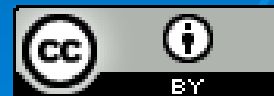


LIBRARIES IN INTERNET ERA

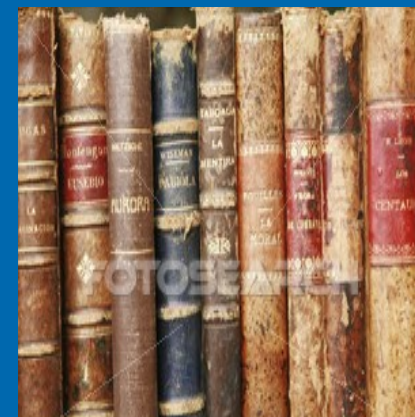
SRIDHAR IYER
and
GARGI BANERJEE

DEPT. OF COMPUTER SCIENCE & ENGG
I.I.T. BOMBAY



Definitions

- 2 broad categories of Indian libraries:
 - Public library : “local gateway to knowledge [and] lifelong learning of the individual and social groups”.(UNESCO,2004)
 - Academic Library : subsets of parent institution catering to more restricted group of users
- In both cases, definition of a library is changing from:
 - ‘a collection of books’ to
 - ‘collection of useful materials’ in print, electronic, multimedia, and other formats.



Some key challenges faced by libraries today

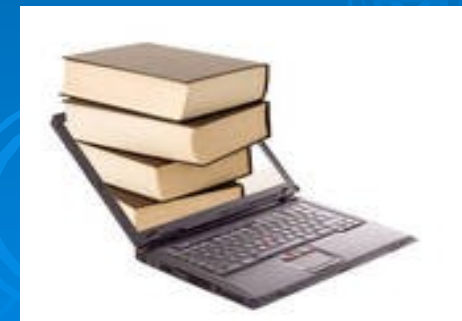
- Decreasing footfalls
- Internet vs. Print media
- Catering to the SMS generation whose patience level is quite low



- Anecdote: As told by the Assistant Librarian, IIT Bombay. A B.Tech student came to the library for the first time only in his final year. When asked, he replied that he did not feel any need to visit the library in all this time!

Problem of user antipathy faced by libraries in the Internet era!

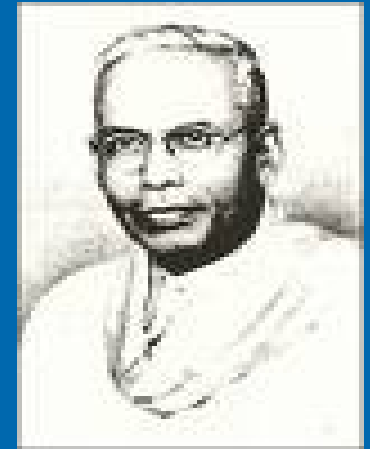
- **Interesting to apply Dr. Ranganathan's Laws of Library Science proposed in 1931 to Libraries in Internet era.**



THE 5 LAWS OF LIBRARY SCIENCE

--- Dr S R Ranganathan

(Father of Library Science in India)



1. Books are for use.
2. Every reader his/her book.
3. Every book its reader.
4. Save the time of the User.
5. The library is a growing organism.



THE FIRST LAW : BOOKS ARE FOR USE

INFERENCE: Making a book accessible to readers is the primary goal.

❖ Application of Dr. Ranganathan's law in INTERNET era :

➤ Provide multiple modes of access to user by exploiting technologies. Books on handhelds.

➤ Library automation systems like OPAC making bibliographical search accessible from anywhere.

➤ Library Resource Sharing: Multiple libraries pool in their acquisitions, technical processing, storage and delivery of service.

➤ Find ways to satisfy the tech-savvy clientele; SMS-interface?

➤ Internet and other local/national networks promotes inter-library co-operation with formation of Library Consortia like INDEST consortium



First law extension: Exploit digitized content

- All significant works of science, literature, arts are being digitally preserved
- Collection of digitized material in libraries accessible from any part of the globe.
- Case in point : Digital Library of India, hosted by IISc., Bangalore (<http://www.new.dli.ernet.in/>)
- 30,000 free e-books available at Project Gutenberg (http://www.gutenberg.org/wiki/Main_Page)
- User can download these free e-books into their Palm organizer or smart-phones



Summary:

- Book form is changing**
- Libraries have to cater to new forms also to increase accessibility**

THE SECOND LAW: EVERY READER HIS/HER BOOK

INFERENCE: Library collection should be such as to interest every part of the community it is meant to serve.



❖ Application of Dr. Ranganathan's law in Internet era:

- Diversify with different types of E- content, without straining the budget.
- Faculty lectures of world renowned institutes like I.I.Ts , IISc.,MIT etc. are available free on the Internet.



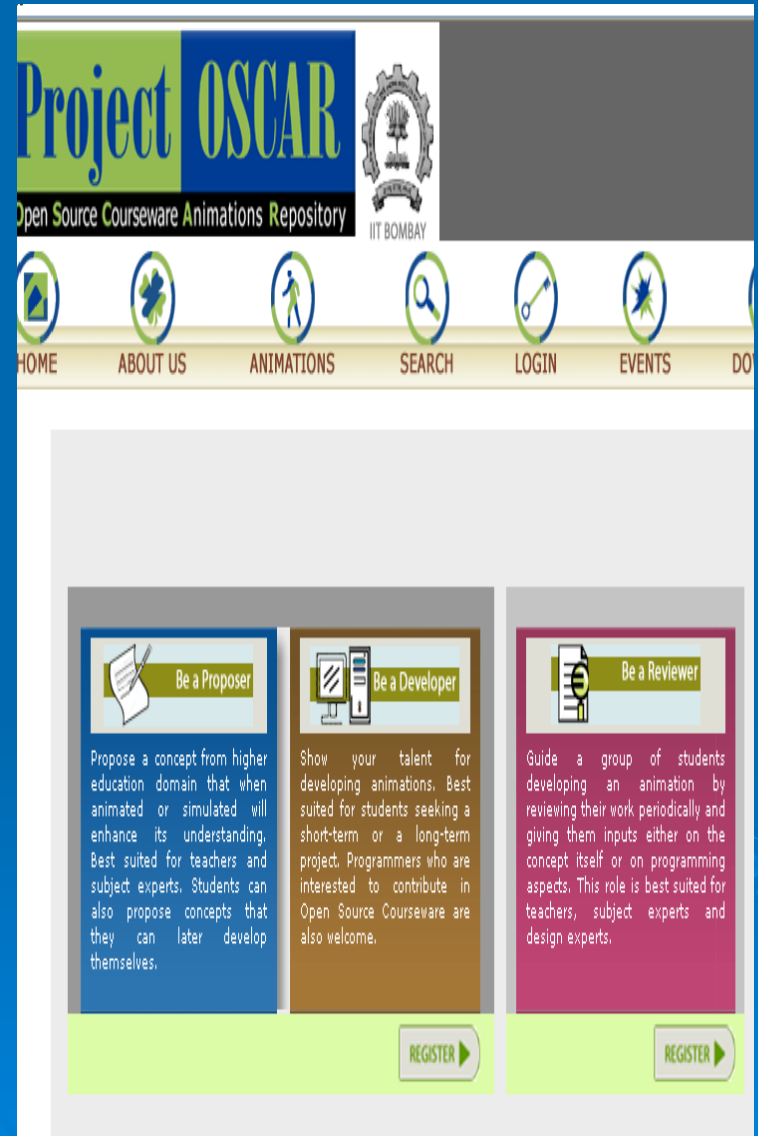
Second law extension: Diversify the content modes

- Open source courseware animations repository
- Part of MHRD's National Mission on ICT for education.
- Open-source animations from school level upwards available at <http://oscar.iitb.ac.in/oscarHome.do>
- Animations are being created to support the online video lectures of IIT /IISC. faculties that are available through CDEEP (<http://vod.cdeep.iitb.ac.in/index.html>) and NPTEL (<http://nptel.iitm.ac.in/index.php>).

The screenshot displays the Project OSCAR website. At the top, there is a header with the Project OSCAR logo, the text "Open Source Courseware Animations Repository", and the IIT Bombay logo. Below the header is a navigation menu with icons and labels for HOME, ABOUT US, ANIMATIONS, SEARCH, LOGIN, EVENTS, and DOWNLOAD. The main content area features a description of Project OSCAR, a search box for animations, and a list of available animations. On the right side, there is a sign-up form with fields for Username and Password, and buttons for LOGIN, RESET, and a link for Forgot Password? The bottom of the page includes a "TOP ANIMATIONS" section with several thumbnail images of educational animations, and a footer with contact information and developer/mentor counts.

PROJECT OSCAR

- Teaching aid animations for important concepts in Science and Technology
- Simplifying concepts otherwise difficult to comprehend.
- Available free to all students and teachers across India
- Source code available for programmer community to improvise
- Libraries can freely access the OSCAR being built at IIT Bombay



More examples of free e-Content on the Internet

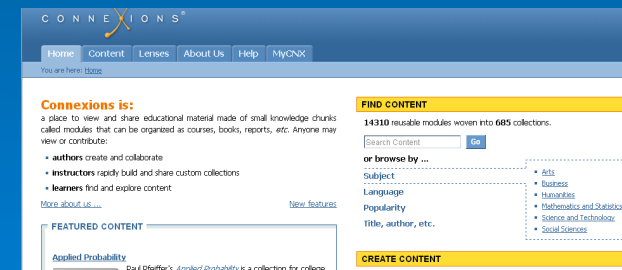
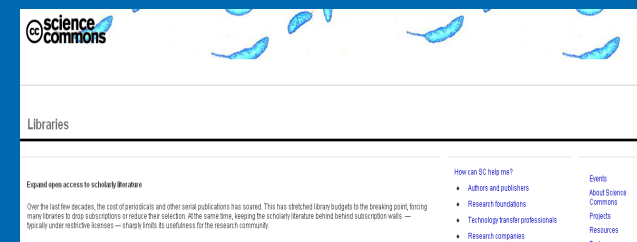
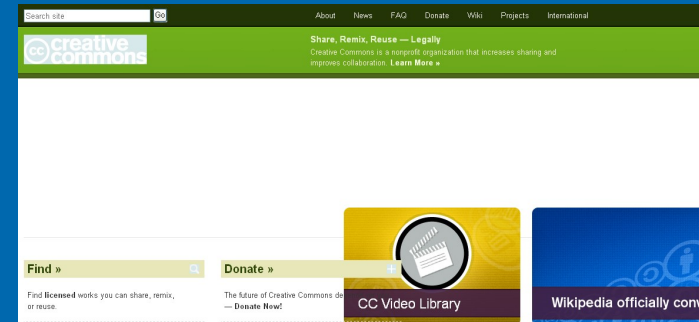
➤ Creative Commons

➤ (<http://creativecommons.org/>), a non-profit organization that makes lots of scientific and literary works available under relaxed copyright rules.

➤ CClean, Creative Commons division dedicated to realizing the full potential of the internet to support open learning and open educational resources.

➤ Science Commons helps libraries access published research papers at no extra cost.

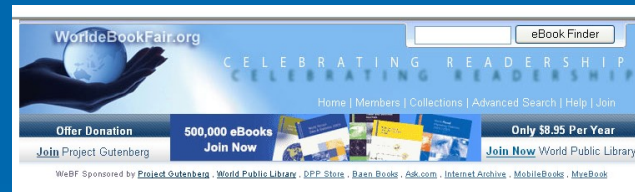
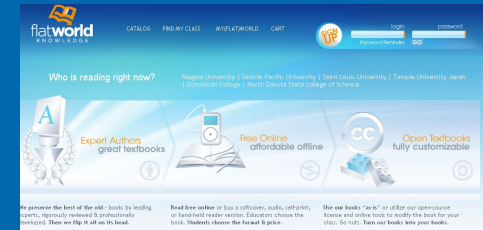
➤ Connexions (<http://cnx.org/>): a place to view and share educational material that can be organized as courses, books, reports, etc. Anyone may view or contribute for free.



More examples of e-Content sites

➤ Other such sites are :

- World e-book fair (<http://worldebookfair.org/>)
- Flat World Knowledge (<http://www.flatworldknowledge.com/>)
- Directory of open access journals (<http://www.doaj.org/>)
- California open source textbook project (<http://www.opensourcetext.org/>)



Summary: a. Lots of free content available on the Web.

b. Library has to disseminate this information to its users in a systematic manner.

THE THIRD LAW : EVERY BOOK ITS READER

INFERENCE: If a book is not being used often, it needs exposure to groups of readers who will find it useful

- ❖ Application of Dr. Ranganathan's law in Internet era:
 - Metasearching : allows search of multiple databases at once.
 - Maximizes opportunity to find citations on your topic.
 - Product knowledge management software very useful.
 - List books not in demand on Amazon.com to increase its visibility.

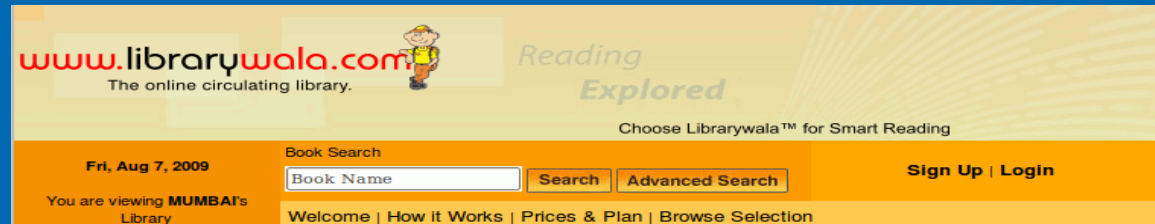
The screenshot shows a search interface with a 'Simple' search tab selected. Below the tab is a search input field with a 'GO' button. A message indicates 'Set: Start here contains 5 databases'. Below this is a table listing databases:

Database Name	Type	Actions
<input checked="" type="checkbox"/> Academic Search Premier (EBSCO)	Database	i +
<input checked="" type="checkbox"/> ANZ Reference Centre (EBSCO)	Database	i +
<input checked="" type="checkbox"/> MasterFILE Premier (EBSCO)	Database	i +
<input checked="" type="checkbox"/> ProQuest 5000 International	Database	i +
<input checked="" type="checkbox"/> Swinburne University Library	Catalogue	i +

The screenshot shows the ILLUMINA search interface. At the top, it features logos for CSA, ILLUMINA (China and the Path to Environmental Sustainability), and Johns Hopkins Libraries. Below the logos are navigation buttons for 'Quick Search', 'Advanced Search', 'Search Tools', and 'Browse'. A search input field is present with a 'Search' button and a 'Clear' button. Below the search field, there are options for 'Search Tools' and a list of 'Now Selected' databases, which includes 'IBSS: International Bibliography of the Social Sciences', 'PAIS International', 'Sociological Abstracts', and 'Worldwide Political Science Abstracts'. The 'Now Selected' list is circled in red. Below the list, there are options for 'Change: Subject Area', 'Date Range: Earliest to 2000', 'Limited to: Latest Update, Journal Articles Only, English Only', and 'Show: Shortformat Results per page 25'.

Third law extension: Exploit Internet for exposure

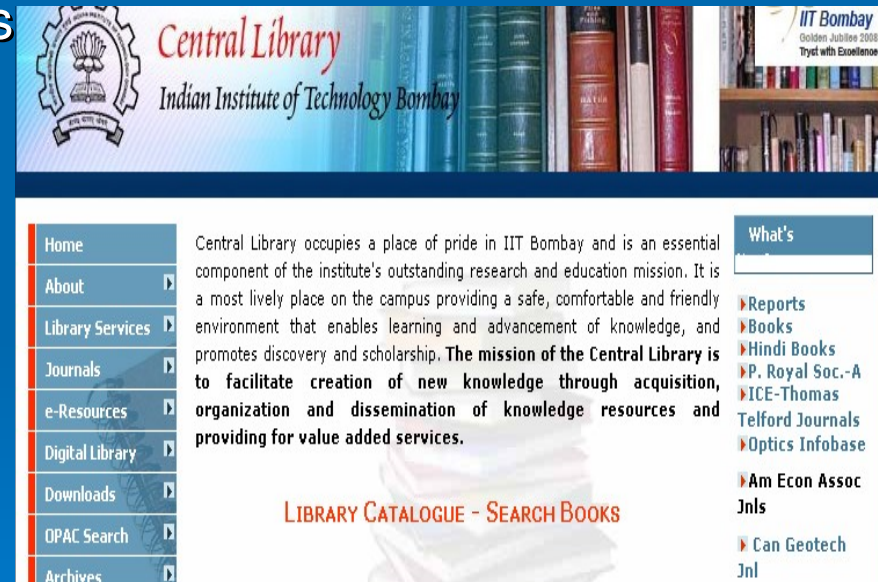
- Innovate:
www.librarywala.com



- Librarians can also find lot of useful material on the Internet for their users
 - Use search, catalog and indexing techniques to weed out the irrelevant and present authentic material to the user.

Summary :

- Attract Users through Web and innovative delivery modes.**
- Increase access of books using Creative Commons Model (Computer Masti)**



THE FOURTH LAW : SAVE THE TIME OF THE READER

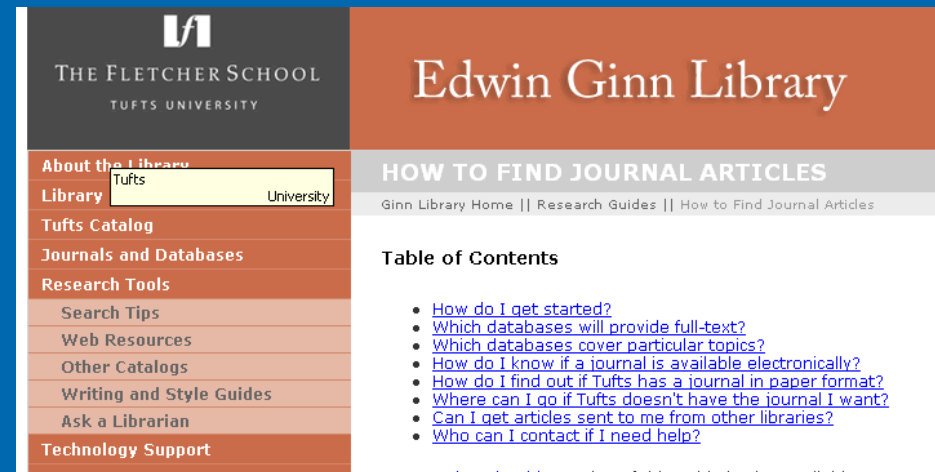
INFERENCE: If users find what s/he is looking for in a timely manner, they will be more satisfied

❖ Application of Dr. Ranganathan's law in Internet era:

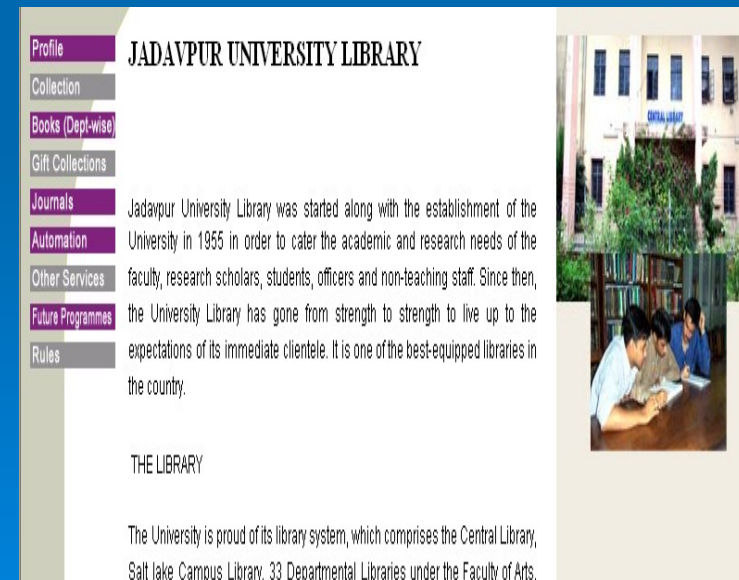
➤ Library website should be attractive enough for the user to want to explore more.

➤ Information architecture of the web page should be easily navigable.

➤ Today's users have zero tolerance for ineffective interfaces



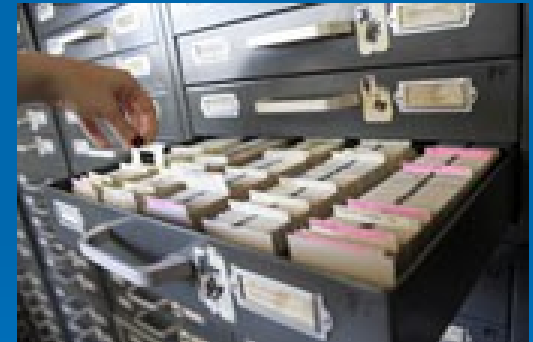
The screenshot shows the website for the Edwin Ginn Library at Tufts University. The header includes the Tufts University logo and the text 'THE FLETCHER SCHOOL TUFTS UNIVERSITY'. The main title is 'Edwin Ginn Library'. Below the title is a navigation bar with 'HOW TO FIND JOURNAL ARTICLES' and a breadcrumb trail: 'Ginn Library Home || Research Guides || How to Find Journal Articles'. A 'Table of Contents' section lists several links: 'How do I get started?', 'Which databases will provide full-text?', 'Which databases cover particular topics?', 'How do I know if a journal is available electronically?', 'How do I find out if Tufts has a journal in paper format?', 'Where can I go if Tufts doesn't have the journal I want?', 'Can I get articles sent to me from other libraries?', and 'Who can I contact if I need help?'. A sidebar on the left contains a menu with items like 'About the Library', 'Tufts Catalog', 'Journals and Databases', 'Research Tools', 'Search Tips', 'Web Resources', 'Other Catalogs', 'Writing and Style Guides', 'Ask a Librarian', and 'Technology Support'.



The screenshot shows the website for the Jadavpur University Library. The header includes the text 'JADAVPUR UNIVERSITY LIBRARY'. A sidebar on the left contains a menu with items like 'Profile', 'Collection', 'Books (Dept-wise)', 'Gift Collections', 'Journals', 'Automation', 'Other Services', 'Future Programmes', and 'Rules'. The main content area features a paragraph: 'Jadavpur University Library was started along with the establishment of the University in 1955 in order to cater the academic and research needs of the faculty, research scholars, students, officers and non-teaching staff. Since then, the University Library has gone from strength to strength to live up to the expectations of its immediate clientele. It is one of the best-equipped libraries in the country.' Below this is a section titled 'THE LIBRARY' with a paragraph: 'The University is proud of its library system, which comprises the Central Library, Salt Lake Campus Library, 33 Departmental Libraries under the Faculty of Arts,'. On the right side, there is a photograph of a multi-story library building and a smaller photograph of students sitting at a table reading books.

Fourth law extension: Use the power of ICT

- At the back-end, library data should be structured to aid in quick retrieval
- Libraries are ideal places to offer public access to ICT resources as they are found in nearly every community
- Librarians help people to meet and manage their information needs.
- The public library can be the public access point to the “Information highway”.



Summary: a. The library interface should be designed to give good user experience.

b. Good user experience translates to brand loyalty.

THE FIFTH LAW : THE LIBRARY IS A GROWING ORGANISM

INFERENCE: Without the human and organizational changes that occur, the library would neither function properly, nor meet its purpose.



❖ Application of Dr. Ranganathan's law in Internet era:

➤ To keep pace with changing times, the services offered by a library has to expand.



➤ It can function as a cyber-café, specially in our hinterlands.



Fifth law extension: Bridge the digital divide

- With majority of public libraries situated in rural India, this is a great opportunity.
- Like cybercafes, government's E-governance projects can operate out of public libraries.
- Cases in point :
 - Gyandoot: An intranet in Dhar district of Madhya Pradesh that connects rural cybercafes and offers services like Landholders passbook, BPL family list etc.
 - E-governance centers like the Akshaya Project (Kerala)
 - Drishti Information Kiosks (Assam, Chattisgarh, Haryana): facilitates information interchange within a localized intranet between villages and a district center



LIBRARY IS A GROWING ORGANISM

- For the literate villager, it should be the window to the outside world
- For people willing to study further, it should serve as the path to higher education
- For children, library should be the gateway to the world of letters
- For the youth, specially in times of recession, library should enable them to submit online job applications or search for jobs



LIBRARY IS A GROWING ORGANISM

- Libraries can expand their horizons to function as career counselling centres for the youth.
- Librarians themselves can upgrade their expertise through continuing education programs and skill enhancement to make full use of ICT technologies.

Summary: Libraries should diversify, innovate and adapt its offerings to its users



REFERENCES

- ‘Five laws of library science’ , Available at: http://en.wikipedia.org/wiki/Five_laws_of_library_science, Date of access: August 4, 2009
- Guha A. (2009), “Recession brings dramatic use in public library use”, Available at: <http://www.wickedlocal.com/somerville/homepage/x50628480/Rec> , Date of access: August 5, 2009
- Ghosh A. and Banerjee G. (2006), “Study of E-governance in rural India”, paper presented at International Conference on E-governance (ICEG -2006) held from 15 -17th December, 2006 at IIT Delhi

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Closing

- Thank you for inviting me.
 - I got to know about Dr. Ranganathan's work!
- Contact information:
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 - sri@iitb.ac.in
 - OR Google “Sridhar Iyer” “IIT Bombay”.