Vol II Issue XII Jan 2013 Impact Factor : 0.2105

ISSN No : 2230-7850

Monthly Multidisciplinary Research Journal

Indían Streams Research Journal

Executive Editor

Ashok Yakkaldevi

Editor-in-chief

H.N.Jagtap



IMPACT FACTOR : 0.2105

Welcome to ISRJ

RNI MAHMUL/2011/38595

ISSN No.2230-7850

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

International Advisory Board

Flávio de São Pedro Filho Federal University of Rondonia, Brazil Kamani Perera Regional Centre For Strategic Studies, Sri Lanka Janaki Sinnasamy	Mohammad Hailat Dept. of Mathmatical Sciences, University of South Carolina Aiken, Aiken SC 29801 Abdullah Sabbagh Engineering Studies, Sydney	Hasan Baktir English Language and Literature Department, Kayseri Ghayoor Abbas Chotana Department of Chemistry, Lahore University of Management Sciences [PK]
Librarian, University of Malaya [Malaysia]	Catalina Neculai University of Coventry, UK	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Horia Patrascu Spiru Haret University, Bucharest, Romania
Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania Fabricio Moraes de Almeida	Ilie Pintea, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus Pop	Postdoctoral Researcher	College of Business Administration
	Editorial Board	
Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University, Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yalikar Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Jt. Director Higher Education, Pune K. M. Bhandarkar Praful Patel College of Education, Gondia	Umesh Rajderkar Head Humanities & Social Science YCMOU, Nashik
Salve R. N. Department of Sociology, Shivaji University, Kolhapur	Sonal Singh Vikram University, Ujjain	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
	Maj. S. Bakhtiar Choudhary	Rahul Shriram Sudke

Ph.D.-University of Allahabad

Director, Hyderabad AP India.

S.Parvathi Devi

Ph.D , Annamalai University, TN

Devi Ahilya Vishwavidyalaya, Indore

Awadhesh Kumar Shirotriya Secretary, Play India Play (Trust),Meerut Sonal Singh

Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College,

Indapur, Pune

Satish Kumar Kalhotra

S.KANNAN

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.net

Indian Streams Research Journal Volume 2, Issue.12,Jan. 2013 ISSN:-2230-7850

Available online at www.isrj.net

ORIGINAL ARTICLE



LIBRARY AUTOMATION AND NETWORKING OF UNIVERSITY LIBRARIES OF UTTAR PRADESH: STATUS PROBLEMS AND PROSPECTS

SALMA KHAN AND J. DOMINIC

Librarian , IFTM University, Moradabad. Chief Librarian , Karunya University, Coimbatore.

Abstract:

This paper highlights the present scenario of automation and networking of university libraries of Uttar Pradesh. Survey was carried out in the central, state, deemed and private university libraries of Uttar Pradesh focusing the automation, networking, and services.

KEYWORDS

Automation, Networking, Internet, Hardware, Software

1.INTRODUCTION

Computer application in library and information field has made phenomenal progress in industrialised countries where hardware, software and communications facilities are well developed. In view of their technological advancement, they are able to computerise their entire library and information system in the country, with great success. Besides improving services and operations for a better performance, libraries are able to evolve effective computer networks, towards optimum utilisation of resources and facilities.

An information network is a set of interrelated information systems associated with communication facilities, which are cooperating through more or less formal agreements and institutional agreements, in order to jointly implement information handling operation, with a view to pooling their resources and to offer services to the user.

The internet, which is now well developed, provides unprecedented opportunities for storage, retrieval and dissemination of information. Internet provides access to the most diversified source of information hosted by individuals and various organisations worldwide on a vast network of servers. The emergence of Internet offers very high bandwidth, which will widen the scope for information processing and dissemination as never before. A user will be able to cross-correlate information in multiple ways and that too from selected sources in this new networking environment.

2.OBJECTIVES OF THE STUDY

The major objectives of the study are:

Title : LIBRARY AUTOMATION AND NETWORKING OF UNIVERSITY LIBRARIES OF UTTAR PRADESH: STATUS PROBLEMS AND PROSPECTS Source:Indian Streams Research Journal [2230-7850] SALMA KHAN AND J. DOMINIC yr:2013 vol:2 iss:12



To find out the present status of library automation and networking in the university libraries of Uttar Pradesh

To evaluate the library so ftware/ hardware adopted by the university libraries.

To know the housekeeping operations.

To know the networking facility for sharing of information and resources in the university libraries.

3.REVIEW OF LITERATURE

Automatism at Adeyemi College of Education Library and print out the problems which are faced during the automatism and proposed the solutions to it, Akinfolarin (1998). Automatism project is likely to be successful if at least our staff member has an educational qualification in computer science, management of the college must take an interest in the automatism process and adequate financial and material support must be given.

The cost and types of the library automatism systems in use in public libraries in Finland. The result show that almost all of the public libraries have some land of library automatism system and that 80% of than are already offering services via the internet. The cost of establishing public library automatism have been approximately 16-8 million Euros with annual operating cost of about 5-7 million Euros. The labour costs used in building and maintaining library automatism systems had been poorly monitored in the libraries, Saarti, Jarmo (2003).

The software packages namely Alice for window Libsys and Virtua. There study reveals that each package has got its own capabilities and limitation. Alice has a unique feature of tracing a documents at a particular location I the library (facility). Virtua supports Unicode standards. Libsys has got its uniqueness to run any platform, it provides option to import data in marc and non-marc formats from established bibliographic databases, Husain, Shabahat and Ansari, Mehtab Alam (2007).

Automation of library operations and services is essential for efficient functioning of the library and saving the library users' time. Hence a study has been conducted to investigate the Automation in university libraries in Tamilnadu, India. It discusses automation, its need, and application in university libraries. The study explains the various problems faced by authorities and the staff during the process of automation. The tool adopted to conduct the study is a well structured questionnaire, Jayaprakash, and Balasubramani, (2011).

The changes that libraries and information centres need to indergo for networking and lists the existing communication networks (INDONET, ERNET NICHET, GPSS, RABMN, INET and libraries and information networks (INFLIBNET, DELNET, BTIS SIRNET, MALBNET etc) in India. It mentions the paradigm changes that LICS undergo challangee to ther networking, and abo highlights the role of IT in transforming traditional LIC into a digital Mode, Rao, Siriginied Subha (2001).

Since 1990s, cooperation, automation and resources sharing by means of networking have been the dominant themes. In India, library resource sharing sometimes has encouraged competition rather than cooperation, in view of the benefits that relatively large libraries have accrued by owning a monopoly of the research materials that such consortia would need to have in common. Despite meager budgets and depleted collections university and government libraries in India tend to keep separate subscriptions to relatively expensive periodicals titles with the advent of new pricing models by publishers such as licensing and access fees for electronic information sources, the relatively favorable terms of consortia agreements should make the economics of cooperation more viable, practical and visible, Ghosh, Maitravee Biswas, and Jeevan, (2006).

4.SCOPE OF THE STUDY

Uttar Pradesh is a biggest province of India having maximum number of general, agriculture, technical and other professional universities. The researcher selected 32 universities libraries.

5.RESEARCH METHODOLOGY

The data and information collected were examined with special reference to automation and networking of university libraries. Questionnaire method was used to collect the data. The investigator

Indian Streams Research Journal • Volume 2 Issue 12 • Jan 2013



went directly and collects the data. All the collected data have been used for analysis.

The data collected through the questionnaire was analyzed by employing the following statistical techniques. The statistical analysis of the data for the present study was done by applying (i) Simple percentage (ii) Chi-Square

6.ANALYSIS AND INTERPRETATION

The details of statistical analysis and interpretations of the data on the application of ICT in University Libraries under study are collected from the librarians through the structured questionnaires and semi-structured interviews and data collected through the observation visits to the libraries. The analysis of the consolidated data has been done based on the objectives set for the study using Excel and SPSS software.

6.1HARDWARE

Table 1. Hardware available in Libraries

Hardware	Central	State Univ.	Deemed	Private Univ.	Total
А	Univ.		Univ.		
Computers	4(100%)	14(100%)	8(100%)	6(100%)	32(100%)
ⁿ Servers	4(100%)	10 (71.42%)	6 (75%)	4 (66.66%)	24(75%)
Printers	4(100%)	14(100%)	8(100%)	6(100%)	32(100%)
^a Audio Video	1(25%)	4 (28.57%)	1 (12.5%)	1 (16.66%)	7(21.85%)
Sources					
¹ Overh ead	4(100%)	4 (28.57%)	2 (25%)	-	10(31.25%)
Projectors					
^y Multimedia	3 (75%)	7 (50%)	3 (37.5%)	-	13(40.62%)
Projector					
^S Slide Projectors	4(100%)	3 (21.42%)	2 (25%)	-	9(28.12%)
_i TV , VCR, DVD	2 (50%)	4 (28.57%)	3 (37.5%)	1 (16.66%)	10(31.25%)
Players					
Scanners	4(100%)	8 (57.14%)	5 (62.5%)	5 (83.33%)	22(68.75%)
Fax	2 (50%)	3 (21.42%)	2 (25%)		7(21.85%)
Barcode Reader	1(25%)	3 (21.42%)	4 (50%)	5 (83.33%)	13 (40.62%)
Dvd , Cd Writer	4 (100%)	14(100%)	8(100%)	6(100%)	32(100%)
r					

Analysis reveals that all of the (100 per cent) libraries of Central Universities and (75 per cent) of state and (75 percent) of Deemed and (66.66 percent) of Private Libraries have server in the library. All the libraries of different categories of universities have computer nodes or workstations. All the university libraries have printers. Nearly all the libraries have barcode reader 5(83.33 percent) are available in private universities library under study. All the universities have CD or DVD writer, scanner in the libraries.

6.2 SOFTWARE

Indian Streams Research Journal • Volume 2 Issue 12 • Jan 2013



Table 2. Software available in University Libraries

Software	Central	State	Deemed	Private	Total
	Univ.	Univ.	Univ.	Univ.	
Library Automation	3 (75%)	6 (42.85%)	6 (75%)	6 (100%)	21 (65.62%)
S oftwar e					
Operating System	3 (75%)	13 (92.85%)	6 (75%)	6 (100%)	28 (87.5%)
Dos	1 (25%)	4 (28.57%)	2 (25%)	1 (16.66%)	8 (25%)
Unix	-	1 (7.14%)	3 (37.5%)	2 (33.33%)	6 (18.75%)
Window	4 (100%)	11 (78.57%)	7 (87.5%)	5 (83.33%)	27 (84.37%)
Ms-Word	4 (100%)	13 (92.85%)	7 (87.5%)	5 (83.33%)	29 (90.62%)
Ms-Excel	4 (100%)	13 (92.85%)	7 (87.5%)	5 (83.33%)	29 (90.62%)
Power Point	4 (100%)	13 (92.85%)	6 (75%)	5 (83.33%)	28 (87.5%)
Digital Library	3 (75%)	3 (21.42%)	5 (62.5%)	2 (33.33%)	13 (40.62%)
S oftwar e					
Antivirus Software	4 (100%)	6 (42.85%)	5 (62.5%)	6 (100%)	21 (65.62%)
Cd- Net	2 (50%)	2 (14.28%)	4 (50%)	1 (16.66%)	9 (28.12%)
Management					
S oftwar e					
Any Other Software	2(50%)	1 (7.14%)	4 (50%)	1 (16.66%)	8 (25%)

To bring the hardware establishment into activation, proper software facilities are required by the University libraries to serve up-to –date information to the clientele. Table 2 gives the availability of software in University Libraries. All the libraries of different category of Universities have Library Management Software (65.62%). Only (42.62 percent) of them has digital library software. Half of the University Libraries (50 percent) of Central and Deemed universities Libraries have CD-Net management software, i.e. 2 of the Central University and 4 of the Deemed University. Majority of institutions have DTP software Ms-office in their libraries.

6.3 Library Automation

Library Management Software package place a key role for the success of the library automation, and there are a number of library automations software packages in India.

6.3.1 Library Management Software

Table 3 Library Management Software Used

Type of Software	Central	State	Deemed	Private	Total
	Univ.	Univ.	Univ.	Univ.	
Commercial	3 (75%)	5 (35.71%)	4 (50%)	6(100%)	18 (56.25%)
In-house	-	-	2 (25%)	-	2 (6.25%)
Not Available	1 (25%)	9 (64.28%)	2 (25%)	-	12 (37.5%)
Total	4(100%)	14(100%)	8(100%)	6(100%)	32 (100%)

Indian Streams Research Journal • Volume 2 Issue 12 • Jan 2013



5

Name of the	Central	State	Deemed	Private	Total
software	Univ.	Univ.	Univ.	Uni v.	
Alice for	2 (5004)	1 (7 1 40/)		2 (33.33%)	5 (15.62%)
Window	2 (30%)	1 (7.14%)	-		
CDS/ISIS	-	1 (7.14%)	-	-	1 (3.12%)
Liberty	-	-	1(12.5%)	-	1(3.12%)
Libsite	-	-	1 (12.5%)	-	1(3.12%)
Libsys	1 (25%)	1 (7.14%)	3 (37.5%)	1 (16.66%)	6 (18.75%)
Libware	-	-	1(12.5%)	-	1 (3.12%)
Softlink	-	-	-	1 (16.66%)	1(3.12%)
Soul	-	2 (14.28%)	-	-	2 (6.25%)
TLSS	-	-	-	2 (33.33%)	2(6.25%)
No	1 (25%)	9(64.28%)	2 (25%)	-	12 (37.5%)
Automation	1 (2070)	9 (04.2870)	2 (2370)		
Total	4 (100%)	14 (100%)	8(100%)	6 (100%)	32 (100%)

Table 4. Software Used in University Libraries

Responses indicate that the organizations surveyed use a wealth of different software packages depending upon particular applications. Table 3 and 4 shows the different library management software used in University libraries under study. The analysis shows that Universities libraries are more interested in commercial software packages. There are Nine software preferred by 20(62.5 percent) libraries. It is found that Libsys is used more in libraries (18.75 percent) than any other software. Alice for window software is a used as second with 15.72 percent of libraries, 50 percent of the Central universities and 33.33 percent of deemed universities are using Alice for window. Only two Deemed universities developed in house library management software.

Two libraries are using SOUL and TLSS library management software and two libraries have developed the library management software in house. The analysis revealed that 20 libraries have library management software and still 12(37.5%) libraries has no automation. Libsys is the more used software and Alice for Window is the second. Central and Deemed Universities libraries (75%) are better in library management software. All the private universities are automated and all are using the commercial software.



Figure 1. Software's Used

Indian Streams Research Journal • Volume 2 Issue 12 • Jan 2013



Figure 2. Types of software

6.3.2 PRESENT STATUS OF LIBRARY AUTOMATION

Table 5. Status of Library Automation

Type of the University	Partial	Full	Not	Total
			Available	
Central	3 (75%)	-	1 (25%)	4 (100%)
University				
State	4 (28.57%)	1 (7.14%)	9 (64.28%)	14(100%)
University				14(10070)
Deemed	2 (25%)	3 (37.5%)	3 (37.5%)	8 (1009/)
University				8 (100%)
Private	1 (16.66%)	5 (83.33%)	-	6 (100%)
University				0 (100%)
Total	10 (31.25%)	9 (28.12%)	13 (40.62%)	32(100%)

Chi-Square = .009

Chi-Square at 6 df and 5 level of Significance is 17.122

Null Hypotheses = Accepted

Almost all the operation in a library can be computerized to achieve more efficient and effective functioning and providing excellent library and information services.

Libraries were asked to indicate the library housekeeping operations they have automated. Table 5 shows the status of library automation in University libraries under study. Libraries of Central Universities (75 percent) and libraries of State Universities (28.57 percent), and Deemed Universities (25 percent), and Private Universities (16.66 percent) are partially automated; whereas State Universities Libraries (7.14 percent), Deemed universities (37 percent) and private universities (83.33 percent) of libraries are fully automated. Nearly all the private universities libraries are fully automated and all the central university

Indian Streams Research Journal • Volume 2 Issue 12 • Jan 2013



libraries are partially automated. Majority of the state universities (64.28 percent) libraries have no automation. All the libraries of private universities have automation.

Chi- square test was carried out to test the association between the organization type and status of automation. The hypothesis tested was status of automation is independent of the type of universities. The computed Value of $\lambda 2$ is .009, which is less than table value (17.122) at 6 degree of freedom and 5 percent level of significance. Hence it can be conclude that status of automation and organization type are independent.



Figure 3. Status of Automation

Table 6. Computerised Housekeeping Operation of University Libraries

House keeping	Central	State	Deemed	Private	Total
Operation	Univ.	Univ	Univ	Univ	
Computerized	2 (50%)	5 (35.71%)	5 (62.5%)	6(100%)	18 (56.25%)
Acquisition					
Computerized	3 (75%)	5 (35.71%)	5 (62.5%)	6(100%)	19 (59.37%)
Cataloguing					
Computerised	2 (50%)	4 (28.57%)	6(75%)	6(100%)	18 (56.25%)
Circulation					
Computerised	3 (75%)	5 (35.71%)	5 (62.5%)	6(100%)	19 (59.37%)
Serial Control					
OPAC in libraries	2 50%)	5 (35.71%)	6(75%)	6(100%)	19 (59.37%)
Computerised	1 (25%)	4 (28.57%)	4(50%)	6(100%)	15 (46.87%)
Annual Stock					
Verification					
Computerised	-	1 (7.14%)	3(37.5%)	5 (83.33%)	9 (28.12%)
Budget Control					

It is analyse that in the private university libraries acquisition, cataloguing, circulation, serial control, annual stock verification, all are computerized where as computerized budget control is available in only few (28.12%) universities libraries. Computerised acquisition, circulation is available in (56.25%) university libraries. Computerised cataloguing, serial control and OPAC in libraries are available in (59.37%) university libraries. Computerised annual stock verification is available (46.87%) university

Indian Streams Research Journal • Volume 2 Issue 12 • Jan 2013





libraries.

6.3.4. FEATURES OF LIBRARY MANAGEMENT SOFTWARE

Type of the university	Is Webopac facility available in your automation software	Is your library automation software network version	Is your library management software has online help for users
Central University	3 (75%)	3 (75%)	3 (75%)
State University	4 (28.57%)	5 (35.71%)	4 (28.57%)
Deemed University	6 (75%)	5 (62.5%)	5 (62.5%)
Private University	6 (100%)	5 (3.33%)	5 (62.5%)

Table 7. Features of Library Management Software

Table 7 shows the different features of library management software used in University libraries under study. Majority of libraries have network version of library management software and have OPAC and Online help facilities. It is revealed that the library Management software of (75 per cent) central university, 83.33 per cent of private University libraries have network version, 62.5 percent of deemed university libraries have network version. The library management software of majority of the central university libraries (75 per cent) have online help for Users, and deemed university and private university libraries (62.5 percent) has online help for the users. The library management software of all the Private university libraries (100 percent) has Web OPAC facility, whereas 75 percent of deemed and central university libraries and state university libraries (28.57%). It is found that the majority of libraries Management Software are good and most of them are network version and have online help and OPAC facilities.

7.SUGGESTIONS FOR SUCCESSFUL IMPLEMENTATION OF LIBRARY AUTOMATION AND NETWORKING

Hardware and software should be acquired as per the latest configuration.

For the successful implementation of the computerization of library services, advice from the experts who have already computerized the library services and activities should be sought.

Senior library professionals should visit computerized libraries to gather practical information about computerization of library operations and services.

Easy purchase procedure should be adopted for acquisition of hardware and software so that system with latest configuration can be purchased for library automation.

Erratic power supply should be corrected by installing high capacity UPS and power generator.

Standardization of library automaton activities to facilitate easy resource sharing.

Resources and facilities available in library should be shared.

Sharing of resources should be strengthened.

LAN and wi-fi facility has to be setup by all university libraries for making information transfer and share at faster speed and efficiently.

8.CONCLUSION

Library automation is the process which needs proper planning, timely implementation and periodical evaluation. The librarian with the administrators has to set the priorities after analyzing the current status and future requirements. Selection of the suitable integrated library management package according to the needs of the users and the library is important. Retrospective conversion, OPAC,

Indian Streams Research Journal • Volume 2 Issue 12 • Jan 2013



9

circulation and serials control, etc. should be conducted with care. Staff training and user education are keys to the success of the

process. Library automation invites realistic approach. Librarian should acquire adequate knowledge about the hardware and software options available. All libraries should use standard software packages for automation. Majority of the libraries are the part of the institutional network. All the central university library are the part of Institutional network.

There is need for continuous monitoring of automation activities for improvement of the situation and for meeting the future needs. An automated and networked library with a variety of resources and user oriented services library can achieve its goals.

REFERENCES

1.Akinfoliarian, W. A. (1998), "Automation in the Adeymi College of Education Library, Ondo", library Management, Vol. 19 No. 1, pp 26-28.

2.Saarti, Jamo (2003), "The Acquisition and maintenance cost association with Library Automation systems in Finnish Public Libraries", Electronic Library and Information Systems, Vol. 37 No. 1, pp.25-30. 3.Husain, Shabahat and Ansari, Mehtab Alam (2007) "library automation software packages in India : a study of the cataloging modules of Alice for Window, libsys and virtua", Annals of library and information studies, vol.54 no.3 pp.146-151.

4.Jayaprakash, M. and Balasubramani, R. (2011) "Status of Automation in University Libraries of Tamilnadu: A Survey", European Journal of Scientific Research, Vol.53 No.1, pp.17-24.

5.Ghosh, Maitrayee, Biswas, S. C. and Jeevan, V.K.J. (2006). "Strategic cooperation and consortia building for Indian libraries :models and methods", library Review, Vol. 55 no 9, pp. 608-620

6.Rao, Siriginidi Subba (2001), "Networking of libraries and information center : challenges in India" libraries Hi tech, vol.19 no.2, pp.167-179.



SALMAKHAN, Presently working as Chief Librarian in IFTM University, Moradabad. Various papers are published in National and International conferences and Journals. Guided few M.L. I. Sc. Dissertation projects M.L.I. Sc. of IGNOU. Member of ILA, SALIS and MANLIBNET.



J.DOMINIC, M.L.I.Sc., Ph.D.PhD from University of Mysore and presently working as Chief Librarian & Head DLIS in Karunya University, Coimbatore, Tamilnadu, India for the past 23 years and implemented many IT based services. More than 60 research papers published in National and International Conferences and in Journals. Received two best paper awards in conferences. Guided 52 Mphil project and presently guiding 8 Phd's. Resource person for the National conferences, seminars and workshops. Editor for 4 conference volume and associate editor for 3 journals. Coordinator to conduct Training Programme for Engineering College Librarians by ISTE -AICTE. The Best Librarian Award for the year 2006 by SALIS. Expert Member in Doctoral committee for various Universities. Membership in professional bodies ILA, IASLIC, SALIS, ISTE.

Indian Streams Research Journal • Volume 2 Issue 12 • Jan 2013

Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished research paper.Summary of Research Project,Theses,Books and Books Review of publication,you will be pleased to know that our journals are

Associated and Indexed, India

- ★ International Scientific Journal Consortium Scientific
- ★ OPEN J-GATE

Associated and Indexed, USA

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database

Indian Streams Research Journal 258/34 Raviwar Peth Solapur-413005,Maharashtra Contact-9595359435 E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com Website : www.isrj.net