Development of an Information Network for Affiliating Universities in Kerala: A Feasibility study

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Abstract

Library and information networks play a vital role in the sharing of information resources and building cooperation among libraries. Library cooperative initiatives like consortium and resource sharing services can seize the pricing of e-resources and ensure uniform availability of information resources. Regional level library networks can satisfy the information requirements of the user community at the micro-level. Kerala state is bestowed with sufficient infrastructure and human resources for the development of a network for library cooperation. This study enquires the possibility of the development of an information network for college libraries under four prominent affiliating universities in Kerala state to facilitate the avenues for cooperation and resource sharing.

Keywords: *Library cooperation; Resource sharing; Interlibrary loan; Document delivery services; Library automation; College libraries; Kerala.*

1. Introduction

Library and information support is highly necessary for the success of higher education, research and development activities. In a federal system of governance, each state government possesses control over the management of education and research institutions at the regional level. So, library network initiatives at the local level can do a lot of things to ensure uniform availability of e-resources by wisely utilizing the public fund (Francis, 1997). Initiatives for sharing resources among libraries and joint procurement of e-resources is the need of the hour in Kerala State. Development of an information network for libraries is possible by utilizing ICT infrastructure, positive attitude towards Open Source software and the human capital for IT support at the Kerala State. The study enquires the feasibility for the development of an information network for libraries in affiliating universities in Kerala. The study investigates the current status of colleges under affiliating universities in Kerala for the development of an information network.

2. Literature Review

The review of literature takes a gaze on the published literature on library cooperation, information networks, and resource sharing.

Library cooperation efforts started in India among research libraries by the Indian National Scientific Documentation Center (INSDOC) in 1952. The NISSAT program in India could lead to the development of several library networks. Library cooperative programs empowered by Information Technology developed in the late 1990s (Pal, 2016).

Planning Commission appointed a Working Group on Modernization of Library services and Informatics during the Seventh Five Year Plan period 1985-1990. The working group recommended the interlinking of library systems at the national level. Interlinking of libraries through computer and communication networks started during the late 1980s. Initially, library networks were limited to major cities like Delhi, Kolkata, and Mumbai. A national level academic library network came into being with the establishment of UGC proposed INFLIBNET (Murthy,

1996). INFLIBNET Centre started the document delivery and interlibrary loan service using the platform J-gate Plus in 2008. INFLIBNET Centre has assigned ILL (Interlibrary Loan) Centres based on their unique journal titles. The ILL Centre receives requests from the users and sends back the desired documents (Panda & Mallappa, 2016).

Price differences of journals in different academic disciplines are the main limitations of pricing and licensing of resources in the Indian context. A centralized system makes available price and licensing information for open negotiation (Nazir & Wani, 2015).

Libraries are facing challenges in the acquisition, maintenance, preservation and management of e-resources. Quality assessment and pricing are the main challenges to deal with at the time of e-resources procurement. Variations are visible in consortia and individual price. Libraries need to facilitate single window access to all e-resources for easy access by users. Joint effort can save the libraries to find solutions for problems with e-resources management (Chandel & Mukesh Saikia, 2012).

Development of an exclusive regional network for the Kerala state is possible due to the availability of infrastructure and manpower. Academic and special libraries in Kerala have sufficient ICT infrastructure, and it is possible to make the project easier (Sreekumar & Vijayakumar, 2008).

"Organizational self-sufficiency to a collaborative survival mode" is the main advantage of library cooperation. Information technology has opened up many ways to share library collection and services. Library consortia create unity among libraries either located in the same geographical area or similar missions. Demand from the user community, lack of sufficient funding, changes in information access and delivery are the universal driving forces for libraries to join with a consortium (Allen & Hirson, 1998).

Regional level library networks can satisfy the information requirements of the user community at micro level. About 75% of the postgraduate students are from colleges and the quantum of resources are located in university libraries. College libraries are not in a position to cater to the information needs of the academic community due to their limited and obsolete collection. Dr. Raman Nair (1990) proposes that a state center for the resource sharing for universities and for colleges is necessary. University departments and colleges are the service points of resource sharing in the proposed model.

3. Data Collection and Method of Study

Fourteen state universities are functioning in Kerala. Out of these, Kerala, Mahatma Gandhi, Calicut and Kannur are the major affiliating universities and they were taken for the study. They are offering various courses through affiliated colleges and constituent study departments on the campus. Sree Sankaracharya University of Sanskrit, Thunchath Ezhuthachan Malayalam University, Cochin University of Science and Technology, Kerala Agricultural University, Kerala Veterinary and Animal Science University, Kerala University of Health Sciences, Kerala University of Fisheries and Ocean Studies, Kerala Technological University, National University of Advanced Legal Studies offer specialized courses in specified subject areas. A Central University is also functioning in Kasaragod District in the State (Economic Review 2019, 2019). The prominent affiliating universities -- Kerala, Mahatma Gandhi, Calicut and Kannur -- were taken for the study.

Table 1

Details of universities participated in the study

Sl. No.	Affiliating University	Questionnaires distributed	Questionnairs received	Percentage
1	University of Kerala	51	33	23%
2	Mahatma Gandhi University	68	55	38%
3	University of Calicut	68	46	32%
4	Kannur University	13	11	7%
Total		**200 (100%)**	**145 (72.5%)**	**100%**

Government and Government Aided colleges affiliated to the University of Kerala, Mahatma Gandhi University, University of Calicut and Kannur University were selected for the study. The scope of the study is limited to Law colleges, Training colleges, Arts and Science colleges because of the similar nature of information requirements in such colleges. Questionnaire method (semi-structured) to collect primary data. Out of 255 colleges, 55 colleges are excluded from the survey because the chief librarian/ in charge of libraries position is vacant. A total of 200 questionnaires were distributed among the college libraries. The number of responses received back is 145 with a response rate of 72.5%. In addition, observation method was applied to get an idea of the collection, services, and infrastructure of the libraries. (Table 1)

4. Objectives

The primary aim of the study is to check the feasibility of the development of an information network for library cooperation and resource sharing among affiliating universities in Kerala. Following are the specific objectives of the study:

- To identify the volume of information resources available in the college libraries.

- To assess the ICT infrastructure available in college libraries.

- To evaluate the IT skills among library professionals working at colleges.

- To understand the attitude of library professionals towards information network for resource sharing.

- To sort out the barriers in the networking of libraries.

- To find out the feasibility of an information network for cooperation among college libraries.

5. Major Findings

Major findings of the study are as follows:

Table 2

Collection of print resources in college libraries in Kerala

Sl. No.	Description	Government (N = 27)	Government Aided (N = 118)	Total (N = 145)	p-value
1	Books	44689 ± 40109	35502 ± 26103	37212 ± 29273	0.541
2	Reference Books	6693 ± 10891	3890 ± 5253	4412 ± 6711	0.662
3	Periodicals	29.11 ± 30.22	67.14 ± 59.15	60.06 ± 56.82	0.000
4	Back Volumes of Periodicals	73.81 ± 290.1	690.4 ± 1867	575.6 ± 1705	0.002
5	Dissertations	88.07 ± 300.8	180.4 ± 590.6	163.2 ± 548.7	0.148
6	PhD Theses	3.741 ± 8.012	14.42 ± 47.09	12.43 ± 42.79	0.029
7	Reports	7.593 ± 34.57	25.59 ± 110.7	22.24 ± 101.1	0.294
8	Maps	6.296 ± 16.85	9.297 ± 22.36	8.738 ± 21.42	0.069

5.1 Library Collection

The collection strength of textbooks, reference books, dissertations, reports, and maps are more or less the same in both Government and Government Aided college libraries. The collection strength of periodicals, back volumes of periodicals, and PhD theses are higher in Government aided college libraries compared to Government college libraries.

The Government Aided college libraries are in the forefront compared to Government college libraries in terms of the collection strength of e-journals. Both categories of colleges are in an equal position in terms of the collection strength of dissertations, theses, full-text databases, bibliographic databases, statistical databases, and other e-resources. Majority of the college libraries in Kerala subscribe to N-LIST consortium services. Government Aided college libraries lead in the participation in DELNET, British Library Consortium, and other networks and consortia initiatives. Very few college libraries subscribe/ participate in other networks and consortia. (Table 2).

5.2 Human Resources

Table 3

ICT skills of librarians in Government and Government Aided Colleges in Kerala

Sl. No.	Description	Government (N = 27)			Government Aided (N = 118)			p-value
		Good	Fair	Poor	Good	Fair	Poor	
1	Windows Operating System	20 (74.1%)	7 (25.9%)	0 (0.0%)	91 (77.1%)	27 (22.9%)	0 (0.0%)	0.736
2	Linux Operating System	11 (40.7%)	12 (44.4%)	4 (14.8%)	24 (20.3%)	57 (48.3%)	37 (31.4%)	0.057
3	Office Automation	18 (66.7%)	8 (29.6%)	1 (3.7%)	84 (71.2%)	32 (27.1%)	2 (1.7%)	0.576
4	Library Automation Software	18 (66.7%)	9 (33.3%)	0 (0.0%)	75 (63.6%)	37 (31.4%)	6 (5.1%)	0.738
5	Digital Library / Institutional Repository Softwares	12 (44.4%)	12 (44.4%)	3 (11.1%)	44 (37.3%)	54 (45.8%)	20 (16.9%)	0.682
6	Content Management Systems	1 (3.7%)	10 (37.0%)	16 (59.3%)	19 (16.1%)	47 (39.8%)	52 (44.1%)	0.180
7	Web 2.0 Tools	4 (14.8%)	14 (51.9%)	9 (33.3%)	43 (36.4%)	51 (43.2%)	24 (20.3%)	0.067
8	Computer Hardware	5 (18.5%)	8 (29.6%)	14 (51.9%)	18 (15.3%)	48 (40.7%)	52 (44.1%)	0.567
9	Computer Networking	6 (22.2%)	9 (33.3%)	12 (44.4%)	23 (19.5%)	49 (41.5%)	46 (39.0%)	0.736

ICT skills of library professionals in Government and Government Aided college libraries are almost the same. They lead in skills on the Windows Operating system, Office Automation, and Library automation software. At the same time, library professionals have the least skill sets on Content Management Systems, computer hardware, and networking (Table 3).

5.3 ICT Infrastructure

Table 4

Hardware infrastructure available in college libraries in Kerala

Sl. No.	Description	Government (N = 27)	Government Aided (N = 118)	Total (N = 145)	p-value
1	Server Computer	0.852 ± 0.456	1.195 ± 0.809	1.131 ± 0.766	0.016
2	Desktop Computer	6.074 ± 6.170	9.949 ± 8.584	9.228 ± 8.309	0.010
3	Laptop Computer	0.889 ± 1.155	0.424 ± 0.881	0.510 ± 0.951	0.022
4	Printer	1.444 ± 1.013	1.593 ± 0.963	1.566 ± 0.970	0.374
5	Photocopy Machine	0.704 ± 0.669	1.110 ± 1.138	1.034 ± 1.076	0.006
6	Document Scanner	0.704 ± 0.823	0.907 ± 0.773	0.869 ± 0.784	0.157
7	Barcode Reader	1.556 ± 1.649	1.898 ± 1.571	1.834 ± 1.586	0.051
8	LCD Projector	0.407 ± 1.738	0.212 ± 0.469	0.248 ± 0.854	0.348
9	Telephone	0.704 ± 1.728	0.585 ± 0.645	0.607 ± 0.938	0.318
10	RFID Reader	0.333 ± 1.732	0.059 ± 0.271	0.110 ± 0.783	0.795
11	E-book Reader	0.370 ± 1.735	0.169 ± 0.981	0.207 ± 1.154	0.899
12	Devices for the Differently-abled	0.556 ± 1.805	0.280 ± 0.583	0.331 ± 0.936	0.779

Government Aided college libraries are in a better position compared to Government college libraries in terms of the hardware infrastructure like server computer, desktop computer, and photocopy machines. Government

Table 5

Use of library management system in college libraries in Kerala

Sl. No.	Description	Government (N = 27)	Government Aided (N = 118)	Total (N = 145)
1	Koha	11 (40.7%)	47 (39.8%)	58 (40.0%)
2	LibSoft	7 (25.9%)	18 (15.3%)	25 (17.2%)
3	Book Magic	4 (14.8%)	15 (12.7%)	19 (13.1%)
4	SOUL	0 (0.0%)	5 (4.2%)	5 (3.4%)
5	e-Granthalaya	2 (7.4%)	1 (0.8%)	3 (2.1%)
6	LibSys	0 (0.0%)	1 (0.8%)	1 (0.7%)
7	Others	3 (11.1%)	31 (26.3%)	34 (23.4%)

and Government Aided colleges are in the same status in the availability of devices like printers, document scanners, barcode readers, LCD projectors, telephones, RFID readers, e-book readers and the devices for the differently-abled people (Table 4).

5.4 Library Automation

Koha (40%) is the popular library management software among Government and Government Aided college libraries. The other library software used are LibSoft (17.2%), Book Magic (13.1%), SOUL (3.4%), e-Granthalaya (2.1%), LibSys (0.7%) and other software (23.4%).

Majority of the college libraries are extensively using cataloguing (93.8%), circulation (92.4%), and OPAC (89.7%) modules compared to acquisition (45%) and serials module (25.5%).

Majority of Government (55.6%) and Government Aided college libraries (67.8%) follow MARC for metadata description. Another group of libraries (9.7%) use library management software that does not support any standard metadata format (Table 5).

5.5 Library Services

About 75% of college libraries provide automated lending services. College libraries maintain both manual and automated lending services is 15.9%. Majority of college libraries (59.3%) follow Reference services in manual mode, and only 22% of libraries use automated reference services. Majority of the college libraries offer Current Awareness Services in the manual way (52%) and 15.2% use automated methods for offering CAS. Majority of college libraries (89.0%) do not offer plagiarism checking service. Interlibrary loan is not a popular service among college libraries and only 20% of college libraries offer the service to the academic community. More than half of the college libraries (59.3%) in Kerala do not offer Document Delivery service (Table 6).

Table 6

Availability and delivery of library services in college libraries in Kerala

Sl. No.	Description	Government (N = 27)	Government Aided (N = 118)	Total (N = 145)
	Lending Service (Circulation)			
1	Manual Delivery	6 (22.2%)	8 (6.8%)	14 (9.7%)
	Automated	18 (66.7%)	90 (76.3%)	108 (74.5%)
	Both	3 (11.1%)	20 (16.9%)	23 (15.9%)
	Not Available	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Reference Service			
2	Manual Delivery	18 (66.7%)	68 (57.6%)	86 (59.3%)
	Automated	6 (22.2%)	26 (22.0%)	32 (22.1%)
	Both	2 (7.4%)	17 (14.4%)	19 (13.1%)
	Not Available	1 (3.7%)	7 (5.9%)	8 (5.5%)
	Referral Service			
3	Manual Delivery	14 (51.9%)	57 (48.3%)	71 (49.0%)
	Automated	2 (7.4%)	16 (13.6%)	18 (12.4%)
	Both	0 (0.0%)	5 (4.2%)	5 (3.4%)
	Not Available	11 (40.7%)	40 (33.9%)	51 (35.2%)
	Current Awareness Service			
4	Manual Delivery	14 (51.9%)	61 (51.7%)	75 (51.7%)
	Automated	2 (7.4%)	20 (16.9%)	22 (15.2%)
	Both	0 (0.0%)	8 (6.8%)	8 (5.5%)
	Not Available	11 (40.7%)	29 (24.6%)	40 (27.6%)
	Plagiarism Checking			
5	Manual Delivery	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Automated	1 (3.7%)	15 (12.7%)	16 (11%)
	Both	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Not Available	26 (96.3%)	103 (87.3%)	129 (89.0%)

6	**Interlibrary Loan**			
	Manual Delivery	0 (0.0%)	19 (16.1%)	19 (13.1%)
	Automated	0 (0.0%)	10 (8.5%)	10 (6.9%)
	Both	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Not Available	27 (100.0%)	89 (75.4%)	116 (80.0%)
7	**User Orientation / Education**			
	Manual Delivery	18 (66.7%)	72 (61.0%)	90 (62.1%)
	Automated	1 (3.7%)	20 (16.9%)	21 (14.5%)
	Both	0 (0.0%)	17 (14.4%)	17 (11.7%)
	Not Available	8 (29.6%)	9 (7.6%)	17 (11.7%)
8	**Documentation Service**			
	Manual Delivery	9 (33.3%)	34 (28.8%)	43 (29.7%)
	Automated	2 (7.4%)	22 (18.6%)	24 (16.6%)
	Both	0 (0.0%)	10 (8.5%)	10 (6.9%)
	Not Available	16 (59.3%)	52 (44.1%)	68 (46.9%)
9	**Document Delivery Service**			
	Manual Delivery	5 (18.5%)	21 (17.8%)	26 (17.9%)
	Automated	2 (7.4%)	21 (17.8%)	23 (15.9%)
	Both	1 (3.7%)	9 (7.6%)	10 (6.9%)
	Not Available	19 (70.4%)	67 (56.8%)	86 (59.3%)
10	**Photocopy Service**			
	Manual Delivery	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Automated	18 (66.7%)	104 (88.1%)	122 (84.1%)
	Both	0 (0.0%)	0 (0.0%)	0 (0.0%)
	Not Available	9 (33.3%)	14 (11.9%)	23 (15.9%)

5.6 Access to Online Library Services

Only 17.9% of libraries provide access to the online catalogue on the Internet. Majority of the college libraries (46.2%) restrict the access to online catalogue inside the library. A small segment of libraries (11.0%) offers a digital library/institutional repository service. Only 32.4% of libraries give remote access to e-resources. More than half of the college libraries (57.2%) do not own a library website/portal, and only 29.7% of libraries could make available the portal/website on the Internet (Table 7).

Table 7

Access to online library services in Government and Government Aided college libraries in Kerala

Sl. No.	Description	Government college				Government-aided college			
		Inside the library only	Inside campus only	Off-campus	Nil	Inside the library only	Inside campus only	Off-campus	Nil
1	Online catalogue	15 (55.6%)	4 (14.8%)	2 (7.4%)	6 (22.2%)	52 (44.1%)	31 (26.3%)	24 (20.3%)	11 (9.3%)
2	Digital library/ Institutional repository	6 (22.2%)	2 (7.4%)	2 (7.4%)	17 (63.0%)	30 (25.4%)	20 (16.9%)	14 (11.9%)	54 (45.8%)
3	E-resources	6 (22.2%)	4 (14.8%)	3 (11.1%)	14 (51.9%)	23 (19.5%)	20 (16.9%)	44 (37.3%)	31 (26.3%)
4	Library portal/ website	3 (11.1%)	0 (0.0%)	3 (11.1%)	21 (77.8%)	6 (5.1%)	10 (8.5%)	40 (33.9%)	62 (52.5%)

5.7 Attitude towards Information Network and Resource Sharing

The majority of library professionals in college libraries in Kerala believe that the availability of a network leads to the improvement of library services. The library professionals in colleges strongly agree that a cooperative network system can facilitate adequate facility and services to the users and support research and development activities. However, a small group (6.9%) in college libraries in Kerala thinks that information networking is a difficult task to implement in college libraries (Table 8).

Table 8

Lirarians' attitude towards information network and resource sharing in Government and Government Aided college libraries in Kerala

Sl. No.	Description	Government (N = 27)	Government Aided (N = 118)	Total (N = 145)
1	It improves the library services	4.63 (1)	4.72 (1)	4.70 (1)
2	It provides adequate facility and services to the users	4.63 (1)	4.64 (3)	4.64 (3)
3	It increases the usage of library resources	4.44 (6)	4.63 (4)	4.59 (4)
4	It creates a positive attitude among library users	4.56 (4)	4.56 (5)	4.56 (5)
5	It provides up-to-date information	4.56 (4)	4.54 (6)	4.54 (6)
	It creates conflict among librarians	1.93 (15)	2.14 (16)	2.10 (16)
6	It increases the workload of library staff	2.67 (11)	2.83 (11)	2.80 (11)
7	It increases the reputation of the library among users	4.37 (7)	4.52 (8)	4.49 (8)
8	It creates mutual understanding among librarians	4.33 (9)	4.34 (9)	4.34 (9)
9	It supports for research and development activities	4.63 (1)	4.67 (2)	4.66 (2)
10	It increases the research output in the academic community	4.37 (7)	4.53 (7)	4.50 (7)
11	It requires more manpower in the library	3.26 (10)	3.73 (10)	3.64 (10)
12	It is a difficult task to implement in libraries	1.89 (16)	2.64 (12)	2.50 (12)
13	It is difficult to maintain the quality of the library services	2.00 (14)	2.33 (14)	2.27 (14)
14	It affects library routine works	2.26 (12)	2.54 (13)	2.49 (13)
15	It may not create a greater impact on library environment	2.15 (13)	2.18 (15)	2.17 (15)

5.8 Barriers towards Library Networking in Kerala

Table 9
Barriers towards library networking in Kerala

Sl. No.	Description	Government (N = 27)	Government Aided (N = 118)	Total (N = 145)	p-value
1	Lack of legislative measures in the library network-based services	25 (92.6%)	110 (93.2%)	135 (93.1%)	0.990
2	Lack of funding	20 (74.1%)	105 (89.0%)	125 (86.2%)	0.043
3	Lack of trained human resources	25 (92.6%)	100 (84.7%)	125 (86.2%)	0.369
4	Lack of coordination and planning	23 (85.2%)	99 (83.9%)	122 (84.1%)	0.990
5	Lack of infrastructure facility in the library	24 (88.9%)	96 (81.4%)	120 (82.8%)	0.572
6	Lack of training in ICT application	24 (88.9%)	94 (79.7%)	118 (81.4%)	0.411
7	Lack of support from the authority	15 (55.6%)	76 (64.4%)	91 (62.8%)	0.391
8	Lack of awareness on library networks	18 (66.7%)	71 (60.2%)	89 (61.4%)	0.532
9	Lack of confidence among the library staff	9 (33.3%)	56 (47.5%)	65 (44.8%)	0.183
10	Lack of interest from the part of library professionals	12 (44.4%)	46 (39.0%)	58 (40.0%)	0.601

The main barriers against the networking of libraries in the perception of library professionals in Kerala are lack of legislative measures, lack of funding, lack of skilled human resources, lack of training opportunities in ICT applications, lack of necessary infrastructure in the library, lack of coordination and planning (Table 9).

6. Development of an Information Network for Kerala State

The result of the study gives input to create the framework of a virtual information network of libraries for cooperation and resources sharing in Kerala. The proposed network can empower the libraries by providing cutting-edge and innovative ICT infrastructure. Adoption of social networking and mobile technology to reduce the gap between libraries, information resources and academic community in Kerala. Application of Open Source and Open Access solutions for academic communication and library services will reduce operational cost and better utilization of public fund. In addition, Open Source solutions offer sustainable technology solutions public sector initiatives (Shaikh & Cornford, 2011). The proposed network can act as a training provider for library professionals to enhance the quality of services.
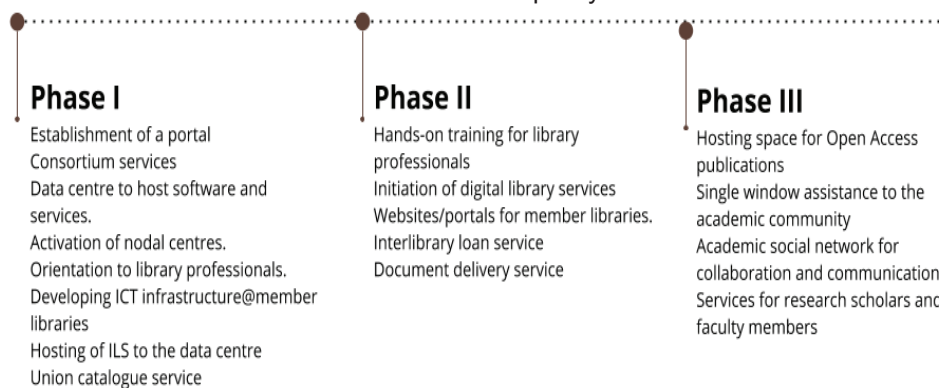
Phase I
Establishment of a portal
Consortium services
Data centre to host software and services.
Activation of nodal centres.
Orientation to library professionals.
Developing ICT infrastructure@member libraries
Hosting of ILS to the data centre
Union catalogue service

Phase II
Hands-on training for library professionals
Initiation of digital library services
Websites/portals for member libraries.
Interlibrary loan service
Document delivery service

Phase III
Hosting space for Open Access publications
Single window assistance to the academic community
Academic social network for collaboration and communication
Services for research scholars and faculty members

Figure 1. Phased implementation of the proposed information network

6.1 Partners and Members

The partners of the information network would be the Department of Higher Education, Govt. of Kerala, Kerala State Higher Education Council, Universities in Kerala, The Department of Collegiate Education and the Kerala State IT Mission.

In the first phase of the project, university libraries, libraries of Government Law, Training, Arts & Science colleges become the members of the network. In the second phase of the project, libraries of Government Aided colleges can participate in the network.

Nodal centres are necessary to coordinate the activities of the network at the regional level. The libraries of the four affiliating universities to be facilitated as nodal centres. Colleges with excellent IT infrastructure and human resources also consider for the nodal centres of the network (Figure 1).

6.2 Human Resource Development

The proposed network should employ Administrative, Scientific and Technical staff for the implementation and ongoing works of the system. The scientific and technical staff should be from the domain of Library and Computer Sciences. The network authority can find and appoint ideal candidates for various posts through direct recruitment/ on deputation basis.

6.3 Functional Groups

Following functional groups envision to achieve the network objectives:

- ⮑ Training division
- ⮑ Library Automation and Union Catalogue
- ⮑ Scholarly Communication and Open Access
- ⮑ Web services
- ⮑ Consortium for e-resources
- ⮑ Digital library services
- ⮑ System support and development team

6.4 Activities and services

The proposed network will facilitate the access of resources and services from libraries to the academic community. Resources in physical and electronic format can be made available to the user community through the network. The academic community can receive seamless access to resources from networked libraries. Library professionals can offer better services to their users after the manifestation of the library network (Figure 2).
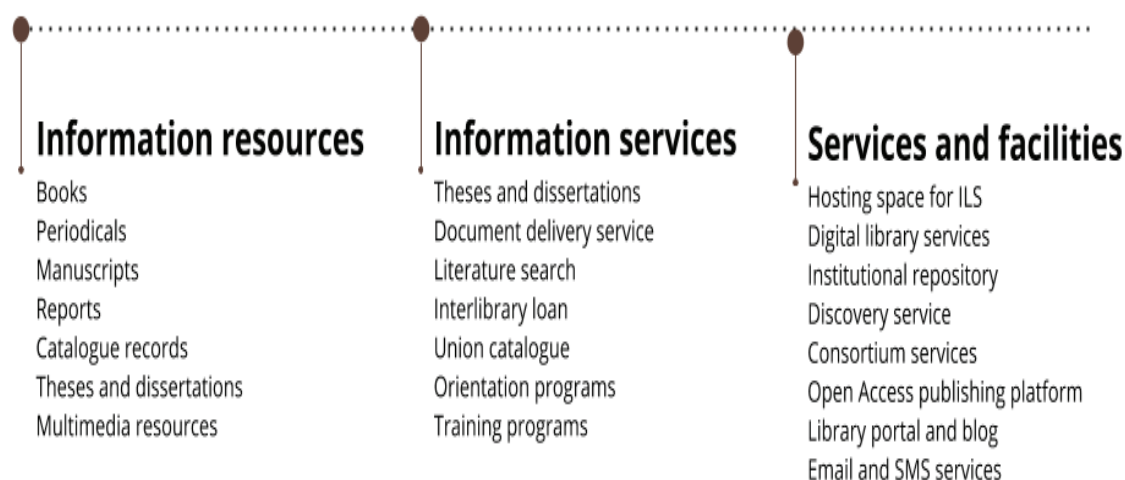

Information resources
Books
Periodicals
Manuscripts
Reports
Catalogue records
Theses and dissertations
Multimedia resources

Information services
Theses and dissertations
Document delivery service
Literature search
Interlibrary loan
Union catalogue
Orientation programs
Training programs

Services and facilities
Hosting space for ILS
Digital library services
Institutional repository
Discovery service
Consortium services
Open Access publishing platform
Library portal and blog
Email and SMS services

Figure 2. Activities and services of the proposed network

7. Conclusion

A regional information network for library cooperation and resource sharing can improve academic and research output in Kerala State. The network initiative can enhance confidence level among the library professionals and academic community by pooling information resources scattered in various libraries in the State. Libraries can procure more e-resources in less price through purchase via the consortium. In this manner, the Government of Kerala can spend the taxpayer's money on information resources in a meaningful way.

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