

Accessing of E-Journals: A Consortia Approach

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Abstract: *The explosion of information on the Internet and information technology in general has created challenges for libraries to focus on developing more effective ways to meet the information needs of users. Recently, following the expansion of electronic publishing, libraries have been displaying renewed interest in cooperation activities with particular reference to acquiring licenses and sharing electronic resources. Making information available for the acquire and transmission of human knowledge is the focal point of this paper, which discusses the implementation of consortium at the Indian Statistical Institute libraries. It also discusses the problems faced by the libraries in handling E-Journals.*

1. Introduction

Over the last four to five years, academic, public, and special libraries in many countries have been joining together to negotiate collective licenses for the use of electronic journals and other forms of digital information, with consortia sales fast becoming the predominant means of negotiation access to scholarly journals. The advent of the 'Big Deal' in particular a consortia model that enables a group of libraries to pool their purchasing through a central consortium that negotiates a multi year electronic access agreement directly with a large publisher, providing online access to many additional titles at relatively little extra cost has played a significant part in the rapid uptake of electronic content by users throughout the world. Internet based e-resources increasing used for scholarly purposes. The spread of consortia licensing has been and far reaching. Consortia structures appear to be the most promises way to get. Charney (1) bases the assessment on several factors, including:

- . Consortia already exist
- . Consortia can provide bottom-up support
- . Consortia can assist an neutralizing support
- . Consortia own the concept.
- . Consortia can attract funding.
- . Consortia one easy to establish
- . Consortia are flexible.

2. Organization

Indian Statistical Institute, is funded by Govt. of India, Bangalore center is one among the three important centres of ISI. The ISI Bangalore centre library was established in the year 1976 to meet the academic and research interests of the students, scholar, teachers and others. It has one of the best collections of literature on Statistics, Mathematics, Quality Engineering/ Management and Library & information science in India. Presently it subscribes to around 270 international Journals on various subjects. The overall collection of books and reference materials, viz., reports, reprints, directories, encyclopedias, CDs etc., is approximately 35000. At present the library is automated which will enable a better management and easy access of information to users.

3. Electronic Journals: Aggregation and disaggregation

The term e-journals and electronic journals are used interchangeably to designate what may also be called:

“ Online Journals”

“Electronic Serials” or “E- serials”

“Electronic Periodicals”

“Zines “ or e-Zines or “Web-Zines “

In the simplest terms, electronic journals are:

- . meets the bibliographic definition of a serial
- . is accessible through a computer; and
- . has the feature of a journals, magazines, or news letter

Most of the bibliographic /full text aggregation databases are EBSCO host, First Search, Wilson select databases, among others at first were designed to deliver journals. Their original purpose was to discover citations and articles in response to a search query. Some of the examples are included are:

- . JSTOR
- . Emerald
- . J-gate
- . EBSCO

Libraries and library consortia are the ultimate aggregators of electronic journals, providing organized and integrated access to journals from many sources for their users. To aggregate a library first needs to disaggregate the separate collections it has acquired.

Responding to these challenges, governing authorities, academic, and librarians are pursuing a number of different avenues in to the future, some of them local or regional, some national and international. Many of the problems confronting libraries and their parent organizations are of such complexity and dimensions that only extraordinary alliances or partnership suggest solutions. Institutions dedicated to organization, presentation, and provision of equal access to archives, entertainment, and the scholarly record. Electronic formats make universal access to information a much greater reality

- . JSTOR, at the university of Michigan in Ann Arbor, consists of digitized older volumes of key journals in a grouping numbers of disciplines.
- . Bio one, collaborative projects of several organizations, provides electronic access to a collection of life sciences journals published by specialized sources.

4. The ISI Consortium

Library consortia are not new phenomena. Many have existed for decades, and perform a range of functions beyond the negotiation of licenses and advantageous prices for the purchase of electronic and print journals. Catering to mutual interests by setting up a library consortium to select, acquire, maintain, and preserve electronic information is one means of reducing or sharing costs as well as expanding the universe of information available to users and ensuring successful outcome. The recent growth in the number and size of Digital library applications has introduced the issue of services and collections. Perhaps the most significant management strategy that libraries use today in the acquisition of networked, licensed electronic resources in the growing use of consortia purchasing and licensing.(3) A contract to use Elsevier Science electronic publication has been signed by Indian Statistical Institute (ISI) and by the provider in 2003. . The primary purpose of library establishing a consortium to share electronic journals among ISI libraries. The solution had to come from networking the libraries in all the centers co-operative procurement and resource sharing. In this consortium ISI libraries such as Kolkatta, Delhi, and Bangalore . Elsevier Science Direct consortium gateway for sharing and accessing both print and e-journals. Consortium subscription to e –journals from Elsevier (Pergamon, Saunders, Academic press). The Consortium was formed to contribute to the development of research through the acquisition of electronic publication to the participating libraries of Indian Statistical Institute. Using the LAN, in addition to the current journals. Implementation of this project includes the following stages already achieved. Fig .1 shows the architecture of the gateway of consortia.

- . Constitution of the consortium by the three libraries;
- . Access, search, browse and view the licensed products;
- . Print and down load a limited number of articles, abstracts, records or parts of chapters from the licensed products.

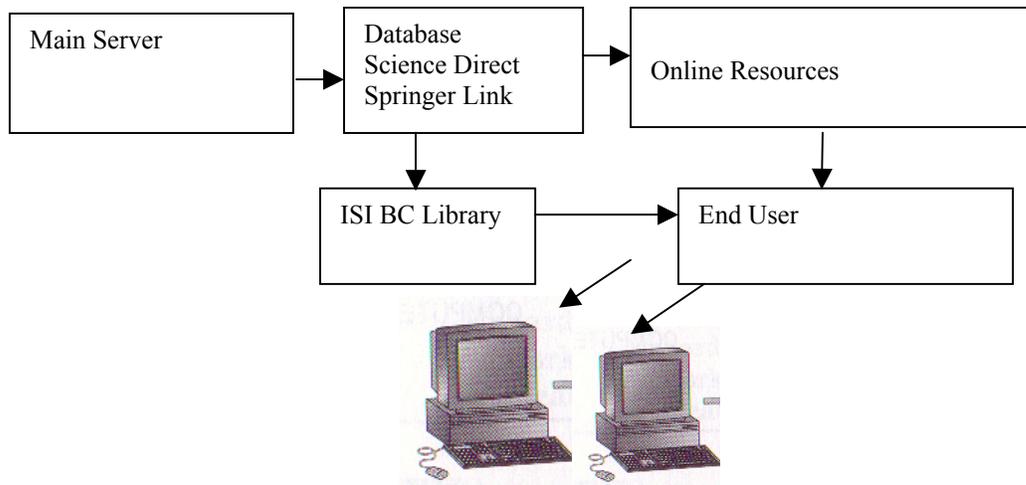


Fig. 1 .ISI BC Library Network system

Table No.1 List of Journals Received by ISI Libraries

No of Journals	P+E	E only
133 Science Direct	87	46
78 Springer Link		78

P= Print E= Electronic

Table No 2: Subject wise Journals (Science Direct)

Subject	Mathematics and Statistics	Quality control and Operation Research	Economics	Library and Information Science	Computer Science	Total
	61	15	38	7	12	133

Table 3: Subject Wise Journals (Spring Link)

Subject	Mathematics and Statistics	Quality control and Operation Research	Economics	Library and Information Science	Computer Science	Total
	48	8	14	3	5	78

Table No 4: Cost of Consortia

Mode	2003	2004	2005
Print Subscription	9,31,879.00	9,87,793.00	10,47,600.00
Electronic	8,58,624.00	9,10,181.00	9,64,791.00
Total	8,58,624.00	9,10,181.00	9,64,791.00

5. Need for Archiving the Digital Content

The cooperative environment of library resources allows the ISIBC library to serve its users with a host of journal resources available in the region. Accessing a resource for the sake of querying it or obtaining results from it requires prior knowledge of the resources, because each resource has its own distinct structures and rules for the interpretation of its data. It is not only the structure of the data at the target end that is required for the delivery of queries and the retrieval of results. The local integration and linking of these resources at a high level of customization is required. To address these issues, libraries and information providers have developed mechanisms to assist users with database selection, search strategy formulation, and search navigation. One useful mechanism for addressing the problems of selecting from multiple relevant databases is to provide the capability of simultaneously searching multiple selected databases and running individual search results for user examination. Based on the approach to federated search, this paper deals with a model of a library portal customized for searching across the multiple online resources at the Library of the Indian Statistical Institute Bangalore.

6. Web Access to Science Direct Consortium

Fig 2 shows the ISI library offering access to the service Science Direct database. A number of text fields allow the user to search on several kinds of information such as title, publisher, year, ISSN etc., when a search is requested, the Science Direct database returns a list of containing titles and links to the electronic version of those articles. ISI library Science Direct database is based on the Science Direct, a product of Elsevier that provides indexing, citation and for articles published in the number of scientific domains such as mathematics, statistics, quality control and Library and Information Science. The consortium was formed to contribute to the development of research through the acquisition of electronic publications by the participating libraries of the Indian Statistical Institute using the LAN, in addition to their individual current journal collection. In this consortia gateway, the ISIB library maintains a total of 133 online journal subscriptions. They consist of consortium subscriptions to e-journals from various Elsevier publishing groups such as Pergamon, Saunders and Academic Press. These pages offer a description of each library service and the user interface, which deals with all aspects of the interaction between the user and the system. Using the document option, the user can browse through each document. To save the user time, however, there is a direct link from the main home page. Once the user has clicked on the service icon on the menu structure of the information is on four levels

- . an introductory screen which gives the user the option to choose the appropriate information
- . the main menu, from which the user makes a choice about the types of information
- . a sub menu which refines the choices available to the topic
- . The information page, which gives a user the detailed information on the required topic.

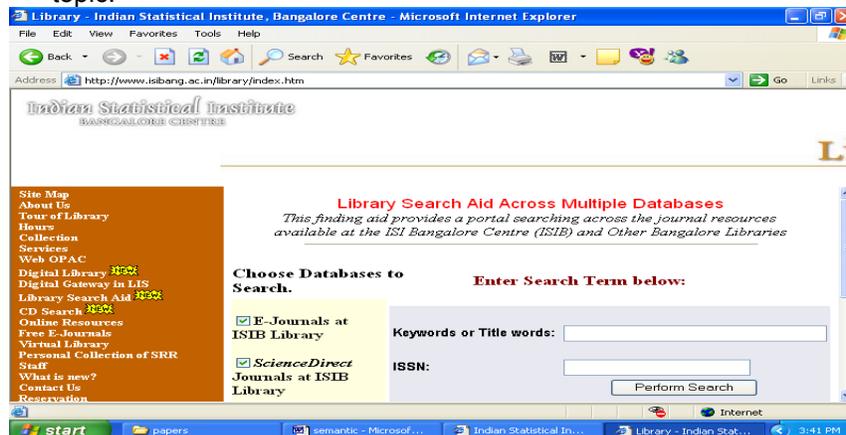


Fig.2 ISI BC Integrates Resources

7. Critical Factors

First of all, except in very few cases, libraries have no administration autonomy, or only very little, and with hardly decision making powers.

- . This factors forms interference in decision-making process, complication theme, slow down procedures, and strips librarians of their responsibility.
- . Another limit is the insufficient awareness, especially on the academic side, of the challenge of electronic information.

8. Conclusion

Experience shows that acquiring publication through consortia has brought great benefits and has equally favored different size library that would not be able to afford single subscriptions, whether on paper or in electronic format. The ultimate goal of cooperation is to join users and the documents and information they need; establishing relations among participants' institutions is a means to that end. Consortia represent the possibility to test alternatives to the traditional automated library. They represent the potential to offer the best library services to a wider number of users with all the resources they possess. The technology to make database content become easy to find access the database, content database searching is performed within the native databases search capabilities. The new library portal at the ISIB library, library employs this search approach to perform cross database searching over online resource categories.

Reference:

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7. Emerald Library (<http://www.emeraldinsight.com>)
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Appendix – A List of Journal

1. Advances in Applied Mathematics
2. Advances in Mathematics
3. Agricultural Economics
4. Annales de' l H P- B : Prob & Stat
5. Annales d'Institut Henri Poincare(c) Nonlinear Analysis (E)
6. Annlaes Scientifiques de l'Ecole Normale Superiere
7. Annals of Physics (E)
8. Annals of Pure & Applied Logic

9. Allied and Computational Harmonic Analysis (E)
10. Applied Numerical Mathematics
11. Bulletin des Sciences Mathematiques (E)
12. Bulletin of Mathematical Biology (E)
13. Chaos, Solitons and Fractals (E)
14. Cognitive Sciences
15. Comptes Rendus Mathematique
16. Computational Geometry
17. Computational Statistics & Data Analysis
18. Computer Aided Geometric Design (E)
19. Computer Vision & Image Understanding
20. Computers and Mathematics with Applications (E)
21. Computers and Operations Research (E)
22. Differential Geometry and its Applications (E)
23. Discrete Applied mathematics
24. Discrete Mathematics
25. Earth Science Reviews
26. Ecological Economics
27. Economics Letters
28. Economic Modelling (E)
29. Energy Economics (E)
30. Engineering Applications of Artificial Intelligence (E)
31. European Economic Review
32. European Journal of Combinatorics
33. European Journal of Operation Research
34. European Journal of Political Economy (E)
35. Expert systems with Applications (E)
36. Explorations in Economic History (E)
37. Finite Fields and their Applications (E)
38. Fuzzy Sets & Systems
39. Games and Economic Behaviour
40. Graphical Models (E)
41. Graphical Models and Image Processing
42. Insurance: Mathematics and Economics (E)
43. Image and Vision Computing
44. Information Processing and Management
45. Information Processing Letters
46. Information Sciences
47. Information Systems
48. International Informational and Library Review
49. International JI of Approximate Reasoning
50. International Journal of Food Microbiology
51. International Journal of Forecasting
52. International Journal of Heat & Mass Transfer
53. International Journal of Industrial Organisation
54. International Journal of Non linear- Mechanics
55. International Journal of Production Economics (E)
56. International Review of Law and Economics (E)
57. Journal de Mathematiques Pures et Appliques
58. Journal of Academic Librarianship (E)
59. Journal of Algebra
60. Journal of Algorithms
61. Journal of Approximation theory
62. Journal of Banking and Finance (E)
63. Journal of Combinatorial Theory –A
64. Journal of Combinatorial Theory – B
65. Journal of Comparative Economics
66. Journal of Complexity
67. Journal of Computational and Applied Mathematics (E)
68. Journal of Corporate Finance (E)
69. Journal of Development Economics
70. Journal of Differential Equations (E)

71. Journal of Econometrics
72. Journal of Economic Behaviour and Organization (E)
73. Journal of Economic Dynamics and Control
74. Journal of Economic theory
75. Journal of Economics and Business (E)
76. Journal of Environment economic & Management
77. Journal of Financial Economics
78. Journal of Functional Analysis
79. Journal of Geometry and Physics (E)
80. Journal of International Economics
81. Journal of Macroeconomics
82. Journal of Mathematical Analysis and Applications (E)
83. Journal of Mathematical Economics
84. Journal of Monetary Economics
85. Journal of Multivariate Analysis
86. Journal of Number theory
87. Journal of Parallel & Distributed Computing
88. Journal of Policy Modeling
89. Journal of Public Economics
90. Journal of Pure and Applied Algebra
91. Journal of Statistical Planning & Inference
92. Journal of Structural Geology
93. Journal of System Architecture
94. Journal of Theoretical Biology
95. Journal of Urban Economics (E)
96. Library and Information Science Research (E)
97. Library Collections, Acquisitions and Technical Services (E)
98. Linear Algebra & its Applications
99. Mathematical Biosciences
100. Mathematical and Computer Modeling (E)
101. Mathematical Social Sciences (E)
102. Mathematics and Computers and Simulation (E)
103. Non-linear Analysis (E)
104. Nonlinear Analysis: Real World Applications (E)
105. Neural Networks
106. Neuro Computing
107. Operations Research Letters
108. Parallel Computing
109. Pattern Recognition
110. Pattern Recognition Letters
111. Physica A : Statistical Mechanics and its Applications (E)
112. Physics Letters A
113. Physics Letters B
114. Probabilistic Engineering Mechanics (E)
115. Regional Science and Urban Economics (E)
116. Reliability Engineering and System Safety (E)
117. Reports on Mathematical Physics (E)
118. Research in Economics (E)
119. Resource and Energy Economics (E)
120. Review of Economics Dynamics (E)
121. Review of Financial Economics (E)
122. Science and Computer Programming (E)
123. Signal Processing
124. Social Networks
125. Social Science Research
126. Statistics & Probability Letters
127. Stochastic Process & their Applications
128. Systems and Control Letters (E)
129. Theoretical Computer Science
130. Theoretical Population Biology
131. Topology
132. Topology and its applications

133. World Development.

Appendix-B Springer Link

1. Acta Mathematica Hungaria
2. Acta Mechanica
3. Aequationes Mathematicae
4. Algorithmica
5. Annales Henri Poincaré
6. Applied Intelligence
7. Applied Mathematics and Optimization
8. Archiv der Mathematik
9. Combinatorica
10. Communications in Mathematical Physics
11. Constructive Approximation
12. Data Mining and Knowledge Discovery
13. Designs, Codes and Cryptography
14. Development Genes and Evolution
15. Discrete & Computational Geometry
16. Economic Theory
17. Economics of Governance
18. Empirical Economics
19. Environmental and Resource Economics
20. Extremes
21. Finance and Stochastics
22. Fluid Dynamics
23. Functional Analysis and its Applications
24. Geometric & Functional Analysis
25. Graphs and Combinatorics
26. Heat and Mass Transfer
27. Human Genetic
28. Integral Equations and Operator theory
29. International Journal of Computer Vision
30. International Journal of Game Theory
31. International Journal of Digital Libraries
32. International Journal on Document Analysis and Recognition
33. International Tax and Public Finance
34. Inventiones Mathematicae
35. Journal of Cryptology
36. Journal of Economic Growth
37. Journal of Economic Inequality, The
38. Journal of Economics
39. Journal of Fourier Analysis and Applications
40. Journal of Human Genetics
41. Journal of Mathematical Biology
42. Journal of Mathematical Modelling and Algorithms
43. Journal of Molecular Evolution
44. Journal of Optimization theory and Applications
45. Journal of Risk and Uncertainty
46. Journal of Theoretical probability
47. K-Theory
48. Life time Data Analysis
49. Lithuanian Mathematical Journal
50. Machine Learning
51. Mammalian Genome
52. Manuscripta Mathematica
53. Mathematical Methods of Operations Research
54. Mathematical Programming
55. Mathematische Annalen
56. Mathematisches Zeitschrift
57. Metrika
58. Molecular Genetics and Genomics
59. Neural Computing and Applications

60. Nonlinear Dynamics
61. OR Spectrum
62. Potential Analysis
63. Probability Theory and Related Fields
64. Problems of Information Transmission
65. Publications Mathematiques de l'Institute de Hautes Etudes Scientifiques
66. Queuing Systems
67. Review of Economic Design
68. Review of Finance
69. Review of Industrial Organization
70. Scientometrics
71. Selecta Mathematica, New Series
72. Social Choice and Welfare
73. Statistical Inference for Stochastic Processes
74. Statistical Methods and Applications
75. Statistics and Computing
76. Theory of Computing Systems
77. Ukrainian Mathematical Journal
78. Zeitschrift fur angewadte Mathematik und physik ZAMPK

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Subscription journals, open-access journals and hybrids of the two (either a mixture of open-access and subscription articles in a journal or a 'moving wall' to open access after a fixed period of time) provide a complex landscape for the preservation of, and long-term access to, e-journals. This e-journal landscape continues to evolve as e-publishing itself begins to shift from static to dynamic content, and the importance of data and supplementary material linked to articles increases in major disciplines. A small number of regional consortia also organize and provide their own hosting services for access and preservation of e-journals. E-journals Service: Cutting the Barriers for Accessing Global S&T Information with Power of ICT. DESIDOC, DRDO Technology Spectrum, 2013. Library Consortia: Benefits and Models of E-journals Consortia. International Indexed and Refereed Research Journal. Apr 2013. Sp. Nimbhorkar. SP Nimbhorkar. Library Consortia: Benefits and Models of E-journals Consortia. International Indexed and Refereed Research Journal. April-May 2013. <http://www.ssmrae.com/admin/images/ef4c727b0c2982fe74698f286abf94c6.pdf>. Accessed on 29th November 2014. Use of Electronic Resources by DRDO Scientific Community throu