. The land mark act has come into force from June 2005 which is known as "RTI Act 2005". Some of the salient features of the Act are [1]: Computerization of records connected through a network all over the country.

- Proactively publishing information held by public authorities.
- Setting up Information Commissions and appointing Information Commissioners.
- Raising public awareness and education on the Act.

Indian RTI Act 2005 envisages for a citizen to seek for information from any of the government department/organization(s)/NGOs termed as Public Authorities (PA), virtually on any issue by filing an RTI request to the concerned Public Information Officer (PIO). In case the information seeker does not get the sought information within stipulated time frame of one month or is not satisfied with the information provided by the PIO can prefer an appeal before 1st Appellate Authority (AA) of the concerned department/ organization and subsequently before the 2nd Appellate Authority i.e. Central Information Commission (CIC). Alternatively one can also file a complaint with the CIC in case RTI regime has not been put in place by the Department/Organization.

In order to eliminate the unwanted time-lags and streamline the filing process of Complaint and/or 2nd Appeal to the CIC two simple user friendly online forms have been designed in coherence with the RTI Act. On the other hand, to expedite the hearing and disposal process an internal workflow system has also been designed, developed and implemented within CIC.

The solution comprises of two distinct modules accomplishing two distinct objectives: viz. a) The Citizen Module and b) The Administrative Workflow Module. The Citizen Module is available on through <http://rti.india.gov.in> and the Administrative Workflow Module is available through a separate URL to be accessible to role based authenticated users only. The web enabled solution is simple to use helping citizens to file Complaints/2nd Appeal anytime and anywhere.

**Key Words:** Right to Information Act, RTI Act, National Portal of India, Complaints & Appeals, Government of India

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## **"e-procurement in Govt (DGS&D)"**

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DGS&D (Directorate General of Supplies & Disposals, [www.dgsnd.gov.in](http://www.dgsnd.gov.in)) is Central Purchase & Quality Assurance organisation of Government of India under Ministry of Commerce & Industry. It was established in 1860 by erstwhile British Govt, on the concept of 'centralised buying', as "India Stores Department" having its



headquarters in LONDON. In 1951, DGS&D in its present form was established, to cater to the procurement and inspection (quality assurance) services to the Central & State Govt departments, for common user items. The DGS&D officers are recruited through All India competitive examination- **Indian Engineering Service (I.E.S.)**.

In the year 2005, DGS&D switched over to **e-procurement** mode, in phased manner, for purchase of over 350 items on rate contract, worth ` 3000 crores, in diverse fields of - IT, Electrical, Mechanical/Automobiles, Hardware, Workshop/Machine Tools, Wool/Leather, Paper products, Oil/chemicals, Steel/cement.

All steps from the initial stage of tender creation, tender publishing, bidding, ranking, award of contract, placement of supply orders, inspection and upto the payment are being done electronically, in a work flow based process.

DGS&D in the process of offering its e-procurement platform to other Govt organisations.

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## **eGovernance Standards in India**

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Standards in eGovernance is sine qua non for sharing of information and seamless interoperability of data across e-Governance applications. , GOI has initiated a National eGovernance Plan (NeGP) to expedite the implementation of eGovernance in India. An Institutional Mechanism has been setup under NeGP to evolve/adopt Standards for e-Governance. This paper provides an overview of the work that is done in the area of Standards for eGovernance.

Government of India is promoting the usage of Open Standards for eGovernance to ensure cost effective and interoperable eGovernance applications not locked to any technology..In this regard, a Policy on Open Standards has been formulated which provides a framework for the selection of Open Standards to facilitate interoperability between systems while providing organizations the flexibility to select different hardware, systems software, and application software. Open standards for interoperability in various domains are being adopted based on this Policy. Some of the priority areas where standardisation is undertaken by GOI include Metadata and Data Standards, Interoperability Framework for eGovernance , Localisation, Biometrics, Digital Signatures etc. Efforts are made to adopt the existing and mature international Open Standards which qualify the Policy laid by

GOI. However, as a part of the Standardisation process, these Standards are further tailored to suit the Indian eGovernance requirements.

Some of the Standards and guidelines published include Unicode and Open Font Format for localisation, Metadata and data standards (MDDS) for person and land identification like name, address etc. MDDS standards also form the basis for defining the structure of the data elements for Unique ID (UID) and census data collection under the National Population Register (NPR) projects. GOI has come up with Security assurance framework (eSAFE) guidelines to help in implementation of the ISO 27001 standard. Quality Assurance Framework (QAF) and guidelines to ensure quality in e-Governance applications have been also published. Digital Signature Certificate (DSC) Interoperability guidelines have been published to enable interoperability of DSC's issued by various Certifying Authorities (CA). Website Design Guidelines compliant to Web Accessibility guidelines have also been published.

Further, work in the Biometrics standards for face image, fingerprint image & minutiae and Iris image standards would enable the sharing of biometrics data by various eGovernance applications and authentication of the same against the National UID database. Work is also under progress in the areas of Enterprise architecture framework and XML signatures. Open Technology Centre, under National Informatics Center (NIC), has also been set up which is aimed at giving effective direction to the country on Open Technology in the areas of Open Source Solutions, Open Standard, Open Processes, Open Hardware specifications in e-governance applications. New areas of standardization like digital preservation and cloud computing are under consideration for formulation of standards. The standards and guidelines and other information relating to e-governance standards is available on the website <http://egovstandards.gov.in>

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## **E-Governance: An Agenda for Management Education**

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Today, e-Governance presents a major business opportunity for IT Services and Management Consulting firms. The importance of the Indian Government as a customer has become even more emphasized for these firms because of the significantly reduced margins in the US and European markets. Under these circumstances, these firms are looking towards education institutions, including management institutions, for satisfying their increased needs for professionals who are specialized in e-Governance. On the other hand, even the government is looking at the need for training its administrative personnel in relevant management fields. In response to this demand, several management institutions are looking at the possibility of floating full fledged programmes dedicated to developing e-Governance personnel. Under these circumstances, it is necessary to critically assess the possible role that management education can play in successful planning

and implementation of e-Governance. This talk presents such an assessment and draws conclusions from it, regarding a meaningful management education curriculum for e-Governance.

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## **Information and Communication Technology for E-Society and Development in the Rural Sunderbans**

### **A Methodology for Successful Interventions**

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As we move towards using of Information and Technology tools for the implementation of various aspects of Human development , we need to follow a rigorous methodology and framework to ensure that the investments made reap real benefits for the community that we work with. In this paper we present a case study where we illustrate how following a particular methodology for implementation , led to a number of changes even in the project scope and definition. In spite of these , rather due to this we ensured the implementation of a successful project, meeting the objectives of the community . We present here the framework, loosely based on the traditional Systems Development Life Cycle and further work is envisaged to derive a detailed theoretical framework and a process orientation . Also we plan to review similar projects that have been undertaken and add to the research work in this area.

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## **Specifying the E- Commerce in a age of Internet**

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With the explosion of the e-commerce in the past few years, distinct buying patterns and preferences have emerged for specific groups and other demographics. These patterns have been measured and collected by numerous independent marketing, business and even academic studies to understand how consumers connect with new technology. With the advent of the Internet and its related technologies as a new vehicle for commerce, new models have developed. This paper lays the groundwork with brief introduction of these patterns have been measured and collected by numerous independent marketing, business and even academic studies to understand how consumers connect with new technology. With the advent of the Internet and its related technologies as a new vehicle for commerce, new models have developed. This paper lays the groundwork with brief introduction of recent trends in e-commerce on people.

## **E-Governance Initiatives and E-Participation in North East India : An Assessment**

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The paper intends to harness the potential account of network based technologies of electronic governance information services which has improved the conveniences and speed of G2C service delivery as to increase overall efficiency and effectiveness of the government. As e-governance puts the citizen at the centre stage by enabling citizen participation in governance and makes government more responsive and accountable to citizens. The paper also highlights the objective, scope of the study, methodology, the current scenario of NE e-governance initiatives and e-participation and its accessibility as in G2C interface. Concluded that there is the need for assessment of the project in this problem prone states of NE India for all around development of G2C under E-Governance.

**Key-words:** E-Governance, G2C, e-participation.

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### **PERVASIVE COMPUTING**

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Pervasive or ubiquitous computing environments integrate small sensors to form dynamic and powerful devices. In simple words, it refers to the use of computers in everyday life, including Personal Digital Assistants (PDAs), smart phones and other mobile devices. Pervasive computing devices are not personal computers as we might perceive them to be, but very tiny - even invisible - devices, either mobile or embedded which could in any type of object, including cars, tools, appliances, clothing and various consumer goods - all communicating through interconnected networks. As everything in this world has got both pros and cons, pervasive computing devices have also got some privacy and security issues such as these devices gather sensitive data, for example on users' everyday interactions, movements, preferences and attitudes, without user intervention or consent.

Although, pervasive computing continues to affect more and more of the world's population with its benefits but privacy and security issues still need to be resolved, while realising the benefits of pervasive computing.

This paper examines the emerging technologies, and scenarios for networked applications enabled by pervasive computing. These include Mobile Computing,

Embedded and Applied Computing (Wearable computers), RFID and Sensors and Speech Recognition Systems.

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## **E-COMMERCE: SECURITY ISSUES AND LEGAL ASPECTS OF INFORMATION TECHNOLOGY ACT, 2000**

**AMIT KASHYAP<sup>1</sup>**  
**UJJVALYA ANAND<sup>2</sup>**

Today is the world of Information & Technology. With its advent the whole community has seen revolution in each and every field. Commerce has also been changed to a considerable level and it has now been the E-commerce. There are certain aspects of this which are to be addressed at an early rate. The security concern is one among them. It is seen that there are several frauds which has resulted from the weak security measures adopted in India. Hence this paper would bring out those essentials which have impact on the various aspects of Information & Technology and E-commerce as well, with special emphasis on security issues. The very objective of this paper is to provide the reader with a bird's eye view as to the current situation prevailing with respect to e-commerce and security cycle. It also analyses the international evolution of e-commerce and tools used for the security of e-commerce.

**KEY WORDS:** Information & Technology, E-Commerce, Security, & Legality of Security.

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## **SECURE ONLINE ELECTORAL VOTING SYSTEM**

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In the present election voting system the citizen has to go their corresponding constituency to utilize their votes which is inconvenient to the citizens who are staying out of their constituency. Using this inline election system we can improve the voter's participation in elections and also we can run the corruption free election (no rigging) with high security measurement i.e. fingerprint.

This project is used to provide the facility to the citizens of country or students of university in any election to cast their votes using online election voting. We can secure the member details by providing unique number and corresponding finger

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print of the voter. In order to cast their vote in the election period they have to swipe or scan the voter card then they should verify their presence with finger print (where this finger print can be compared with the finger print which is already stored with the unique voter ID while registering).

If verification is valid then the GUI menu with corresponding constitution representatives will be displayed in the Voting application. They can elect their representative by pressing on the one of the representatives on the application GUI. This can be secured because we are going to use finger print verification. This project can implement using front end Java with back end as Data base server. To improve the voting percentage we can also use online voting vehicles like mobile ATMs.

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## **IDENTITY MANAGEMENT 'CHALLENGES AND SCOPE'**

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Identity management is the system that encompasses all the processes that are used to manage the information of the individual working in an organization, or who is present on the internet. The purpose of this paper is to describe the importance of identity management and future scope of this business automation practice. Emerging services like internet, social networking sites, banking sector and all other online business require analysis and storage of user information. Number of users getting "connected" over the internet is increasing exponentially. Although, this is good for commerce and communication but the convenient, user friendly and exceptional numerical acceleration of these services has resulted in regular monitoring of security and privacy challenges which are imposed on the IT companies. Identity management is a key technology with which we can collect user related personal information and can resolve these security issues. Identity management is an area which uniquely identifies a person within a country, network or an organisation. As a person has unique identity, various restrictions can be imposed on him/her individually. In the past, username and password was required for identification purpose and presently we are using thumb expressions and facial recognition system for identification. In this paper we illustrate the 7 laws of identity using which various software like Tivoli and Triniti Identity Management Solutions have been developed. Benefits and perspectives of identity management would also be described in the paper.

## **Implementing e-governance in Kerala: C-DIT's experience**

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The Government of Kerala is making an impact in the e-Governance front with a series of initiatives aimed at bringing the most transparent and efficient governance to each citizen's doorstep. Way back in 1997, Kerala became the first state in India to formulate an IT policy. Centre for Development of Imaging Technology (C-DIT), an organisation under the Government of Kerala, has made a major contribution in framing the IT policy and implementing e-Governance in Kerala. C-DIT is functioning as a major Total Solution Provider (TSP) for the Government of Kerala by undertaking many prestigious e-governance projects of the state like the FRIENDS, Akshaya e-Pay, e-Grantz, web portals and websites for the Government, Facility management services for Government departments, State Video Conferencing facility, Digital archiving, etc. C-DIT has also been approved as the Content Service Provider for the Government of Kerala.

The objective of this paper is to discuss the opportunities and practical hurdles experienced by C-DIT in the implementation and scaling up of e-governance in Kerala. The paper aims to provide a distinct perceptive of the prospects and bottlenecks, with case studies, which shall be beneficial in dealing with them for successful execution of e-Governance projects. The paper looks into the benefits of adopting a strategic and holistic approach in e-Governance. The paper takes reference from various situations faced in different e-Governance projects undertaken by C-DIT as a Total Solution Provider. (As a Total Solution Provider C-DIT undertakes activities like preparation of feasibility study to be outlined by the Government, preparation of SRS and tender documents; Software development; installation and commissioning of hardware, networking, etc; orientation and training; Annual technical support; Technical evaluation, inspection, Testing, supervision of IT implementation, etc.)

Looking back at the e-governance projects by C-DIT till now, we feel that while each activity has been implemented well, there is scope for improvement in many of them. The paper deals with the problems faced in the activities undertaken by C-DIT with lessons learned and a review for the betterment in each category. The main issues in the following areas are covered in the paper - Change Management, Maintenance, Sustenance methods, Timeframe, Socio-Political issues, project implementation means, Integration and Interoperability, Capacity building, Security, User consensus and Training, Backup mechanisms, Procedural loops, Infrastructure usage, Requirement finalization, Application development and modifications, Individualization of projects, etc

The various projects that shall be referred for covering these topics include:

- **FRIENDS** (Fast, Reliable, Instant and Efficient Network for Disbursement of Services – A single-window facility where citizens can make Government related transactions. C-DIT is the Total Solution Provider for the project)
- **Akshaya e-Pay** (Management of e-Payment Gateway for transactions involving payment collections through Akshaya e-Kendras all over the state of Kerala. C-DIT is the Total Solution Provider for the project)
- **e-Grantz** (A Web based grants distribution system for SC/ST Students of the state)
- **Digiarchives** (Digitisation of churunas for the Archives department. *The project won the 2010 FutureGov Awards (Malaysia) for best information management project*)
- **State Video Conferencing facility** (Maintenance and management of Video Conferencing equipments, location and sessions. C-DIT is the Total Solution Provider for the project)
- **Websites** (Website for the Government of Kerala, other Government departments and organizations)
- **Softexam** (IT practical examination software for high school classes in Kerala developed for the IT@School project.)
- **Disability certification project** (Issuing disability certificates and Photo Identification cards on camp mode basis to an estimated 9 lakhs physically challenged people in the state.)
- **AMC and Facility Management Services** (for various departments like Registration department, Motor Vehicles Department, etc)
- **Computerisation of Welfare Fund Boards** (Computerisation of all activities of various welfare Fund Boards like, Kerala Motor Transport Workers' Welfare Fund Board, Kerala Khadi Workers' Welfare Fund Board, etc)
- **Other Computerisation projects**

This paper is intended to convey the notion that a holistic, pragmatic and visionary approach is required for effective implementation of e-Governance in India.

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## Challenges and Opportunities of E-governance

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Over the last decade, public service organizations around the world have invested heavily in technologies to improve service delivery and realize cost efficiencies. Collectively known as "e-government," these initiatives were designed to meet a range of organizational challenges—such as improving public access to information and services through online channels; sharing data within and across organizations; improving the efficiency of business processes; and managing organizational



performance. While investment in e-government has delivered significant benefits, these solutions also have limitations when it comes to public service delivery and reform. People are no longer content to be passive consumers of services. In many countries more than 70 percent of taxpayers now file taxes electronically and many other transactions- ranging from renewing drivers' licenses and paying parking tickets to managing government benefits can be conducted online. However, despite the continued allocation of enormous resources, progress on the e-government front appears to have plateaued over the past few years. Many new e-government initiatives have neither generated the anticipated interest among users nor enabled clear gains in operational efficiency. In the face of the users' heightened expectations based on the integration of the internet into their daily life and work, it is imperative that the public sector refine its approach to e-government to ensure that these initiatives achieve maximum impact. They expect a different kind of relationship with their government— one that places individual needs and expectations at the heart of public service planning and delivery. This new relationship is characterized by the more active involvement of citizens and other stakeholders in identifying priorities, influencing decision making, shaping policies, designing\ services, holding governments accountable for results and even jointly contributing to service delivery. In light of today's changing citizen expectations, governments have begun developing strategies to not only enhance efficiency and effectiveness, but also to strengthen the relationship between government and citizens. While e-government has been largely a one-way street—with government delivering and citizens receiving—these new e-governance strategies enable government and citizens to engage and partner with each other and other stakeholders. In doing so, they are leveraging new technologies and modifying conventional service provision in innovative ways to create public value. It is a development that is gaining momentum as citizens respond positively to the new information, debate and participation that government and non-governmental community e-governance tools make possible. From operational perspective we have experienced three obstacles that have limited the impact of e-government efforts: ineffective governance, lack of web-based capabilities, and reluctance to allow user participation in the creation of applications and content. Ineffective, complex governance processes present a fundamental obstacle to success. In this paper we will try to analyze the various obstacles and suggest ways to overcome them in order to attain the next level of success in e-government services.

**Keywords:** e-governance, e-government, public service, community, web-based governance, obstacles

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## Digiarchives

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The Kerala State Archives Department , Kerala, India functions as the custodian of

all non-current records of permanent value of the State Government and various Departments. Major responsibilities of the Department include custody, care and management of records received in the Archives, acquire documents of historical value, render technical advice and assistance on management and conservation of records to various departments and institutions in the State.

About a century ago when paper was very scarce, processed palm-leaf was the chief material largely used in Kerala for correspondence. So records in cadjan (palm leaves) form the bulk of ancient record wealth of Kerala for the sake of convenience and better preservation. It was the practice in earlier days to keep loose sheets of palm-leaves scrolled in bundles of convenient sizes passing a cord (string) through the holes provided in the leaves as in the case of present day tagging of sheets of paper. These scrolls are known as Churunas.

The Central Archives, Trivandrum under the State Archives Department houses a collection of 11,100 churunas. Each churuna consist of an average of 1000 cadjan leaves of about 90 cm long and 2.5m cm wide on an average and both side of the leaf is used for recording events. They are written in different ancient scripts of Kerala like Vattezhuthu, Kolezhuthu, Malayanma, Tamil and also in Malayalam. Each bundle of churunas deals with different subjects, not necessarily connected to each other. Majority of these records preserved here relates to the period from 1500- 1900 A.D. This large mass of cadjan records, are in the state of acute deterioration. The department had been adopting traditional methods of fumigation by using para dichlorobenzene and applying lemon grass oil on the dust free surface of the palm leaf. Lemon grass oil is an insect repellent and it imports strength and increase the flexibility of the palm leaf. The churunas are also been kept in racks made of wood in the non-A/c repositories.

In the year 2009, the department had decided to establish a Digital Heritage Archives of these materials available with them and the project was started. The scope of the project included

- Setting up of the Online Digital Heritage Archives.
- Conservation of Cadjan records
- Digital Conversion of Cadjan records
- Indexing of the Cadjan records
- Creation of Metadata of Cadjan records
- Creation of Cadjan Database
- Translation of Cadjan Contents from primitive scripts into the latest regional language
- Information dissemination by means of Search Engines
- Maintenance of Backup mechanism and ensuring security methods for the Heritage Archives

The principal reasons behind setting up a Digital Heritage Archives is

#### **1. For enhanced access**

Provides support for democratic considerations by making public records more widely Accessible. Also extends the availability of material in support of educational

and outreach projects

## **2. To facilitate new forms of access and use**

The main purpose in this case is to enable the use of material (original manuscripts) that cannot be consulted in its original form other than by visiting its specific repository and that has been damaged and where technological support is needed to reveal its content or shape (data recovery)

## **3. For Preservation**

To create accurate reproductions of the original materials on a long-lasting medium. These reproductions need to satisfy both users of today and future potential users, and must therefore both be of high quality and possess a physical stability that can be maintained over time.

### **Outcome of the Project**

Digital Heritage Archives established Digital conversion of 5 lakh cadjan records completed Database of cadjan records created Translation of Cadjan record content into the regional language activity progressing Search Engine developed Touch Screen kiosk implemented for Information dissemination

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## **e-Grantz, a Web based Scholarship Distribution system**

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The state of Kerala gives much emphasis in extending quality and popular education which resulted in attaining more than 90% literacy, remarkable when compared to other states in the country. The interference in the field of education to weaker sections of the society especially scheduled castes/tribes and other backward classes enabled this growth. This includes reservations in admissions and providing financial support for meeting educational expenses. Full fee concession, lumpsum grant and monthly stipend are the components of financial assistance.

Due to the rise in number of students as well as educational institutions and complexity of procedures, find it difficult to disburse the assistances in time. Usually the students will not get the support in time when they need it. The amount could only be disbursed at the close of or after the year/course. The e-grantz project was implemented in the year 2009-10 as a solution for avoiding delay and complexity of procedures and ensuring timely and transparent disbursement of educational assistance using the avenues of information technology, accelerating the process of e-Governance .In association with State Bank of India, the leading Nationalised Bank, the project facilitates the students for getting their monthly assistance through ATMs. Now more than 3lakh students as well as 3450 institutions are getting timely assistance through this project. Being an e-based project benefiting lakhs of students especially from the weaker sections of the society with objective of extending quality education for National Development, the E-grantz project is nominated for presenting in the National Conference on E-Government.

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## **e-Commerce and e-Business**

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Electronic commerce, pronounced as e-Commerce, is a model of new selling and merchandising tools in which buyers are able to take their purchase decisions in all phases by stepping through those phases electronically rather than in a physical way. In the process of electronic commerce, consumer is able to access product information, select and purchases the product with security. Trade on the Internet is increasing every year and it is expected that in coming few years it will generate wealth worth hundreds of billions in goods and services. The e-commerce benefits buyers and sellers both. The e-commerce benefits include: businesses without the barriers of time or distance, cheapest means of doing business, no human interaction is required during the on-line electronic purchase, buyer's sorting out time is reduced, leads to better buyer decisions, more opportunities for buying alternative products, time involved in documentation, reconciliation, error detection and correction is reduced. Although, e-Commerce is having tremendous benefits, it is not free of limitations, one of the limitations of the e-commerce is that we do not have the touch and feel of the product.

In this paper, we first illustrate the variety of e-Businesses conducted online and explain the conceptual model of e-Business, the concept of supply chain management (SCM) and enterprise resource planning (ERP). It will also be explained and demonstrated that how these systems relate. The limitations of traditional business model will also be explained.

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## **E-health and Telemedicine – A new paradigm of quality healthcare in India**

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Telemedicine, as the name suggests, is the application of communication and information technology for remote consultation and diagnosis of diseases by medical professionals.

It is a procedure through which medical services are made available remotely, through a combination of telecommunications, multimedia technologies and medical

expertise. Telemedicine is the hope for a common villager for a better access to healthcare. Logic suggests that employing information and communication technology (ICT) to deliver health care at distance (i.e. telehealth or e-health) would be useful to address at least some of the problems in developing countries. Most developing countries in recent years have recognized the importance of ICT in their economic development and social progress. However, it is surprising that, in most cases, these national ICT initiatives have not considered the health sector as an important sector. Telecommunication will never replace the physician or other health workers concerned in a patient relation. Alternatively, it provides an opportunity of increasing the combination between various health care services and in this way contributes to better care directed towards the patients. So telemedicine or eHealth service can be an important medium for economical benefit of health sectors of a country. Telemedicine has added a new dimension in modern clinical practice of medicine in western countries where it is now a matter of routine. In western countries, telemedicine is now being utilized as an advanced facility for providing specialty services for hospitals and medical centers where experts are not readily available, thus eliminating the impediments of time and distance. According to the available healthcare statistics, about 75 percent of the qualified doctors in India practice in urban areas, and 23 percent in semi-urban areas, so this leaves only 2 percent

of the doctors to cater to the health needs of a whopping 70 percent of the Indian population, living in villages. The most unfortunate outcome of this distribution is that 80 percent of the medical facilities in India are being channelised to the urban areas and a meager 20 percent comes to the rural areas. In such an otherwise depressing scenario, telemedicine has the promise to revolutionize this lopsided delivery of healthcare in India. Telemedicine would enable the population of remote and rural India to avail the facilities and expertise of big super-specialty hospitals in the metros and thus bridge the existing divide in terms of healthcare between the urban and rural India. Now it is the duty of the medical professionals, engineers and technologists to spread the awareness among the general population and make this promising venture a success in India. Tele-healthcare concept is an emerging trend in the arena of health care in our country. Both government and private agencies are venturing into it. Few Indian companies are being capable of providing hardware and software solution for tele-health care. Products of reputed overseas tele-health industry have their presence. Efforts are directed towards setting up standards and IT enabled healthcare infrastructure in the country. Realizing the benefits and having the capability in terms of the technical and medical expertise in India, Department of Information Technology(DIT), Indian Space Research Organization (ISRO) of Department of Space, and other public and private organizations have started Telemedicine projects in different parts of the country. As a facilitator, DIT has taken initiatives for development of technology, initiation of pilot schemes and standardization of Telemedicine in the country. This paper will discuss how e-health provides the opportunity for the patients to maintain independence longer and for the providers to monitor a condition more closely. It also describes the barriers and challenges to the implementation of ehealth in Indian context. Also, an attempt is

made for presenting the e-health status in the Indian scenario and to summarize all those activities carried out by various agencies in India to implement e health. Further, its technological and financial barriers are illustrated and recommendations are provided for the improvement.

**Key Words :** e health, telemedicine, telehealth

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## **Role of Technology in Preserving and Promoting the Intangibles of Indian Society**

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I step into the land of Lucknow, known once for its cultural vibrancy, its language, hospitality, etiquette, poetry, culinary arts, dance and music. Curious to get a feel of this bygone era I hop into a cycle rickshaw, keeping aside all my internal human rights debates. A polite cycle rickshaw wala rides me into Hazratganj. I decide to walk from there on, and to my disappointment Hazratganj displays its air conditioned, modern and so called 'sophisticated' branded showrooms – The Reeboks, Lees, McDonalds, and the likes.

I think of Joseph Stiglitz and his ideology in the book 'Globalization and its Discontent'. I can experience the distance that globalization (westernization, more than globalization) has created between the historical being of a place and its present being. Globalization has led to an efficient, quick and convenient death of the individuality of cities like Lucknow; it has converted its people, arts and culture into globally accepted 'standards'.

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## **Providing a better life, services for the citizens at the Municipality governed areas using E-Governance**

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This paper provides means of improvement on the existing e-governance techniques adopted by NEGP (National E-Governance Plans). Here, a model with the name, "Virtual Governance at the Municipality level using grid connectivity techniques " is proposed. The model uses live webcasting and e-portals as an interface as the chief tools to provide municipality, governance services for all. Research work and survey is done after proposing this model in front of the common people and their opinions compared using acceptance rate as an index.

**Keywords-** e-Governance; national grid, common service centres, data centres .

## **A FRAME WORK FOR CONGESTION CONTROL FOR WIRELESS AD HOC NETWORKS**

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In the current scenario wireless communication is emerging the world. Wireless AdHoc networks demands for higher intermediate node supports for long-range Communication. Wireless AdHoc network is an emerging communication approach. AdHoc networks are usually defined as an autonomous system of nodes connected by wireless links and communicating in a multi-hop fashion.

The wireless ad-hoc networks are for easy of deployment without centralized administration or fixed infrastructure to achieve the goal of less interface communication. In wireless AdHoc network the connections between the wireless links are not fixed but dependent on channel conditions as well as the specific medium access control (MAC). The Channel medium and transmission links are affected by the interface, delay and buffer overflow these may cause the network congestion. To avoid network congestion various control methods were developed in past but they were performed less control of end-to-end congestion and less in per link connection control problems and to improve the resource allocations developed an efficient method.

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## **Strategic and Technical Framework for An Electronic Government in Republic Of Yemen**

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There are many strategies in many countries where electronic government has been implemented one of the case study examples from developed world is NEWZEALAND, its provides one of the best of the electronic government strategy worldwide ,in this strategy and other strategies are explanted many important parts in electronic government from information and communications technologies field such as levels of e-government, Stages of electronic government and e-government building blocks. To address the technical problems in these strategies, these don't explain other important technical aspects such as (electronic government accesses channels, Information Systems Integration, Stages of the production of electronic service, Properties of the web Portals..) with these technical aspects and other aspects , we can build the best technical framework for Yemen electronic government strategy. proposed solutions to this problem are discussed in two proposals the first proposal is technical components of the framework for e-government of the Republic of Yemen this proposal includes ( national infrastructure for wide area network , channels of access to electronic

services and architectural proposal for the work of Integrative between different channels of access, shared data centers that will serve the e-government, the integration between information systems merged within the electronic government).The second proposal of the components of the framework of services and web portals for e-government of the Republic of Yemen. This proposal includes Technical Properties of Yemen web Portals, government e-mail, Information portals, services Web Portals for electronic applications and services.

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## **Electronic-government Adoption: Controlling Effects of Demographic Factors**

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Traditionally it is observed that young generations are more familiar, habituated, and interested in embracing computer and Internet related technology. As the E-government (EG) system driven by information and communication technology (ICT) would not be equally accessible by all citizens who have lack of skills and training required to effectively use an ICT-based system and who are financially insolvent, adoption of EG system might be severely affected by users financial capability and education level. Therefore, users age, financial capability, and education level may have significant effects on the critical factors of EG adoption at different levels of service maturity in different degrees. To reveal these effects, we have done an empirical study in Canada and found that among those three controlling variables, age level and education level have significant effects on EG adoption. However, family income level has no controlling effect on adoption of EG at any level of service maturity of EG.

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### **E-Crowd**

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All our current networking systems are usually based on some concepts, which are modified or reformed in the E-Crowd networking system to bring development in the Computer Networking with various advancements such as in democracy.

**Definition:** E-Crowd is a kind of electronic network where each person in a crowd can communicate, participate, perform and regulate himself/herself from far as being a part of the crowd on a multi-lined network.

**Concept:**

- Form and Regulate whole crowd on a network.
- Where each person is connected on multi-lined network.



- Facilitate each person in the crowd to bring presentation and performance at same moment.
- Make crowds digitally by providing all action to be performed which are physically possible.

**Motives:**

The motive of E-Crowd is to bring each crowd on electronic network for advancement of technology, and to make crowd at places where it is either difficult or impossible to bring physically. The motives are further more amount as crowd is not regulated only with one person. This would also be important to form whole of humanity to be a crowd either for meeting, etc, which would be a democratic revolution.

With the growth of population, utilization of resources gets increased, and advancement in technology becomes necessity of globalized human world. More and more people are using communication facilities which save time and money, as compared to direct meeting. Communication can be brought by phones which transfers audio, video conferencing which transfers audio and video, etc, these all are used for basic requirements usually for connecting two people which just requires single lined network between two people or group. And if a larger number of people want to communicate, today we prefer to video conferencing or meeting at a place where each person should arrive. There is also a system of E-Learning where students can participate online with the teacher and one student at a time can ask questions to the teacher, but it is too single-lined network where only one data travels at a time, and people are not connected in a network as physically, where any person can communicate at any person at any time.

E-Crowd would be a networking system where each person is directly connected to all the people present in the crowd on a multi-lined network either physical or digital. E-Crowd is not just a networking system, but also revolution which would change the lifestyle of the crowd. Following are the advantages of E-Crowd:

- It saves money of travel, stay, and management
- It saves time
- It saves people from any risk and conserves privacy
- It is environmental friendly, as prevents emits of Pollution by traveling
- People get more opportunities as a participant of the crowd, and can perform and give presentation.
- A larger number of people can communicate which is not physically possible.

It is not just a technological revolution, but also a political revolution, as people of the world can directly meet and poll and bring their opinion for decision in governments, etc, which would be a parliament itself, which won't consists of representatives of people, but the people themselves.

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