delnet Newsletter

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NACLIN 98

***M.B. Konnur** **

The National Convention was inaugurated on November 16, 1998. Dr. S. Varadarajan, President, DELNET, welcomed the delegates who had come from different parts of India. Dr. N. Seshagiri, Director-General, National Informatics Centre, inaugurated the Convention by lighting a lamp. Mr. H.K. Kaul, Director, DELNET, gave an introduction to the concept of organising national conventions.

Dr. S. Varadarajan welcoming the delegates

Mr. H.K. Kaul's address is reproduced below:

"The roots of the National Annual Convention on Library and Information Networking (NACLIN 98) being organised from November 16-18, 1998 by DELNET go back to the developments that have taken place in India in general, and DELNET in particular, during the last decade in relation to the overall changes that the IT revolution has brought about in these years. The Indian scenario in this context is very complex.

"India has about 60,000 public and village libraries and reading rooms that are in no position at this stage, barring the negligible few, to adopt IT applications. The condition of public libraries is so pitiable that they are even run with an annual budget of, as low as Rs. 2,500 in certain places. For instance, the State Central Library in Ambala had a budget of Rs. 13,500 in 1997. How can this library play a role of the State Central Library with this budget? And, how can IT be introduced in such circumstances? The UGC has been making efforts since 1988 through INFLIBNET to modernise some of the academic libraries from over 200 university libraries and about 10,000 college libraries in India. However, we have yet to see the growth of automated resource sharing tools of international standard, and resource sharing taking place even among some of these libraries. Special libraries and information systems had been receiving special attention, which they should have been. But we have still not been seeing any value added resource sharing products being produced from these centres, though they have been contributing records to international information systems. Of about 1,200 libraries in the science and technology sector, even the rationalisation of periodicals has not taken place so far at the national level. I feel it was with this concern in mind that Dr. A.P.J. Abdul Kalam organised the meeting of information specialists at DESIDOC on October 14, 1998. We hope that the recommendations made at this meeting will be implemented.

"Most of the special libraries in the social sciences and humanities are either managing with the help of existing documentary resources or are trying to acquire a few of them that they can afford. More than ninety per cent of about 2,000 libraries in this sector are decaying under the weight of their own unused documents and lack of financial resources for modernisation and acquisition of the most recent necessary documents. In most Government libraries, IT applications have still to take root and those which have begun adopting IT mainly with the support of the National Informatics Centre have begun to use INTERNET and accessing databases but are still unfamiliar with the actual IT application in libraries. The national libraries in various disciplines in general and the National Library, Calcutta, in particular,

* Professor and Head, Department of Library and Information Science, University of Pune

have yet to understand that their ships are sinking in the growing oceans of digital information for want of digitising their inventories and rare and important resources.

"The IT in the first instance remained in the domain of computer professionals and in order to cross the bridge over to library and information science professionals, its progress has been slow and staggering. Application of IT in the knowledge industry needed the assimilation of the principles of organised knowledge in the softwares that were getting produced in India and the specialist touches that made this organisation clearer and simpler. The role of IT and library and information science professionals in supplementing and complementing the work of each other did not take place as much as it should have. The Government of India supported the establishment of library networks such as DELNET, CALIBNET, BONET, MALIBNET, PUNENET,and ADINET but this support has not uniformly transformed these networks. We, in DELNET, were first supported by NISSAT and since 1992 by the National Informatics Centre. The support of the India International Centre has existed from the start. NIC's support to DELNET in terms of hardware, software and technical expertise has been a great asset. We have been trying to transform this asset into a flowering and fruit laden tree. DELNET has 97 libraries as its members, covering all subjects and all types of libraries. More and more libraries are joining the network from different parts of India and outside India. We have developed the softwares for creating MARC records such as DELDOS and DELWINDOWS. DELSEARCH, developed by DELNET, enables any library anywhere in the world to access our databases off-line. We have developed DELSIS, which contains special modules on the software BASIS plus which NIC so kindly gave us. All our databases are accessible through DELSIS. The work of upgrading our software is a continuous process.

"No network can do resource sharing unless it creates resource sharing tools from the resources available in its member-libraries. DELNET is making available more than 25 databases and the types of databases being offered are both increasing. At this stage, when more and more libraries from outside Delhi want to access our databases, we considered it appropriate to understand their needs and assess the technology existing in the country so that DELNET can take appropriate steps in providing better services to its member-libraries. The DELNET Constitution provides for both cooperation with regional, national and international networks and libraries and for conducting research in the area of information science and technology. This makes our deliberations more meaningful. DELNET databases are accessible now through INTERNET and any library anywhere in the world can access them. This has been possible with the continued support of the National Informatics Centre.

Mr. H.K. Kaul, Director, DELNET

We are indeed grateful to Dr. N. Seshagiri, Director-General, NIC, and his able colleagues for providing continued support to DELNET. The progress made by DELNET has necessitated that we organise the National Annual Convention on Library and Information Networking (NACLIN 98) during November 15-18. We have also arranged the tutorials on the following topics:

1 Bibliographic Formats like MARC, CCF
2 AACR-II
3 Creation and Management of Library Web Sites
4 Creating Databases in Indian Languages
5 Library Resources on the INTERNET

"We do not want this National Convention to be like any other conference. We have a commissioned paper in each section and have also included those that were selected from the papers received from the professionals. In addition, we have constituted the Committee on the Issues for Discussion under the Chairmanship of Prof. A.P. Srivastava. All the rapporteurs and a few experts are its members. This Committee is going to take care of all major issues that need to be discussed at each session. The Rapporteur-General, Prof. M.B. Konnur, will present a detailed report with recommendations.

"We are pleased to note that computer communication and library information science experts have joined us from different parts of India in organising the National Convention. We indeed welcome them in making this meeting a useful event."

Dr. N. Seshagiri delivered the inaugural address. He began his address by referring to the gloomy

picture of public libraries as drawn by Mr. H.K. Kaul. He observed that the Deputy Chairman, Planning Commission and the Chairman of the National Task Force on Information Technology and Software Development had approved the constitution for a Working Group of the Task Force on Contents Creation and Content Industry. Dr. Seshagiri said that often when we discuss informatics and information policies, we lose sight of content. We talk about computers and networks and not about contents. He referred to INFLIBNET and noted that

Dr. N. Seshagiri, Director-General, NIC

the project did not take off the way we had all hoped it to develop. He felt that a project of this nature should be headed by the library scientist with his vision centred on modern technologies. He felt that this was a billion dollar industry or rather a multi million dollar industry. He added that this industry could create lucrative jobs for library and information science professionals. Dr. Seshagiri maintained that we were now working on these issues in the Task Force. The Task Force had made rapid progress and it had broken barriers. He said that while strengthening networks by using telecommunication and computer technology, we should not have lost sight of contents. He added that the particular working group which had been notified today would be looking into the problems of creating content specialists in several tens of thousands which meant that we needed to support that particular industry in the same way as we had done to information technology.

Dr. Seshagiri referred to the computer network area, especially in the software field and observed that we now have to focus on training a million people, say at the rate of 10,000 per annum. He was sure that if people found this a lucrative industry, immediately it would spiral and then one would find that manpower shortage would emerge. He felt that the kind of investments that were going to be committed to the content industry would be quite substantial because it was a knowledge-based and labour intensive industry. Referring to INTERNET, he noted that the biggest advantage of INTERNET was that most of the middlemen were eliminated, the one whose interaction was between the creator and the creative informative customer. He was of the opinion that all the major bibliographic and related enterprises in the world could gravitate around India and that was a major possibility. As far as libraries were concerned, he affirmed that a number of things had happened. "Now there is a Web library. We should make arrangements with publishers to give site license to put full text versions on the Net. We are publishing a sizeable number of journals. Once they are put on the Web and serviced, we can have a business which will be several times what they are able to do in the paper form. The moment we give full text access along with diagrams and things like that, then we have to be prepared for multimedia transmission, multimedia networks and that is the precise reason why we are increasing the speed of our network. We are putting not only 64 kbps VSATs but we are also putting on NICNET download capabilities of 256 kbps." He also referred to a number of new technologies that were coming which would help reduce cost. He felt that with this kind of a download, VSATs could be bought by the cable TV operators. The cable TV operators could then route it to the houses. He stated that this was at the last mile level and hoped that direct transmission to homes through satellites was going to be possible soon.

Dr. Seshagiri observed that there was no earthly reason why a library should now subscribe to every journal as they used to do in the past. There must be a hierarchical arrangement whereby those journals which are very frequently and regularly used by the scientists in the organisation may be subscribed to in hardcover or in the CD-ROM form. "As we go along, it will be in CD-ROM or DVD because people are not even bothering to produce hard copy journals. Many journals are now going over to CD-ROM. Once DVD-ROM comes up in a cost effective manner which will happen in the next year or so, then the DVD can take a good bit of information and the DVD has a greater chance of compressing, putting information on to this media than the CD-ROM. Once that happens, you will find that the whole way in which you look at libraries will change and that change will come very fast." He referred to the IU Net project or Sankya Vahini project being undertaken in collaboration with the Carnegie Mellon University and Indian Institute of

Science, IIT Chennai, IIT Mumbai, Pune University and others. "But that is only for the backbone. These institutions are prime movers for this new technology because it is advisable that such technologies are with the educational and research institutions who will bring into it a tremendous amount of intellectual component." He added that the conventional approaches to the library system were coming to a dead end. It was not possible to cope with the increasing price of journals. He felt that the sophistication of technology did not mean that it was to be costly technology, it was something beyond one's reach. He made it clear that there was going to be a paradigm shift and very soon a time would come when if the libraries did not manage the affairs, a new set of people would appear and take over the jobs. He felt that training of manpower was essential and said that he had requested Mr. Kaul to take the initiative in training library professionals so that they could get into this new paradigm.

Dr. R.V. Vaidyanatha Ayyar, Secretary, Department of Culture, Government of India delivered the presidential address. He said that DELNET was trailing new paths and trying to induct information technologists into the field of libraries. He lamented the condition of public libraries and felt that their condition was dismal and pathetic. He said that the tragedy was that on the one hand when great potentials were coming in, which we were realising through information technologists in our country, the public library system was virtually collapsing. "I think compared to what it was twenty or thirty years ago when I was a student, now the system is really in a very bad shape." He commented upon the reasons for this state of public libraries and added that regarding the question of funding, most of the libraries were with the states. He said that a strong voluntary library movement which existed

Dr. R.V. Vaidyanatha Ayyar, Secretary, Department of Culture

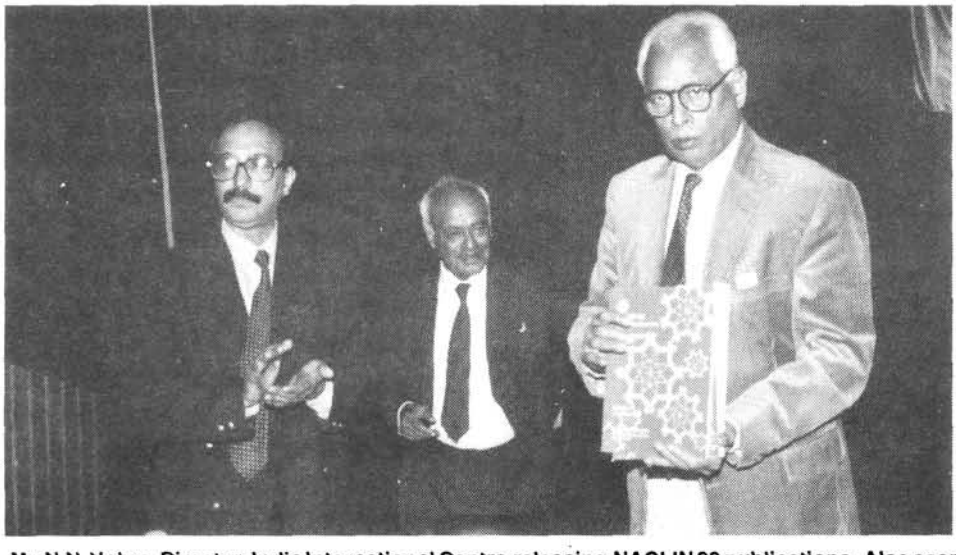
as part of the freedom struggle in many parts of the country, including his own state of Andhra Pradesh in the south, had gradually receded and community support was becoming increasingly a governmental system under competing demands for resources. He agreed that the public libraries were enormously starved of resources. Secondly, given the very few resources, the library professionals were also getting demoralised. He felt that there was a dichotomy in the library professional system. On the one hand, in the university system the library professionals were in par with the academic staff, while in the governmental system the library professionals were becoming clerks or *babus* and not the true professionals that they should have become. He also added that the whole systems of procurement of books in most public libraries is deplorable and the less said the better. He felt that it is more distributor-driven and the sort of reader-orientation that ought to exist, does not. Thus to modernise the public libraries was the greatest challenge today. He observed that there was no option but to share the resources and network because more and more libraries ought to opt for cooperative acquisition. It was not necessary that every library should stock every book and every periodical as there must be some sort of a rationalisation that goes together with the type of information technologies that is being discussed today. Then more users could use the same resources more effectively. The question of inducting the information technology was not a question of whether to do it or not, but it was about when to do it and how to do it. Given the sort of resource constraints and the facility constraints in the public library system, it was felt that unless all the libraries in a particular area came together and worked concertedly to avoid duplication, wasteful investment could be avoided. He said that the networks could provide user services and the public libraries could benefit. He also added that the university libraries were finding it extremely difficult to subscribe to all the necessary journals and magazines. He said that "DELNET had blazed a glorious path to which all should lend their support. We, in the Department of Culture, will be only too glad to cooperate with library professionals as well as DELNET." He pointed out that many states did not have the library legislation, which was badly needed. He added that the National Library in Calcutta was facing many problems and attempts are being made to solve them. He hoped that the reliable networks would take up a number of assignments till the National Library, Calcutta, was modernised.

Mr. N.N. Vohra, Director, India International Centre releasing the publication on *Library and Information*

Networking and *NACLIN 98 Souvenir* said that we should be adequately able to absorb, digest and utilise the vast revolution which was taking place in the field of information technology. Mr. Vohra added that the resource management was a serious and complex problem which was not going to be resolved merely by wishing that it would be resolved. "We have to train manpower, reorient existing attitudes, acquire the hardware, develop the necessary software and most important, develop an effective and relevant networking system which ensured optimisation of resources available to all of us in this country and from outside the country." He added that Dr. Seshagiri had explained his vision of what lies before us and how he planned to go ahead with it. He stressed the need to focus on the school libraries, the college libraries and the libraries in the rural areas of our country. He felt that we had to be extremely conscious of the costs of the actual services that we delivered and added that storing of physical volumes was a major problem as space in institutions is scarce. Mr. Vohra observed that today we had to relate not only to public libraries and educational libraries, but also to those libraries which were specialised in nature and which had no constraint of resources. He added that all such libraries could not depend on their own resources. Resource sharing was becoming essential and that in these circumstances the use of appropriate technology was essential.

The National Convention was divided into the following 11 sessions:

1 Resource Sharing and Networks
2 Web Technology
3 Multimedia Applications
4 Language Databases
5 Communication Tools
6 AACR-II and US MARC Format
7 Newspapers on the INTERNET
8 LCSH
9 Digitial Libraries/ Electronic Commerce
10 Library Resources on the INTERNET
11 Software



Mr. N.N. Vohra, Director, India International Centre releasing *NACLIN 98* publications. Also seen in the picture are Dr. S. Varadarajan and Mr. H.K. Kaul

The proceedings of the National Convention are published in *Library and Information Networking* edited by H.K. Kaul, New Delhi: DELNET, which includes complete deliberations and the papers presented at NACLIN 98.

The valedictory session started with introductory remarks by Mr. H.K. Kaul, Director, DELNET, and Chairman of the Organising Committee. He gave an overview of the National Convention.

Valedictory Address

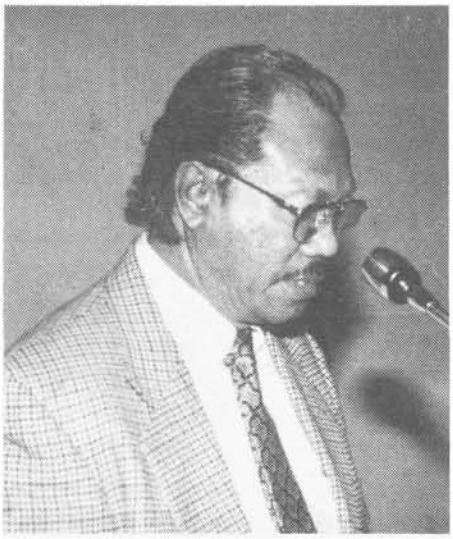
Prof. Moegiadi, Director, UNESCO, delivered the valedictory address. The text of his address is reproduced below:

"I am indeed happy to note that the National Convention on Library and Information Networking had been organised by the Delhi Library Network. The basic purpose of library and information networking is to share the resources that are becoming expensive on one hand, and rarely available on the other. We notice that it is becoming difficult for the libraries and the individuals to buy publications which are very expensive or which do not come into a country at all. It is only through networking and through INTERNET that one is able to access the latest information published anywhere in the world without any significant loss of time.

"I am pleased to note that there have been only six papers devoted to resource sharing. The emergence of library networking in India is the positive step towards contributing to a very sound world information infrastructure. The laws of resource sharing that are defined in NACLIN 98 give us the feeling that the digitisation of resources is going to be a major task and is going to happen definitely. Resource sharing is definitely a global phenomenon and India is rising to contribute to the global aspirations in this regard. I can appreciate that there is much to do to promote library automation and networking of libraries.

"UNESCO itself had been very keen to promote the development of the network of public libraries. In the UNESCO manifesto it was made clear that through the public libraries the information and education can be imparted to a wider section of the society. It is necessary that the public libraries be networked and there is of course a need to network all other types of libraries.

"I am also glad to note that in DELNET there are all types of libraries participating whether they be public,



Professor Moegiadi, Director, UNESCO

institutional or government libraries or libraries of public sector undertakings and other types of libraries. It is the purpose for which a network is established and that is the purpose of a network. In order to participate in the resource sharing at the international level, we have to see that resource sharing mechanisms at the national level are working perfectly well. We should also ensure that the old culture of possession of documents is replaced by the capacity to access documents. This is becoming possible because of the digitisation taking place in different parts of the world. It is only through digitisation that resources will be available to users anywhere in the world. One of the major areas of the research is the area of journal articles. We can see that new concepts get published through articles in journals and they get propagated. It happens that many of the journals are now available on the INTERNET and at the same time there are reviews that are appearing on INTERNET itself. There is no hard copy of such papers, which means that a new dimension of research is taking place and this dimension is one of making accessible new ideas to the users anywhere in the world very fast. The gap between the creation of the ideas and the use of ideas is getting minimised which of course takes us into the issue of quality of information and the validity of information. I am sure that as this new technology gets established, methodologies are going to come out and become part of the procedures for getting new ideas published through INTERNET with proper validation.

"We see today that in most of the developing countries the manpower available in the libraries is not computer or network trained. They have to be well trained in library automation and networking. UNESCO did play a major role by providing CDS/ISIS software to libraries in different parts of the world, especially to the libraries in the developing countries. However, we know that as we go deep into researching, deep into making libraries more advanced, we need more sophisticated softwares. The software engineers in different parts of the world are creating softwares. In India also, DELNET and other agencies have created a few softwares and these softwares will become increasingly refined as they get used by the librarians and by the users. I therefore feel that manpower development in the use of information technology is an important issue which has to be handled very well and more effectively, especially in the developing countries. India has been producing the software experts in large numbers and they have been getting absorbed in various other countries.

"Even in India itself the software opportunities are going to increase rapidly. It is going to become important because the information is going to grow very fast. It has to be made available to the users in remote areas, in neglected areas, in less developed areas and the variety of information and the type of information that is to be needed by those users has to be effectively culled out and for that the information scientists and software engineers will have to create mechanisms of culling out and selecting exact information for the users so that they make best use of the information technology in this information age.

"The organisation of the National Annual Convention on Library and Information Networking is indeed praiseworthy. This whole exercise, I am sure, is going to give a boost to the new methods and technologies for providing more and more information effectively. The use of INTERNET has been discussed in this National Convention. INTERNET itself has given rise to a virtual library. I feel that in the years to come this virtual library will become more and more real as users get used to the real aspects of this library. The use of Web technology is very important because the amount of information available on the Web is increasing. The technology has to be so user-friendly, that out of this Web of information, we should be able to promote the right kind of information, promote the libraries that provide information and promote the networks that pool information for the users.

"Use of multimedia applications, I am

certain, will be increasingly used in the years to come. The multimedia is going to be used a great deal in the Web technology. It will have great implications, great uses as we go on accessing the Web in the coming years not only from the libraries or information centres but from our homes where we study. The Web technology and the multimedia applications are going to provide great imputs for distance learning. I am glad to note that this aspect has also been discussed at this National Convention.

"DELNET has also begun working on the creation of the National Bibliographic Database. The creation of a National Bibliographic Database in all the countries is very important because unless each country promotes the creation of its catalogues at the national level in machine readable forms there cannot be cooperation among the nations on the information front. The work being done for the National Bibliographic Database Project will therefore be very useful and should cover more and more libraries.

"Our librarians should also create databases in their own languages. Creation of databases, full text or bibliographies in the regional or local languages are equally important. Research is also conducted in different parts of the world to provide automatic translation from one language to another. I am sure that in the years to come, this automatic translation facility will help the users in reading the published works from the other languages. This is a great service that the technology is going to provide in India. Now the INTERNET provides not only the government agencies but other agencies are coming in and it will increase competition. It is going to increase excellence in indexing of information in communication skills and this is what is needed in the modern world.

"We are pleased to note that not only have the technical issues been discussed at this National Convention. There has been a session on the use of Newspapers on the INTERNET. ***The Hindu*** is of course one of the good examples from India and I understand that there are several other newspapers that are now on the INTERNET. This is just a beginning and I am sure that slowly more specialised Indian journals will become available on the INTERNET and users interested in them from any part of the world will be able to access them. This is a very positive

Prof. M.B. Konnur, Rapporteur-General, NACLIN 98

contribution that India is making to the world by providing access to its journals and newspapers in digital resources and libraries but also the electronic commerce at the international level. It will definitely have an impact on developments in countries. The electronic commerce is making its headway and we have to see that each country is able to promote its products well, first of all within its own country and then without. It will also help the countries in establishing the quality of products. This is what electronic commerce is going to make possible. Access to information on INTERNET is going to become a major task. Selection of appropriate information and its presentation is very important. This process has to be streamlined.

"Let me hope that the efforts made in organising this National Convention on Library and Information Networking by Delhi Library Network will be repeated every year and more new inputs in terms of technology and in terms of resources will be created within the country. Resources that are available outside the country should also become available to the users and this will help in the development of the nations. I wish the National Convention great success in the years to come."

Dr. Ashok Khosla, Chairman, Development Alternatives, addressed the participants and explained how to expand the information market and provide employment to 250 million people. He added that there were 600 billion who could not read and write and therefore that was a major opportunity for librarians to educate them.

Mr. S. Sathyamoorthy, Joint Secretary, Department of Culture presided over the function. He congratulated DELNET for the commendable initiative and said: "Like the meteoric showers that lit the sky last night the pamphlet of this convention showers almost a hundred questions, probably to light up the minds of the librarians. I was also very happy to note that networking has been very successful. I think DELNET has been able to draw upon several sectors, the defence, the university sector, the government sector, the public sector, the private sector, publishers, distributors and I think that it is an excellent beginning for resource sharing and networking.

"Librarians will have to play a very crucial role in fostering economic competitiveness, educational effectiveness, increased intellectual

activity, efficient knowledge transfer methods, enhanced technological pace and increased collective capacity to resolve global issues."

Mr. Satyamoorthy said that there is a need to convert information into intelligible modes. He felt that already we were talking of STD booths becoming information access centres. He added: "I think, the role of the librarians and information technologists would lie in the future. Knowledge knows no boundaries is the saying. That was with reference to dimensions and discipline. Knowledge knows no boundaries will be the saying with reference to geographical connotations. INTERNET and Web sites will transcend national boundaries. Dissemination of knowledge at the doorstep is not going to be adequate. The possession of knowledge at our fingertips is no more the case. We need knowledge on tabletops and not at doorsteps. We need knowledge at the touch of a button and not at our fingertips. In order to capture manipulation, transmission and consumption of knowledge, it has to be digitised. That has already been taken care of in your Convention." Mr. Satyamoorthy observed that resource sharing has been underscored: resource sharing is not only journals and articles, it is also experience and expertise. Unless you share it with it others, it cannot grow with you. This is absolutely important. He affirmed that for resource sharing, networking was probably the only answer.

Mr. S. Sathyamoorthy (right) at the valedictory function

Ms. Sangeeta Kaul conducting a tutorial

The government was well aware of the role it has to play. It has already taken certain tentative initial steps. He added that the government was willing to help but let the professionals be strong. "Looking at the deliberations and having heard the details, I am convinced that the issues have been admirably addressed and the professionals have a glorious future and I wish all of you the best of luck in your profession."

DELNET considered it important to organise the National Convention on Library and Information Networking (NACLIN 98) every year. It was felt that the library and information centres were not creating records using international standards and there were disparities existing in the collection, storage and dissemination of information in the libraries. There was no standard software that could cater to the needs of libraries and information specialists. Because of the changing scenario worldwide, owing to INTERNET it was considered necessary to monitor its impact in India. With this background, DELNET organised the first National Convention on Library and Information Networking (NACLIN 98) from November 16-18, 1998.

DELNET considered it necessary that

practical training should be imparted to the library professionals and therefore, arranged tutorials on the following topics:

S.No.	Name of the tutorial	Name of the professional/s who conducted the tutorials
1	Library Resources on the INTERNET	Dr. Usha Mujoo Munshi
2	Creation and Management of Library Web Sites	Dr. T.B. Rajashekar
3	Creating Databases in Indian Languages	Ms. Sangeeta Kaul, Prof. K.S. Raghavan, Dr. T.A.V. Murthy and Mr. Jasjit Singh.
4	AACR-II	Mrs. K. Sunita Murthy
5	Bibliographic Formats	Mrs. K. Sunita Murthy

The tutorials were conducted by the specialists in each field. The response to the tutorials was overwhelming as nearly 95 participants participated in them.

The following were the main recommendations of the National Convention:

1. National Agenda for Resource Sharing should be developed. While preparing this National Agenda, all agencies working at the local, regional and national levels should be involved in it.
2. There is a dismal picture of public libraries all over the country. Resource sharing should be one of the primary objectives of networking public libraries.
3. Resource sharing networks should be promoted and the Government of India should provide assistance to them.
4. For networking and resource sharing, Regional Centres should be established.
5. The Government may constitute committees for resource sharing at national, regional and local levels and provide documents to the users. The committees so formed should have Vice-Chancellors, the Principals, the Chairmen of public libraries, Directors of networks and special libraries, etc. as members.
6. Resource sharing networks should make efforts to provide access to information to the users in the remote areas.
7. Different types of libraries should be encouraged to join resource sharing networks. If necessary, they should be provided financial support for the purpose.
8. Public libraries and libraries in rural sectors should be modernised. At the local level itself, the networks should undertake resource sharing work. For public libraries the Raja Ram Mohan Roy Library Foundation should play a major role in resource sharing and networking.
9. Appropriate steps should be taken to implement the recommendations of the Report of the Working Group of the Planning Commission for the Ninth Plan.
10. Library schools should take steps to develop manpower required for networking and resource sharing activity. For this purpose, each library school should have at least one faculty member specialising in IT applications in libraries.
11. DELNET is trying to play a role as an OCLC network. DELNET is enrolling all types of libraries and including all subjects in the network. DELNET can play a supplementary and a complementary role for establishing local, regional and national networks. The Government should provide sufficient assistance to DELNET.
12. DELNET should provide cheaper and standard software solutions to libraries in India.
13. The National Bibliographic Database being developed by DELNET is a major model for the country. It should involve more libraries and should be created on a continuing basis.
14. Creation of databases in Indian languages should be promoted.
15. A compilation of databases that are ongoing in this country should be prepared.
16. The networking of information on art should be taken up along with other subjects in the libraries.
17. Sufficient funds should be provided to networks for digitising important documents in libraries.
18. School libraries, too, should be given priority in modernisation, networking and resource sharing.
19. Use of multimedia in distance education should be encouraged.

Mrs. A. Vijaya Murthy (left) with Ms. Alice Kniskern at NACLIN 98

Information Handling : Where Are We Today?

*Dewang Mehta**

We are almost on the threshold of the twenty-first century. Obviously, we are entering a period of change, whose impact could be as far reaching as never seen before. Since the industrial revolution, people had to locate themselves in large centres, so that they could work with others. However, now new technologies are rendering distance unimportant. The skills that are needed in tomorrow's society will be those associated with information and knowledge, rather than industrial skills of the nineteenth and twentieth centuries. Changing technology will affect almost every aspect of our lives; how we do our jobs; how we educate our children; how we communicate with each other and how we develop and deliver software. Information no doubt is the key to the future.

Just-In-Time manufacturing with Just-In-Time inventory has forged the growth of the manufacturing industries in the 1960s. A similar demand is made today, in Information Technology to provide Just-In-Time Information or Just-In-Time Decision Processing. With the realisation that information is an asset for the company, organisations today are keen to optimise use of this asset by extending accessibility to the knowledge workers, at all levels of the organisation.

IT is challenged today, with newer technologies that must be integrated to enrich the company's asset in the form of information, convert the transactional data into business relevant information, manage this information repository and finally make this asset accessible to the knowledge workers.

* Executive Director, National Association of Software and Service Companies in India.

With the emergence of technology that enables us to manage data in all possible forms, structured and unstructured, the Corporate, Government or an Institutional repository of information must manage data to support everyone's decision processing as well as everyone's quest for information. This information must include data processed internally, as well as information available from external sources. The external information may be industry or other reports in unstructured text format, news bulletins in print and video format, conference proceedings in text and video format, electronic bulletins, E-mail broadcasts and of course traditional means like articles, books, etc.

The advent of information technology has led to new ways of information handling. With the result, what started in the late 1980s as Database Management Systems (DBMS) then transformed itself to Relational Database Management Systems (RDBMS). Companies like Oracle, Sybase, Informix, Ingres, Progress, etc. made deep inroads into new technologies and new applications. But the quest for people who wanted information and then use it in a useful manner still continued. This has led to two important derivatives. One is in the area of information search and the second is in the area of media on which such information is stored, distributed or handled.

In the first case, we are referring to the new concepts of Data Warehousing and Data Mining and of course the new paradigm of INTERNET and e-commerce. The second case is the concept of a paperless office, wherein information is handled and stored on magnetic and optical media and in the near future even on biological media.

INTERNET is undoubtedly an information goldmine. In the last 3-4 years, people around the world have perfected the art of collecting, collating and searching information on INTERNET. The famous example of Amazon.com, which over the last three years, has become the largest selling bookstore of the world, of course on the INTERNET. The interesting factor is that there is no physical bookstore in the world that can match the number of books sold or revenue generated by Amazon.com.

Data Warehouse is a concept for management of corporate information interface with the company's OLTP systems, making information available to knowledge workers at all levels in the organisation and ability to change in the users' requirements. Data Warehousing is a process of evolution and continual enhancements. The information must be non-volatile, temporal and remain relevant to the business objectives of the organisation it serves.

With the emergence of internal technology, computing is increasingly becoming network centric. This has enabled creation of virtual corporations, thus reducing the barrier created by geographic distances. These virtual corporations will have virtual users. And finally, information will be managed in a distributed environment. This means tomorrow's data warehouse must be a virtual data warehouse.

For a decade, many leading retailers have collected reams of item-level sales data, numerous lists of which products customers bought during a single shopping trip, information on hourly trading peaks and troughs, and enough numbers to allow comparisons by any product, any branch or by any time of day.

Unfortunately, the number crunching needed to pull the facts into a truly useful report generally meant that management information was limited to exceptions and trouble shooting.

With modern client-servers and powerful data warehouses now replacing lumbering legacy systems, retailers are at last starting to make full use of all that accumulated data — with dramatic and highly profitable results.

Data warehousing is also helping chains to tailor their product assortment to local demand more precisely. In general, large retailers have found it almost impossible to fine-tune product allocation to meet local purchasing trends, so that fluctuation in demand leaves, over-stocks in some areas and a dearth of merchandise in others.

The need for matured IT implementation and its use had been increasingly felt with the start of India's economic liberalisation process begun earlier in this decade, while use of IT at the grass roots level is just starting. Almost all the large organisations in the country have implemented IT at varying degrees of maturity. These organisations are continually enhancing the scope and functionality of their installed IT systems. Currently, data warehousing is high on the agenda for a number of such early adopters of technology. They have either finalised their data warehousing strategy or doing so.

The new concepts of information handling are not just restricted to IT applications in RDBMS, Data Warehousing or INTERNET, but even the media which we use for information storage and handling.

For many years, we have been talking about a paperless office. However, in spite of computerisation, we have yet to see the real emergence of a paperless office. On the contrary, many believe that computer peripherals like printers, plotters and scanners consume a lot of paper and at many places, use of paper has increased many times after the introduction of computers. However, there are instances where use of paper has decreased through use of information technology, and places, where use of paper has not decreased, there is still some hope and optimism. Recent research reports maintain that the new tools in document management systems may drive this change of a paperful office to a paperless office. Some of these changes include the following:

Document - Centric

* The rapid digitisation of document-centric information : Document centric information is described as information stored within an organisation from notes and reports to a phone bill. Much of this information is currently on paper. It is predicted that within a span of five years, more than 60 per cent of information will be stored and used in electronic format.

* Increasing document lifecycle automation : Increasing digitisation, turning a document into bits of data that can be sent over a computer network, will make it possible to automate more of the stages involved in document production. This will bring high benefits. Compared to today, when nearly 25 per cent of knowledge workers' time is spent on integrating and downloading information, trying to find it, then transmit, organise and output it; when these processes get automated, productivity will grow by leaps.

* Emergence of intelligent documents: In western countries, intelligent documents are expected to appear by the next year. With India leapfrogging the technology divide, it would soon appear in Indian user organisations too. These documents will be able to tell your computer how they want to be displayed, taking into account preferences, such as the type size, etc.

* Increase in demand for integrated document management: The number of workstations where integrated document management can be carried out are expected to grow by over 10 times by 2002.

Document Output Management

Organisations are establishing comprehensive document management infrastructure called Integrated Document Management (IDOM) establishments.

To date, in overseas countries, integrated document management is mainly found in structured jobs such as handling an insurance claim, getting a new drug approved or granting a loan. However, there is a general sentiment that its use will spread rapidly. According to a corporate survey, key areas for document management are client correspondence, financial transaction records, work schedules and order processing. Users feel that technology is helping administrative departments deal with and record client correspondence : communications on paper, by fax, phone or E-mail are digitised, indexed automatically and stored on a computer for immediate retrieval, creating more efficient, responsive organisations.

Document management technology is coming into its own as telemarketing centres evolve into call and correspondence processing centres. It is being used to integrate customer correspondence with customer information received over the phone.

(Contd. on page 13)

ABES: The French Network of Libraries

H.K. Kaul

As a guest of the French Ministry of External Affairs, I had the privilege of getting first hand information about Agence Bibliographique de l' Enseignement Superieur (ABES). ABES was established in 1994 under the French Ministry of Science Research and Technology for networking of libraries. It covered the functioning of a number of organisations and started providing several services. ABES now provides access to the following databases:

1 CCNPS - National union catalogue of serial publications.
2 PANCATALOGUE - Catalogue of publications available in libraries relating to higher education.
3 TELETHESIS - Catalogue of French doctoral thesis.
4 RAMEAU - Directory of encyclopaedic information of education.
5 PEB - Interlibrary loan borrowing.

ABES also undertakes the national project for the networking of university libraries. It plans to coordinate together the various bibliographical services being provided by the libraries and offer single access to the union catalogues. It maintains a relationship with the university and research libraries. ABES had a special system of supplying documents to the users anywhere in the world. ABES maintains a good relationship with the National Institute of Information on Science and Technology and provides support to professional associations like IFLA (International Federation of Library Association and Institutions) and EAIS (European Association of International Studies).

National Union Catalogue of Serial Publications

In this national union catalogue, over 2,900 organisations participate. They contribute records to this union catalogue. It has 291,000 locations data. It gives information about ISSN (International Standards Serial Number). It includes information about the libraries that are participating and maintains detailed information about the books available with them.

The work on the national union catalogue is done at 34 regional centres. These regional centres coordinate the activities of the libraries within their regions and contribute necessary information about books received by them and about their activities to ABES for its use. ABES also promotes the necessary information about the participating libraries on its system. INTERNET access to ABES is available through the TELNET facility at the following address:

telnet pythie.cnusc.fr

Each entry in the union catalogue provides information about the title, ISSN, type of application, language, location codes, methods for navigation, other bibliographic information such as notes, country, language, notes on participating libraries on the network, RBCCN nos., and it also gives information about how to access it.

PANCATALOGUE

This is a catalogue of books available with the libraries specialising in higher education. This catalogue can be searched by subject words, bibliographic description, title, edition, publisher, subject key words, source and location. The mode of access is through TELNET at the following address:

telnet frmop22.cnusc.fr

Recherche
Mots Matières
Description bibliographique — N° Pancatalogue : 6436617

Auteurs : Vidal, Auguste Théodore. 1803-.
Titres : Essai historique sur Dupuytren, par Vidal... suivi des discours prononcés par MM. Orfila, Larrey.
Editeurs : Just Rovier et E. Le Bouvier, 1835
Mots matières : Dupuytren, Guillaume - 1777 -1835 / Orfila, Mathieu Joseph Bonaventure - 1787 - 1853 / Larrey, D.J. - (Dominique Jean), baron, 1766-1842
N° base source : ocm 13790009
Agenda : Paris, Just Rovier et E. Le Bouvier, 1835.-60 p. 22cm

Entrez le code choisi : t terme / k localiser / i index / w voir list / e fin / v. sauvegarder

A sample entry from Pancatalogue

This catalogue was started in April 1992. It also gives information about university libraries and the documents these libraries contain. It has more than 320,000 titles and contains 540,000 locations holdings. This

OTHER DELNET SERVICES

Other Online Facilities to Members and Users

DEL-LISTSERVs

Net happenings • Med-Clips • IFLA • LIBJOBS

Books: New Arrivals from INTERNET

Book Reviews • Current Contents • ILL Online • E-mail • INTERNET TCP/IP

Books-in-Print: New Titles from Publishers

DELNET is also offering

The Hindu Index ONLINE

catalogue is fed automatically from different databases coming from the regions and also has connections with the international library networks like BNOPALE, OCLC and SIBIL.

TELETHESIS

ABES also maintains doctoral theses. The work on this project was started in 1992. Telethesis contains 335,000 entries, out of which, 25 per cent are in the field of literature and arts, 30 per cent in the field of sciences and 45 per cent are in the field of health sciences. There are 20,000 theses added annually into this database and it is updated every month. These doctoral theses contain bibliographic and other information in the form of title, date, university, name of guide, discipline, sub-discipline, nature of research, whether it is a doctoral thesis or any other kind of thesis. It also includes key works.

Interlibrary Loan Facilities

Interlibrary Loan functions are one of the special features of ABES. In 1997 there was 5,29,695 requirements, out of which, 4,52,180 requirements were satisfied. These requirements were for documents, identifying consultation, recovering library data, photocopies, etc. ABES Interlibrary Loan service uses PEPNET and INTERNET protocols for communication.

Information Handling

(Contd. from page 11)

Good electronic management would obviously integrate the following: paper documents, for example, through optical character reading technology; electronic forms; search engine software; workflow software; integrated document archive and retrieval systems; industry specific applications; in-house and external publishing; printers, fax machines and photocopiers.

The above augurs well for Indian user organisations who have an edge over their relatively developed counterparts. The technology gap is an opportunity for not having to go through an expensive and painful process of incremental maturity in information systems infrastructure.

The future of information handling will undoubtedly be determined by advances in areas of INTERNET, data warehousing and document management.

DELNET STATISTICS

(as on December 1, 1998)

Participating Libraries

103

Delhi

81

Outside Delhi

(From 10 States)

20

Overseas

2

DELNET Databases

Union Catalogue of Books: CCF
4,72,754 records

Union Catalogue of Books: MARC
16,965 records

Union List of Current Serials
16,146 records

Union Catalogue of Serials
10,203 records

Database of Periodical Articles
1,15,103 records

Specialists' Database
2,000 records

Multilingual Books
Sample database

CD-ROM Database
138 records

Union List of Video Recordings
1,217 records

Union List of Sound Recordings
500 records

Urdu Manuscripts' Database
210 records

Union List of Newspapers
70 records

Database of Theses and Dissertations
251 records

DEVINSA Database
20,000 records

Union List of Serials: Petroleum and Natural Gas Sector
871 records

Union List of Serials: Management Libraries
800 records

Union Catalogue of Hindi Books
3,000 records

Library Softwares: The DELNET Experience

Gauri Shankar Pardhi, Rajesh Soni and Arun Moza

1 Introduction

Networked microcomputers represent a logical advancement in automation beyond that of stand-alone systems. Over the years, libraries have grown to depend on computers to automate many functions. As individual computers proliferate throughout the library, there eventually comes a point when the computers need to be linked together in a network in order to get the best out of them.

In the second half of the 20th century it became difficult to manage information resources. It was felt mainly in major libraries that were growing fast in their acquisition programmes. Later smaller libraries also began to feel the impact.

So we notice that published records are increasing at an incredible rate and their prices are keeping pace. In such circumstances library cooperation will assume a pivotal role and resource sharing will become the focal point of cooperation.

The development in computer and communications technologies came to the rescue of libraries and information specialists. The computers gave rise to their application in the libraries. We may therefore try to find out, what is the importance of computers from a librarian's point of view? According to Lowell A Martin, "A library is a place for storing knowledge under a system that facilitates identification and retrieval as needed, which is also a definition of a computer." [1] As a result of this a new era began in librarianship. Computers were adopted for several schemes such as cataloguing, literature search, circulation system, etc. They improved the quality of services.

The effect of automation on staff reduction was studied by Karen L. Horny at Northwestern University Library. His research reveals that despite savings in staff there is a "Significant increase in the quality of work and the improvement in both public and staff access to bibliographic information." [2]

Creation of bibliographic database however, became one of the essential and key activities of library automation.

It is now a universal fact that information, to use a simple word to cover all the complex quantitative data, is indispensable for the planned development of countries. An important consequence of the acceptance of the need for planning within each country or among a group of countries, is the emphasis on collecting, processing and dissemination of information. In fact, the library softwares are related to accomplish all these jobs.

2 DELSIS, DELDOS, DELWINDOWS: An OVERVIEW

- DELNET staff has successfully developed three Library Softwares:
- DELSIS, which comprises a networking software module on Basis Plus, an RDBMS with several unique features.
- DELDOS software on DOS platform which can be used for creating records in MARC format for books in English as well as in other Indian languages.
- DELWINDOWS software on Windows platforms is also for the creation of bibliographic records in MARC for books in English.

DELNET has gained experience in the creation of Union Catalogues as on DELSIS the Union Catalogues are made available online. DELNET handles all the functions required to set up and efficiently run a Union Catalogue, from creating the customised software to ensuring effective record extraction and conversion. The software, customised for Library Network, features quality control, duplicate checking, copy command, interlibrary loan functionality and electronic distribution of records.

DELNET has extensive experience in setting up a variety of Union Catalogues established from different criteria. DELNET has completed DELSIS, a single system software, fully integrated and interfaced that links the resources of public, academic and special libraries throughout the state. Location codes are stored in the bibliographic record, allowing the review or display of libraries that maintain a copy.

A Union Catalogue increases the effectiveness of research, improves the access that researchers have to materials, enhances information awareness and resource sharing, and acts as a bibliographic and authority data resource. With one single source available for copy cataloguing information retrieval or Interlibrary Loan, the libraries using the Union Catalogue can avoid unnecessary network searching and save both their own resources and those of the network. The Union Catalogue offers services to all libraries and users of information without risking the capacities of the local system. Information and materials for all users throughout the network are no longer limited to the local libraries' connection. The Union Catalogue serves as a

collection management guide, an instrument for Interlibrary Loan, a locator service for reference purposes, index for implementing virtual library, and a source for copy cataloguing data such as bibliographic, authority and holdings data. In addition, printed bibliographies can be generated.[3]

These softwares enable each library to search the Union Catalogue, tag records corresponding to books owned by the library and then download the records. Each new library is able to quickly and efficiently utilise the Union database to create its own holdings databases and the easy ability to switch between databases.

These softwares extract bibliographies and authority records from participating libraries or databases and loads them into the Union Catalogue. During the load process, the DELNET softwares read and check the records for entries, merge certain bibliographic tags of duplicate entries, and determine which records to keep based on the Union Catalogue rules for encoding and institutional levels. If libraries do not process records or are capable of extracting records in full US MARC format, DELNET software can convert these records to US MARC format and then loan them.

2.1 DELSIS

The DELNET system for Information services is an integrated modular system which supports DELNET's Online Databases.

2.1.1 Salient Features of DELSIS

1 DELSIS is a user-friendly, menu-driven package.

2 Its versatile options allow the users to retrieve the information quickly.

3 It contains the modules for Online Public Access Catalogue as the modules for the creation of databases, e.g. addition, deletion, importing of records, etc.

2.1.2 Features of DELSIS (Module-wise)

The Online Public Access Catalogue (OPAC) component of DELSIS can meet the needs of the users, irrespective of whether the user has little computer experience or is familiar with using computers to perform various library tasks.

A. Union Catalogue of Books

- Search by Boolean, Author, Title, Subject, Call No., Series, Conferences.
- Sophisticated Boolean Enquiry using the Boolean operators AND, OR, NOT.
- Efficient result sets.
- Lets you see brief as well as detailed bibliographical information about a record with holdings data.
- Search can be carried out by giving a word, several words or a phrase.

  Query can be performed in upper or lower case or in both, i.e. it is not case sensitive.
- Help instructions for the users are provided.
- A query can be made in any order.

  Generates a dictionary of subject headings while retrieving a subject.

  Displays a record in user-friendly AACR-II format.
- Printout options are also available.

B. Multilingual Books: A Sample Database

A sample database of language publications using GIST Technology has been developed.

- Searches can be done by Title, Author, Subject or Publisher.
- Creation of bibliographic record in any Indian language.
- Transliteration possible in any Indian language of your choice including Roman script.
- Proper instructions are provided for formulating the queries in Indian languages.
- Printouts can be taken in any Indian language including English.

C. Directory of Member-Libraries

It contains the library profiles of all the member-libraries of DELNET. It furnishes the information about the services provided by the libraries, the subject specialisation of the library, etc.

D. DELSIS: Administration Module

- Menu-driven package with the pop-up Windows.
- Importing of the records in ISO format.
- Exporting of the records in ISO format.
- Duplicate checking provision.
- Addition/deletion/changes in the database can be made.
- Merging of the records.

2.2 DELDOS and DELWINDOWS

Delnet has created the DELDOS and DELWINDOWS software for creating and retrieving bibliographic databases and catalogues. These software can convert the simple system into a powerful management information system. Some of the features are:

- It is simple and easy to use. The novice library professionals or end users can interact with the software without any prior training.
- It is user-friendly with adequate

window-menus for data inputting and search capabilities.

- It provides the option for creating the bibliographic records using the MARC format.

These softwares provide the following operational modules:

2.2.1 Database Creation and Maintenance

- This module is used to create and store the bibliographic records, in a machine readable format using MARC format so as to facilitate the easier exchange of information.
- The desirable format worksheet or MARC worksheet can be chosen for data storage purpose.
- The MARC worksheet consists of two levels. Fix field entry and variable field entry. To save the user's time and also the disk space, the required field tags along with the indicators can be chosen.
- The online assistance is available for data inputting through the help menus.

  Data validation check is possible in order to avoid the data errors.

  Check for mandatory field entry is also possible.
- The personal name authority database is maintained.
- Data Import/Export into and from MARC is made possible.
- The option for editing or the deletion of the records is available.
- Printout facility for printing the desired records is also available.

2.2.2 OPAC (Online Public Access Catalogue)

- This module helps the librarians as well as the end users to retrieve the information available in the database in a user-friendly manner.
- Browsing facility: available for beginners. They can search a book by title, author, subject, etc.
- Word or phrase searching.
- Boolean searching.
- Search term is not case sensitive.
- Brief as well as detailed bibliographical information can be retrieved.
- Displays records in AACR-II format and prints search result in standard AACR-II format or other formats as desired.

2.2.3 Some new features also included in the latest version of DELDOS software

- Tag Control: This is an excellent feature of this software in the terms of addition of new tags. While data inputting, if you require some new tags then you can add tag, subfields, their repeatability, etc.
- Index Control: By this control this software can maintain the list of indexes in various categories. At the time of data search and retrieval, if you require some new indexes, then you can add the desired index tag and search by them and get the results.
- Password Control: In the terms of security, the DELDOS version 2.0 has the latest feature such as the password control. By this security, the invalid user can't open the worksheet and is unable to destroy any records.
- Other features include that, you can copy the records and make some minor changes to create new records.
- Deletion and undeletion of record is also possible.
- DELDOS provides the multilingual facility. It has been successfully implemented for Gurmukhi, Tamil and Devanagari scripts.
- Deletion and printing of selective records and range of records is possible.
- Global values can be defined during the worksheet entry.

3 DELNET Software: Comparative Study

In the field of library automation there are various softwares available, Such as CDS/ISIS, SANJAY, LIBSYS, TECHLIBPLUS, LIBRIS, OASIS, LIBMAN, DATASCAN,DATAGURU, GRANTHALAYA, MAITRAYEE, ect. But in the context of DELNET softwares, there are some special features according to the user's choice for effective Database management.

3.1 Characteristics of Library Softwares

According to A. V. Rahelamma, regardless of the manner in which software has been prepared, it should fulfil the following nine requirements, and of course DELDOS fulfils all the requirements.

- "Libraries have to handle massive data, mainly bibliographical data, which in many respects is different from other textual or numerical data that is usually handled by computers. Hence library application software needs to be specially made for handling large data files having innumerable records with unusual record size.[4]
- The data elements in a bibliographical record will be of varying length. For example, the title of a document may be very short, while that of another may be unduly large: The software must meet the situation by providing variable length fields instead of the usual fix-length fields.
- Some of the data elements are by nature repetitive. For example, there can be more than one author for a book, and more keywords/ subject headings. The software must accommodate such repetitive fields without wasting storage space.

- Some of the data fields may also have to accommodate subfields. For example, an imprint field in a bibliographical record may have to provide for subfields like place, publisher and year.
- Some of the data elements may not be present in all cases. For example, series field may not be present in some records. The software must have a built-in ability to accommodate such optional fields without wasting storage space.
- Bibliographical database should enable speedy random access to files under almost all fields and subfields. Hence the software should be capable of creating fast access files such as Index files.
- The speed and efficiency of subject search will depend upon some of the in-built mechanisms in the software like use of a versatile thesaurus management facility and systematic search language.
- Bibliographical data may have to be printed or displayed in various formats as are required for a catalogue or an index.
- Database creation and output generation should conform to the international/national standards in force in the field and thereby establish necessary compatibility with other information networks."[4]

3.2 CD/ISIS and DELDOS: A Comparative Study based on the following characteristics:

	Feature	CDS/ISIS	DELDOS
1	Compatibility	It is suitable for micro computers and run on simple DOS platform.	It is suitable for IBM micro computers and run on simple DOS platform
2	Disk space utility	It makes efficient use of disk memory space as it does not allot fixed space for each field in a record.	It makes efficient use of disk memory space as it does not allot fixed space for each field in a record.
3	Search Capabilities	It has powerful search capabilities.	It provides simple and efficient search method with individual and Boolean Enquiry in user-friendly manner.
4	Database Management	It is a flexible system for database management.	It provides efficient database maintenance with full security.
5	Record linking	A record can be linked with another in the same database.	Provision for record linking.
6	Authority Data Maintenance	No provision for authority data maintenance	Personal name authority database is maintained by this software. When creating a new record, you can also create the authority.
7	Data Export in USMARC format	It is not suitable for exporting of records in full USMARC format.	It provides one step procedure for exporting of records in full USMARC format.
8	Edit facility	A user has to get into separate menus to modify or remove data while searching for it - a lengthy process.	It provides Edition or Deletion of records in range without getting into separate menus.
9	View facility	It has no facility for viewing different records at the same time.	It provides flexible view process. You can see the record in range with required format.
10	Worksheet Creation	It allows the use of more than one data entry worksheet to provide a different data entry.	It provides flexible MARC Worksheet with Tag modification capability.

4 DELNET Software: Future Plan

Information is regarded as a vital resource and an invaluable commodity in modern times. Information plays a significant role in the socio-economic, scientific and technological development of a country. It is, however, a vast sector which includes different groups of people and stages, involving generations, collection, processing, retrieval and dissemination of information. Librarians and information scientists, acting as intermediaries, provide general and special information services to the users with the help of modern gadgets or tools developed by different branches of science and technologies. All these developments are in generic terms known as information technology. The application of information technology in library service has opened up a new vista for research and pursuit of knowledge.

So, for fulfilment of the above requirements and aspects DELNET has a vision on one side for resource sharing as a library network and on the other side for library automation as an integrated library management system which will include a variety of modules.

These softwares will become an integrated set of software modules covering the whole set of reader and technical services. The facilities so provided enable participating libraries to operate.

DELWINDOWS will grow as a Multiuser Library Software based on Client/Server Technology with the following features:

- Online Catalogue.
- Cataloguing/Maintenance with MARC processing.

- Circulation.
- Serial Control-Serials Processing, Subscription maintenance, Routing maintenance.
- Acquisition - Order Processing, Receiving, Report Generation.
- Administrative Functions - Tag control, Index control, Password control, updation, Export into various MARC formats, Import from various MARC formats, Global data declaration, Deletion.
- Electronic data distribution through the Web.
- Full Text Retrieval
- Image Scanning Capability.

5 Conclusion

Finally, with the information explosion taking place all over the world and with shrinking library budgets in real terms, libraries find it increasingly difficult to acquire a comprehensive collection in the fields of their interest. This situation has led to the creation of database covering information of interest available in various countries for providing relevant information to the users. Also emphasis has shifted from comprehensive acquisition of documents in libraries to providing access to comprehensive information to the users of libraries. This had led to the formation of library networks for resource sharing. Many developing countries are also planning on implementing such networks including those for online usage, for resource sharing.

Both the database and online networks involve use of the technologies of information processing, computer communication, etc. While these technologies are well-established in the developed countries, they are still at the development or implementation stages in the developing countries.

So, we are sure that these softwares will become useful for libraries interested in creating standard bibliographic records in MARC format with full retrieval, full security, export and import facilities.

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Subjectwise Category of DELNET Member-Libraries:

General	25
Science and Technology	41
Social Sciences	22
Humanities	15
Total	**103**

DELNET Member-Libraries: Kinds

Research/Spl. Libraries	52
Govt. Depts	16
College	10
University	9
Diplomatic Missions	8
Public Sector	5
Public Libraries	2
Publishers	1
Total	**103**

New Member-Libraries

Bhilai Institute of Technology, Bhilai

Bureau of Industrial Costs and Prices

CEDUST, French Embassy
Central Electricity Authority

Centre for Women's Development Studies

Dayal Singh Public Library

Delhi School of Business

Dept. of Personnel & Training, Ministry of Personnel Public Grievances and Pensions

Erode Arts College, Erode

Faculty of Management Studies, Delhi University

The Hindu, Chennai

Hindu College, University of Delhi

Indian Council for Cultural Relations

Indian School of Mines, Dhanbad

Institute of Nuclear Medicine and Allied Sciences

Institute for Integrated Learning in Management

International Institute of Tamil Studies, Chennai

International Management Institute

Jaipuria Institute of Management, Lucknow

Johns Hopkins University, Baltimore, USA

Ministry of Rural Areas and Employment

National Research Development Corporation

Northern Institute for Integrated Learning in Management Prime Minister's Office

Punjabi University, Patiala

School of Planning and Architecture

Steel Authority of India Ltd.

University of California, Berkeley, USA

University of Health Sciences, Vijayawada

Knowledge flows through DELNET
Access It

DELNET offers services to more than 100 Indian and foreign libraries.
It treasures more than 25 best databases of Indian Library resources.

DELNET is accessible through INTERNET.

Membership Rates

Admission Fee	Rs. 5,000
Institutional Membership fee *(for libraries with 10,000 or more book collection)*	Rs. 7,500 per year
Associate Institutional Membership fee *(for libraries with less than 10,000 book collection)*	Rs. 10,000 per year

Libraries wishing to avail of ILL ONLINE facility are charged as follows:

Libraries in Delhi	Rs. 4,000 per year Actual photocopying charges, if any, will be extra
Libraries outside Delhi	Rs. 4,000 per year Actual photocopying charges, if any, and courier charges will be extra.

Special Offer for libraries joining DELNET from February 15, 1999 to May 15, 1999. Take DELDOS or DELWINDOWS, the standard database creation software **free** with Membership. For special features of DELDOS and DELWINDOWS, refer to pages 14-18 in this *Newsletter*.

For Membership details contact:

Director
Delhi Library Network
40, Max Mueller Marg, Lodi Estate
New Delhi-110003
Phone: 4619325, 4619431 Ext. 312
Telefax: 011-4619325
E-mail:hkkaul@delnet.ren.nic.in

The recent publication from DELNET

LIBRARY AND INFORMATION NETWORKS:

The proceedings of the National Annual Convention on
Library and Information Networking (NACLIN)1998

Edited by

H.K. Kaul

376 pp 1999 Rs. 550/-

Libraries will be given 20% special discount

Send your orders to:

The Secretary
Delhi Library Network
40, Max Mueller Marg, Lodi Estate, New Delhi - 110 003. Fax: 4619325

National Convention on Library and Information Networking

NACLIN 99

October 11-14, 1999

Organised by DELNET

Introduction:

During the last decade, efforts have been made to establish library networks in India. Rapid advances in information technology, substantial increase in the published and electronic documents, advances in telecommunication, computer and networking technology, the establishment of INTERNET and the growth of the World Wide Web have made networking of resources in the libraries and information centres a necessity. DELNET organised the first National Convention on Library and Information Networking in 1998. In order to promote library networking, DELNET will be making this an annual feature.

Objectives:

The main objective of this National Convention is to disseminate the latest know-how on the following subjects and arrange tutorials for library and information professionals who want to gain practical knowledge:

- Resource Sharing
- Networking Softwares
- Multimedia Applications
- Communication Tools
- Bibliographic Standards
- Cataloguing
- Union Catalogues and Databases
- Language Databases
- Accessing Library Resources on the INTERNET
- Web Technology

Tutorials which will be held on October 11 and 12, 1999, will be organised on the following topics:

- International Bibliographic Formats
- Library Resources on the INTERNET
- Creation and Management of Library Web Sites
- Creating Databases in Indian Languages
- AACR 2

As seats are limited for participation in tutorials, participants are advised to register their requests in order of their preferences.

Submission of Papers

Participants are welcome to contribute papers for presentation at the National Convention on the topics given above or on related topics. They should reach Director, DELNET on or before June 1, 1999. Information about rejection/ acceptance of this paper will be sent within one month and participants should confirm that they will join the National Convention if the paper is accepted. Papers should contain substantial inputs which should be based on research, survey or practical experience. All bibliographic references should be given according to the *Manual of Style*, The University of Chicago. They should be submitted on A4 size paper or on 1.44 MB floppies. Papers should contain the name of the author, title of the article, name of affiliating institution, mailing address, E-mail address (if any), file name and information about the word processing software used in the floppy diskette. Standard softwares such as WORDSTAR or MSWORD may only be used. The paper submitted should not have already been published elsewhere.

Participants

Library and information professionals can apply for participation. Participants nominated by institutions who have immediate need for modernisation of their libraries will be given preference.

Participation fee

National Annual Convention : Rs. 2000/-

Tutorials : Rs. 1000/- per tutorial

Special rates for joining the National Convention and all tutorials Rs.6000/-

Participants from member-institutions of DELNET will be given 50 per cent discount on the above rates.

Accommodation

Participants have to make their own arrangements for stay in Delhi. However, if assistance is needed, accommodation may be arranged depending upon the availability. The rates of hostels, guest houses and moderate hotels in Delhi vary from Rs. 200/- to Rs. 500/- per day. Cheaper accommodation if available, can also be arranged.

Registration Form : NACLIN 99

I wish to register for the National Convention:

(Please use one form per participant. Use photocopies of this form if necessary)

Name: _____

Designation: _____

Organisation: _____

Address: _____

_____

Telephone(s): _____

Fax: _____

E-mail: _____

Are you submitting a paper? Yes [ ] No [ ]

Please make arrangements for me for accommodation. I enclose Rs. 500/- as advance towards this facility.

I enclose a cheque/DD No. _____ for Rs. _____ in favour of **Delhi Library Network**, Delhi.

Date: _____ Signature: _____

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