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NACLIN 2025 : A Report

The Officials at NACLIN 2025 Inauguration

The 28th National Convention on Knowledge, Library and Information Networking – NACLIN 2025 on the theme "Forging New Frontiers for Libraries: Fostering Exploration, Innovation, Evolution and Transformation" was organised by DELNET-Developing Library Network, New Delhi in association with Yashaswi Education Society's International Institute of Management Science (IIMS), Pune and All India Shri Shivaji Memorial Society's College of Engineering (AISSMS COE), Pune at Hotel Lemon Tree Premier, Pune from December 3-5, 2025. Nearly 250 participants from different parts of India including Library and Technology experts, Librarians, LIS Professionals, Students, Exhibitors, Product Demonstrators had actively participated in the Conference. We are pleased to inform that DELNET has its own office at Pune, which was opposite to the Conference Venue.

The Inaugural function on December 3, 2025 began with an invocation of Saraswati Vandana. It was followed by the lighting of the lamp marking the inauguration of NACLIN 2025 by the Chief Guest Dr. Parag Kalkar, Hon'ble Pro Vice-Chancellor, Savitribai Phule Pune University, Pune in the esteemed presence of Shri K. Jayakumar, President, DELNET (former Chief Secretary, Kerala and Jt Secretary, Ministry of Culture, Government of India); Mr. Vishwesh Kulkarni, Chairman, Yashaswi Group, Pune; Dr. Dattatraya S. Bormane, Principal, AISSMS College of Engineering, Pune; Dr. Shivaji D. Mundhe, Director, Yashaswi Education Society's International Institute of Managment Science, Pune; Dr. P. R. Goswami, Treasurer, DELNET; Dr Sangeeta Kaul, Director, DELNET & Organising Secretary, NACLIN 2025 and NACLIN 2025 Coordinators including Mr. Pavan Sharma, Librarian, IIMS, Pune; Dr. Vrushali Dandawate, Librarian/Head (Central Library), AISSMS College of Engineering, Pune and Mr. Deepak Yadav, Assistant Network Manager, DELNET.

The welcome address was jointly delivered by Dr. Sangeeta Kaul, Director, DELNET, New Delhi and Organising Secretary, NACLIN 2025; Mr. Vishwesh Kulkarni, Chairman, Yashaswi Group, Pune and Dr. Dattatraya S. Bormane, Principal, AISSMS College of Engineering, Pune.

It was followed by the release of NACLIN 2025 pre-conference publication containing Conference papers, edited by Dr. Sangeeta Kaul, Mr. Pavan Sharma and Dr. Vrushali Dandawate and also NACLIN souvenir was released on the occasion by the Chief Guest Dr. Parag Kalkar, Hon'ble Pro Vice-Chancellor, Savitribai Phule Pune University, Pune. Dr. Kalkar delivered the Inaugural Chief Guest address. Dr. Kalkar appreciated the organisers DELNET, Yashaswi Education Society's International Institute of Management Science, Pune and AISSMS's College of Engineering, Pune for organising NACLIN 2025. He said that the Pune city has a rich heritage of knowledge and education, having more than 30 Universities and many colleges. He said that the library must transcends from its traditional identity as a custodian

Dr. Parag Kalkar

Major Vineet Kumar

Mr. Kanwaljeet Singh Arora

of physical resources and become a dynamic multimodal knowledge hub. Dr. Kalkar said that AI is not a threat to the libraries but a powerful assistant for enhancing user experiences and research support services. He further said that libraries are instrumental in achieving the vision of Viksit Bharat 2047. Dr. Kalkar also opined that the public libraries should help in bridging the digital divide and nurturing a reading culture in digital age. He spoke about the popular 'Pune Book Festival' and expected Pune city to emerge as a World heritage city of books by 2027.

It was followed by the Presidential Address by Shri K. Jayakumar, President, DELNET. He apprised the participants about the phenomenal growth of DELNET and said that DELNET has been changing over the years without changing the basic commitment and the basic commitment is to the world of libraries and to the academic world. He spoke about the visionary leader and Founder of DELNET Dr. H.K. Kaul who started DELNET as a small enterprise and said that he knew that tomorrow's world would belong to the world of knowledge, to the world of information and hence he conceptualised DELNET. He said that NACLIN has a national validity and DELNET is organising NACLIN in a very continuous manner to ensure that we remain in the mode of networking humanity. He further said that working collectively, cohesively, collaboratively with member-institutions and Library professionals is the very essence of networking by DELNET.

The inaugural function ended with the Vote of Thanks by Dr Sangeeta Kaul, Director, DELNET.

It was followed by the Inauguration of NACLIN 2025 Exhibition wherein a number of leading companies exhibited their products and services. It included 2Cqr/RFID Automation for Libraries;

Dr. Nabi Hasan

KGL Accucoms; Gale, Part of Cengage Group; iGroup India; Drillbit and Cyber Peace Foundation.

The first tutorial on "AI Literacy - AI Tools & Technologies for Libraries" was conducted by Mr. Kanwaljeet Singh Arora, AI & Blockchain Consultant and Trainer, Gurugram, Haryana. The session was highly enlightening, engaging and empowering and was greatly valued and appreciated by the participants.

It was followed by Industry presentation by DrillBit SoftTech India Pvt. Ltd., Bangalore conducted by Mr. Jayanna Belavadi, Founder & CEO. An "Awareness Workshop on AI Safety-Cyber Security & Cyber Hygiene" was conducted by Major Vineet Kumar, Founder & Global President, Cyber Peace Foundation.

In the evening, all the participants were taken to Zapurza Museum of Art & Culture (located on the scenic banks of Khadakwasla dam on the Mutha River) for a visit to galleries, cultural evening and dinner (catering was by Poona Guest House, preserving the rich heritage of Pune's culinary traditions for over 90 years). It was fully enjoyed by all.

On the second day of NACLIN 2025, the first Technical Session was devoted to "New Technological Frontiers for Libraries & AI in Libraries". The session was chaired by Dr. Neeta Verma, Former Director General, National Informatics Centre (NIC), Ministry of Electronics and Information Technology (MeitY), New Delhi & Former Chief Advisor (Information Technology), Election Commission of India. The first keynote presentation entitled "New Technological Frontiers for Libraries" was presented by Dr. Nabi Hasan, Head Librarian (Central Library), Indian Institute of Technology Delhi. The second keynote presentation of the session was delivered by Dr. Padmaja Joshi, Scientist 'G' and Head (Products, Services and Outreach), Centre for Development of Advanced Computing (C-DAC), Mumbai on the topic "The Emerging Role of AI in Empowering Languages and Libraries for Users Community". The last keynote presentation of the session entitled "Autonomous, Multimodal, Edge : The AI Technologies Transforming Libraries" was delivered by Dr. Neeta Verma. The contributed paper entitled "Harnessing Artificial Intelligence to Enhance Research Literacy Among Early Career Scholars: A Comparative Study" was presented by Dr. Vinita Atre, Deputy Librarian, Jaipuria Institute of Management, Indore. The paper was co-autored with Mrs. Kavita Dhare, Librarian, Compfeeders Group of Institutions, Indore, Madhya Pradesh. The last paper of technical session I entitled "Students' Awareness and Perception of Artificial Intelligence (AI) in Select Higher Education Institutions of South Goa" was presented by Mr. Sunil Madhukar Gauns, College Librarian, DCT's Srinivassa Sinai Dempo College (Autonomous), Goa. The paper was co-authored with Ms. Manasi Dattatraya Rege, College Librarian, VVM's Shree Damodar College of Commerce & Economics, Margao, Goa; Mr. Sudhir Baburao Halvegar, College, Librarian, Vasant Joshi College of Arts and Commerce,

Dr. Padmaja Joshi

Dr. Neeta Verma

Ms. Sari Sasaki

Vasco, Goa; Ms. Padmavati S. Tubachi, College Librarian, DPM's Shree Mallikarjun & Shri Chetan Manju Desai College of Arts, Commerce, Science, Canacona, Goa and Dr. Sandesh Dessai, University Librarian, Goa University, Taleigao, Goa. The Rapporteur of the session was Dr. Hemant Kumar Sahu, Scientific Officer 'C' (Library), Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune.

The Technical Session II was devoted to the "Disaster Management for Libraries and Archives". The session was chaired by Dr. Mahendra N. Jadhav, Former Librarian, Indian Institute of Technology Madras, Chennai. The invited keynote presentation entitled "Building Resilience: Disaster Risk Management (DRM) and UNESCO Toolkit for Libraries" was delivered by Ms. Sari Sasaki, Foreign Associate - Fellow, Conservation Division, Indira Gandhi National Centre for the Arts (IGNCA), New Delhi. The contributed paper entitled "Beyond the Fire and Flood: Mitigating Digital Disasters to Secure Library Collections for the Future" was presented by Mrs. Sonia Mukesh Desai, Research Scholar, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon. The paper was co-authored with Dr. Vaijanath Ramchandra Kamble, Research Guide, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon. It was followed by Industry presentation on Gale, part of Cengage Group which was presented by Mr. Ujjwal Lamington, Head, Marketing & Customer Success and Mr. Aman Sharma, Digital Product Trainer. The session Rapporteur was Ms. Priyanka Jain, Librarian, Centre de Sciences Humaines (CSH), The French Institute in India, New Delhi.

The technical Session III was devoted to the "IKS, Building Knowledge Resources and Transforming Libraries into Hubs of Research & Innovation". The session was chaired by Mrs. Kiran Chauhan, Scientist 'G' and Director, Defence Scientific Information & Documentation Centre (DESIDOC), DRDO, Delhi. The keynote paper entitled "Indian Knowledge Systems (IKS) : Building Knowledge Resources and Transforming Libraries into Hubs of Research & Innovation" was presented by Dr. Usha Mujoo Munshi, Chief Librarian, India International Centre, New Delhi. The contributed paper entitled "Requirement for a Research Information Management System (RIMS) for Researchers" written by Dr. M. Doraswamy, Professor (DLIS) and Vice Chancellor (I/c), Dravidian University, Kuppam; Mr. Shameer K. K., Research Scholar, DLIS, Dravidian University, Kuppam and Assistant Librarian, IIT Tirupati, Andhra Pradesh and Dr. B. R. Doraswamy Naick, Professor of Library and Information Science/Head Librarian, University College of Engineering (Autonomous), JNT University, Kakinada was presented by Mr. Shameer K. K. The session Rapporteur was Ms. Sarita Waghate, Manager (BMKC), BrahMos Aerospace, New Delhi.

The last technical session of the second day i.e. Technical Session IV was devoted to "Open Mantra for Libraries". The technical session was chaired by Dr. Nabi Hasan, Head (IIT), Librarian (Central Library), Indian Institute of Technology Delhi and Co-chaired by Dr. Sandesh Dessai, University Librarian, Goa University,

Dr. Usha Mujoo Munshi

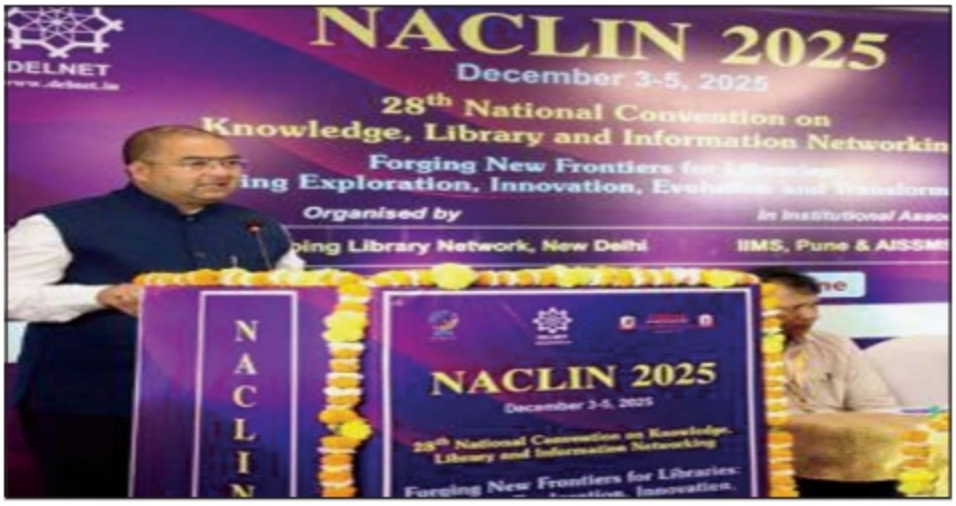
Dr. Vrushali Dandawate

Prof. (Dr.) Amitav Banerjee

Goa. The Keynote Paper entitled "Emerging Trends in Open Access" was delivered by Dr. Vrushali Dandawate, Librarian/Head (Central Library), AISSMS College of Engineering, Pune, Maharashtra. The second Keynote Presentation entitled "Emerging Ecologies of Misconduct in the Era of Open Access: Challenges for Editors & Publishers" was delivered by Prof. (Dr.) Amitav Banerjee, Professor Emeritus, Dr. D.Y. Patil Medical College, Hospital and Research Centre and Editor in Chief, Medical Journal of Dr. D.Y. Patil Vidyapeeth, Pune, Maharashtra. The contributed paper entitled "Open Access Publishing at IIT Delhi and Sustainable Development Goals: A Case Study" was presented by Ms. Charu, Library & Information Assistant, Indian Institute of Technology (IIT) Delhi. The session Rapporteur was Dr. Swati Barnabas, Librarian, Institute of Management Studies Career Development & Research (IMSCDR), Ahilyanagar, Maharashtra.

It was followed by visit to Exhibition Stalls and also a memorable visit to DELNET Pune Office (across the Conference venue). The participants enjoyed the evening of the 2nd day at Residency Club, Pune.

On the last day of the conference the technical session V was devoted to "Reimagining Public Libraries and Nurturing Reading Culture in the Digital Age" The session was chaired by Dr. P. R. Goswami, Former Director (Libraries), Ministry of Culture, Government of India, New Delhi. The Keynote Presentation entitled "The Unique and Inspiring Rural Libraries Initiative of Government of Maharashtra 'Pustakanch Gaav (Village of Books)' at Bhilar, Satara Dist., Maharashtra" was delivered by Dr. Shamkant B. Deore, Director, Rajya Marathi Vikas Sanstha, Government of Maharashtra, Mumbai. It was followed by another keynote presentation on "Efforts of Reclaiming Readership by Society and the Role of NBT" which was delivered by Prof. Milind Sudhakar Marathe, Chairman, National Book Trust (NBT), New Delhi. The last keynote paper on "Private Provision of Public Services: A Strategic Plan for Public Library



Dr. Shamkant B. Deore

Prof. Milind Sudhakar Marathe

Dr. P. R. Goswami

System in India" was delivered by Dr. P. R. Goswami, Former Director (Libraries), Ministry of Culture, Government of India, New Delhi. The contributed paper of technical session on "Reading in the Digital Age: A Systematic Review of Reading Habits Versus Technology Habits" written by Mrs. Dipti Arora, Technical Officer 'C', Defence Scientific Information & Documentation Centre (DESIDOC), DRDO, Delhi; Mr. Tapesh Sinha, Scientist 'F', Defence Scientific Information & Documentation Centre (DESIDOC), DRDO, Delhi and Mrs. Kiran Chauhan, Scientist 'G' and Director, Defence Scientific Information & Documentation Centre (DESIDOC), DRDO, Delhi was presented by Mr. Tapesh Sinha. The session Rapporteur was Mr. Rohidas B. Rathod, Senior Network Assistant, DELNET, Pune.

The last Technical Session VI was devoted to "Empowering Library Workforce". The session was chaired by Dr. M. Doraswamy, Professor (DLIS) and Vice Chancellor (I/c), Dravidian University, Kuppam, Andhra Pradesh. The Keynote Presentation entitled "Competencies of Librarians in the Era of AI" was delivered by Prof. Shubhada Nagarkar, Professor & Head, Department of Library and Information Science, Savitribai Phule Pune University, Pune, Maharashtra. Another keynote paper entitled "Library and Information Science: A Systems Perspective" was delivered by Dr. Vivek Patkar, Independent Researcher, Mumbai. The session Rapporteur was Mrs. Sheetal Deshpande, Librarian, Deenanath Mangeshkar Hospital & Research Centre, Pune. It was followed by Industry presentation on iGroup India by Mr. Kushal Gundecha, Sr. Account Manager, iGroup.

The presentations by the Host Organising Institutions on "DELNET – Developing Library Network, New Delhi" was delivered by Dr. Sangeeta Kaul, Director, DELNET, New Delhi; Ms.

Prof. Shubhada Nagarkar

Dr. Vivek Patkar

NACLIN 2025 Organising Team

Ranjana, Senior Network Assistant, DELNET, New Delhi and Mr. Rohidas B. Rathod, Senior Network Assistant, DELNET, Pune The presentation on "Yashaswi Education Society's International Institute of Management Science, Pune" was made by Mr. Pavan Sharma, Librarian, IIMS, Pune. Dr. Aishwarya Apte, HOD, Department of Electrical Engineering, AISSMS COE, Pune gave presentation on "AISSMS College of Engineering, Pune".

The session on "Future Agenda of NACLIN", was moderated by Dr. Sangeeta Kaul, Director, DELNET & Mr. Deepak Yadav, Assistant Network Manager, DELNET. The participants of NACLIN 2025 shared their valuable feedback.

In the Valedictory session Dr. Shivaji D. Mundhe, Director, Yashaswi Education Society's International Institute of Management Science, Pune; Dr. Dattatraya S. Bormane, Principal, AISSMS College of Engineering, Pune & Dr. P. R. Goswami, Hon. Treasurer, DELNET, New Delhi addressed the participants.

The participants gave their encouraging and enriching feedback.

The announcement of NACLIN 2026 was made wherein it was declared that the 29th National Convention on Knowledge, Library and Information Networking – NACLIN 2026 will be organised by DELNET in Hyderabad during November/December 2026.

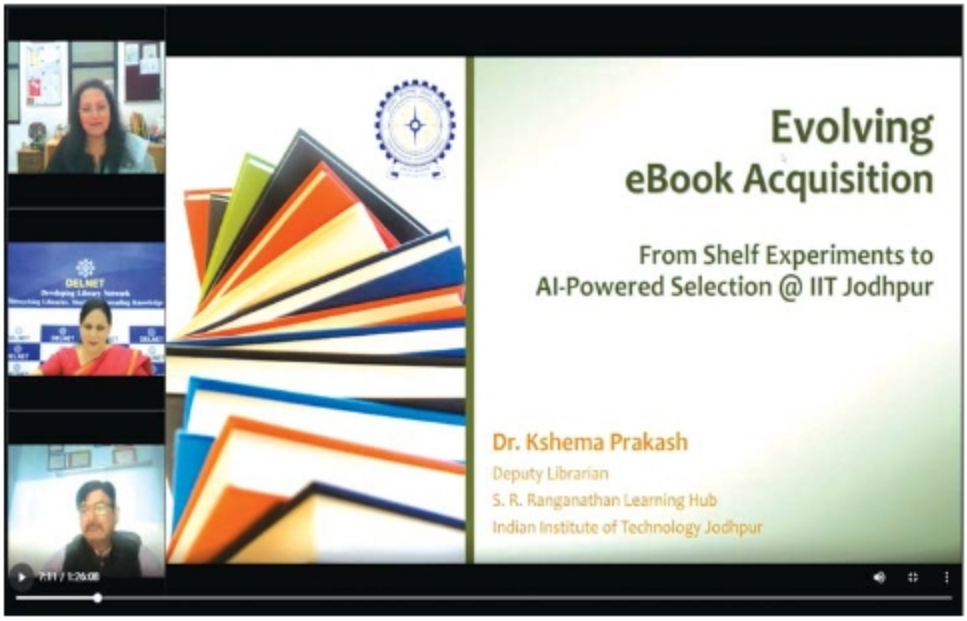
The vote of thanks was placed by Dr. Sangeeta Kaul, Organising Secretary, NACLIN 2025.

The Certificates of participation were distributed to all the delegates.

The conference presentations can be viewed at www.delnetnaclin.in

We look forward to welcoming you at NACLIN 2026 at Hyderabad ! ■

Evolving E-book Acquisition: From Shelf Experiments to AI-Powered Selection



An exhaustive webinar titled "Evolving E-book Acquisition: From Shelf Experiments to AI-Powered Selection" was organised by DELNET on February 15, 2025. The session was graced by two distinguished speakers: Dr. Kshema Prakash, Deputy Librarian, IIT Jodhpur and Dr. Mohit C. Saxena, Co-founder & Chief Technology Officer of Infinity Labs.

Dr. Sangeeta Kaul, Director, DELNET, extended a warm welcome to all the esteemed dignitaries, professionals from IIT Jodhpur, library and IT professionals, as well as participants who joined the webinar from across India and abroad. The session was attended by 547 professionals.

Dr. Kshema Prakash began her address by extending heartfelt thanks to Dr. Sangeeta Kaul and DELNET for giving her the opportunity to share her expertise. She shared an inspiring quote from the book *Ganbatte : The Japanese Art of Moving Forward,* which says "Either we get shipwrecked or ride the waves, choice is ours". She set the tone of her presentation by highlighting the broader points: E-book in the context of academic libraries in India, advantages vis-à-vis challenges and bottlenecks, IIT Jodhpur library's journey of E-book acquisition, where we are standing today and what's next for us. She observed that E-books arrived in India in the 2000s but the concept caught on from 2010 onwards. According to her, we have come a long way in terms of E-books with so many models flooding the market. She cited several examples, including multimedia E-books that were a simple machine-installed model, interactive books on platforms like Access Engineering, and publisher-specific textbook bundles that require the users to access them over a particular learning platform. She also talked about the aggregator platforms that give access to a wide range of popular books. She discussed the freedom model where there are no restrictions concerning the user licenses platforms or sharing downloads and libraries can pick and choose the titles of their choice for perpetual access. She preferred a print copy owing to the sheer convenience and comfort of reading. But after experiencing the advantage of the AI-based tools that allow users to converse with the PDFs and generate insights, she more strongly advocated for the electronic version of books. She further emphasised the convenience of space saving and multiple access anywhere anytime in the electronic version of books.

Dr. Kshema demonstrated that the journey of Jodhpur Library's E-book Acquisition started in 2013 -2014 with the acquisition of around 40 titles from major publishers like Elsevier and Wiley. She mentioned that they began acquiring those books by considering models like the pick and choose model, the freedom model and perpetual access model. She illustrated that despite the advantages, the usage of E-books is not as encouraging compared to the usage of E-journals. She shared her eureka moment of adopting an innovative idea from Idaho State University's Zombie Library—using wooden E-book dummies with QR codes placed among physical books. She explained how they adopted the idea by using customised folders instead of wooden dummies. She mentioned that they placed the information of the book between the folders and pasted a QR code on the cover as well as inside where the access information would be embedded. She added that they maintained it for four to five years till their users got the flavour and essence of E-books. She added they scaled up their E-book acquisition as the users leaned towards the E-books by analysing the data of the past 5 years and focused on the top 500 titles, particularly the textbooks and multiple copy titles. She talked about how they partnered with the channel partners and vendors and also pondered on the following points : variety of publishers, reduce site hopping and click burdens, bundle bungle, return on investment and how these models satisfy the conditions to come up with a model that

is sustainable and useful for everyone. She affirmed that they started with aggregator content EBSCO and ProQuest where they placed an order for 180 book titles and acknowledged that the demand for E-books was felt most during the lockdown. She then moved on to the year 2024 when they took a leap and started their experiments with evidence-based acquisition. She noted that they have maintained a healthy proportion of print and electronic book collections with acquisitions primarily driven by patron demand and selected their acquisition model as a pick-and-choose model based on the experiences of Covid times. She mentioned they initiated an evidence-based acquisition model with two publishers— the Institute of Physics which gave access to around 800 titles plus titles on their platform and the Cambridge University Press which opened up their entire collection of E-books. She explained the model where the publishers opened access to their complete or major E-book collection to the institution against a nominal fee for a year and by the end of the period the institution can choose to retain perpetual access to books of their choice. She believed that this model is workable as the users get enough time to access and evaluate the content. She referred to the practical challenges of the model that involves overwhelming numbers of titles available in the model, difficulty for users to effectively navigate extensive book lists, discovering specific titles across various publishers' websites, gathering meaningful feedback and finally curating a collection truly reflecting the community's need becomes difficult.

Dr. Kshema illustrated the BookSelect Pro Project that was initiated by two brilliant MTech Executive students of IIT Jodhpur, Dr. Mohit and Dr. Abhishek. She mentioned that they were looking for a technological intervention that could map the user profile with the book titles from the library curated list and indicated appropriate titles aligning with their interests. She explained that the project began with the initial design of both the user interface and the library staff interface, ensuring the design was attractive to align with the library website's theme. She mentioned that there were multiple brainstorming sessions between the library team and the developers to pack in appropriate features keeping in view the application's purpose and underlying philosophy. She appreciated the entire team for their collective endeavour. She noted that the product was primarily developed as a web application, and its mobile and iOS version is also available, while the Android version is in progress. She also presented a short video demonstrating what the application looks like. She explained how the user can log into the user interface which is a personalised AI book recommender and upon login a curated list of books matching the user profile appears. She believed that the beauty of the app is that whenever a user creates a profile and curates their research areas, the backend AIML-based application matches with the interests of the user instead of the user having to forage through thousands of titles. She further added that once the book is recommended the user can also see the notifications on the recommendations and their response from the library team. She remarked that with the evolution of the product they had touched Kaizen — "change to improve". She proudly shared that the BookSelect Pro app along with the S.R. Ranganathan Learning Hub was launched on the Engineer's Day, September 15, 2024. Dr. Mohit C. Saxena highlighted the technological aspects of the BookSelect Pro App. He genuinely believes that technology is valuable only when it addresses real-world problems and aimed to give back to the library community and library professionals by applying his AI expertise. He gave an overview of the agenda of his presentation and mentioned that BookSelect Pro is a smart, AI-powered app for librarians, publishers, users, professors, and researchers, currently available on the web and iOS, with Android versions coming soon. He explained that the app bridges the communication gap between all the parties, illustrating that the publishers' long book list serves as the data set for the app which is then analysed by an RAG-based AI model to generate book recommendations for the users.

Dr. Mohit emphasised the key features of the app - AI-powered book recommendations, profile-based customisation, seamless procurement workflow, real-time notifications, and multi-platform support. He affirmed that apart from the application itself, they have an aid-driven back end that processes the book recommendations and stated that it is a Python-based AI model with Random Forest Algorithm and RAG-based searches. He mentioned that the app has a database that runs both MySQL and MongoDB and a BPMN 2.0 standardised which ensures a smooth workflow.

Dr. Mohit Saxena discussed the roadmap and future enhancements of this application. He highlighted that the app is available for regular users. However, they are working on enhanced accessibility features for differently-abled users. He talked about how they want to integrate the app with library management systems, voice command support with Natural Language Processing (NLP). He mentioned that they are trying to integrate chatbots for recommendations where it could give an experience of Alexa or Gemini and also working on publisher collaboration features which would give an interface to publishers.

Dr. Sangeeta Kaul thanked Prof. Kshema Prakash and Dr. Mohit Saxena for their insightful presentations. ■

Data Visualisation Tools and Techniques

An insightful webinar titled "Data Visualisation Tools and Techniques" was organised by DELNET on March 12, 2025. The session was conducted by esteemed resource person Dr. Gopakumar V., Head, Knowledge Centre, Kerala University of Digital Sciences, Innovation and Technology (KUDSIT), Thiruvananthapuram.

Dr. Sangeeta Kaul, Director, DELNET, extended a warm welcome to the distinguished speaker Dr. Gopakumar V., along with all the esteemed dignitaries, eminent professionals from library and information science, IT experts, faculty members, researchers, scholars, colleagues and participants who joined the webinar from across India and abroad. The session was attended by 826 online participants.

Dr. Gopakumar commenced his presentation with a brief introduction on data visualisation. He described data visualisation as the graphical representation of information and data and spoke about how data visualisation is used in Excel, where one can convert data into tables and then transform those tables into graphs. He explained that data visualisation helps to understand patterns, trends and outliers in data through charts, graphs and maps. He further highlighted how it is essential for making data-driven decisions and community insights. He gave an overview of the importance of data visualisation. He emphasised that data visualisation simplifies complex data for better understanding, aids in faster data-driven decision-making, enhances communication through visuals, reveals trends, patterns and anomalies and supports interactive data exploration and presentation. He also showed an Excel sheet of a department-wise purchase of books which is converted into a table and a graph and highlighted how easily one can derive the conclusion with data visualisation.

Dr. Gopakumar enumerated the advantages of data visualisation — better comprehension of the data trends, facilitates faster and more accurate decisions, identifies correlation and anomalies, supports storytelling with data, and engages and retains audience attention with visuals. He highlighted how a data dashboard can enhance and uplift storytelling and maintained that the most important aspect of data visualisation is how it helps in retaining audience attention through visuals. He also pointed out a few disadvantages of data visualisation- misleading visuals can distort facts, oversimplification may overlook critical details, requires expertise and reliable tools, information overload with excessive data can lead to biased interpretations if not done ethically. He talked about the application of data visualisation and mentioned that it is used extensively in business nowadays because of the digital marketing trend. He explained that social media generates huge amounts of data making it difficult to identify the underlying trends and therefore the data visualisation tool is extremely important. He further noted that data visualisation is also applied in healthcare, marketing, finance, and even in education. He named some of the popular data visualisation tools – Tableau, Power BI, and Google Looker Studio. He stated that Tableau is an interactive dashboard for business intelligence and moved on to Power BI, a product from Microsoft that allows data analytics with seamless integration with Microsoft tools. He then focused on Google Looker Studio, a free, simple and effective web-based chart platform.

Dr. Gopakumar discussed some of the best practices for data visualisation. Some important points he highlighted to maintain a clean data dashboard are – choose the right chart for the right data type for better communication, avoid clutter and maintain simplicity, use consistent colours and labels for clarity, provide context and annotation wherever required, ensure data accuracy and ethical representation. According to him, data visualisation is an indispensable tool for analysing and interpreting data that can reveal valuable insights and

support better decision-making. However, he added that it is pertinent to use it responsibly to avoid misleading conclusions.

Dr. Gopakumar gave a demonstration of how to create a data dashboard using Google Looker Studio. He first showed the data in an Excel spreadsheet that includes delivery dates, department, subject, recommended by publishers, order date, delivery date, year of publication, mode of purchase, types of books, suppliers, original price, discount and the final price. He gave a step-by-step detailed demo and requested the participants to note down the steps. In the step, he mentioned that everyone should have the data in an Excel sheet with one row for one item. The next step was for everyone to upload the data to their Google Drive. He moved on to the third step where the file needs to be converted into a Google sheet and then showed the dashboard he created using sample data. He mentioned that the visualisation is shown in three pages that encapsulate the key performance indicators, other purchase details and the data for download. He emphasised the first page that includes visualisation of key performance indicators concerning the library, which includes the total number of books purchased, total amount spent, average cost of a book, average discount, average number of days for delivery, and median year of publication. He observed that the median year of publication is extremely important as that will reflect whether a person has purchased the maximum number of books towards the current year. He talked about the visualisation where the five departments along with the number of books purchased and the cost of books are shown. He also highlighted the savings from the discount, recommendations by faculty, and the method of purchase and then showed the next page which reflected subject-wise purchase, books based on the year of publication, and purchase of books supplier agency. He moved to the third page which highlighted the number of books publishers-wise and further explained that the data dashboard is interactive where a user can click a particular data element and the entire data dashboard changes to suit that particular selection. He demonstrated how a user can check the data of a particular year and it also indicates the increase or decrease in the procurement of books, the amount spent, the median year and other data elements.

Dr. Gopakumar highlighted and affirmed that users can create a data dashboard in Google Looker Studio using their Gmail accounts. He showed the design of the software and how a user can search files on it. He discussed the three items of the create option -- report, data source and explorer. He mentioned that the report is the dashboard and there are several data sources like digital marketing. He noted that many online businesses depend on the collection and analysis of this data to run their operations and then talked about Google Analytics where one can find how many people visit a website. He further added that with the help of the Explorer facility, a person can drill down into the data and showed some of the templates that can be used for data analysis. He asked all participants to keep in mind two key points: first, a window will appear prompting them to select their country due to customisation settings; and second, they will need to enter the name of their company. He highlighted the Google Connectors window that includes 24 free services like Google Looker, Google Analytics, Google Ads, Google Sheets, Big Query, AppSheet, File Upload, Microsoft Excel and so on. He explained the various customisations like themes, layout, number of pages, data sources, charts, etc. He presented the key performance indicators using scorecards and elaborated on how we can label and customise the visualisation of different data elements.

Dr. Gopakumar concluded his presentation by reaffirming that once the fundamentals are understood, creating data visualisations becomes significantly easier.

Dr. Sangeeta Kaul thanked Dr. Gopakumar for his enriching presentation. ■

Transforming Your Leadership and Management Skills

DELNET in collaboration with Amity University Haryana, Gurugram organised an insightful webinar on "Transforming Your Leadership and Management Skills" on April 30, 2025. Prof. (Dr.) Vikas Madhukar, Pro-Vice-Chancellor, Amity University Haryana, Gurugram was the distinguished speaker for the webinar.

Dr. Sangeeta Kaul, Director, DELNET, extended a warm welcome to all the esteemed dignitaries, officials of Amity University, library and information science professionals, department heads, IT professionals, faculty, researchers, scholars and students who joined the session from various parts of India and across the globe. The session was attended by 561 participants.

Prof. Vikas Madhukar commenced his presentation by extending a warm welcome to all the participants. He gave a brief introduction about Amity University, describing it as a multidisciplinary institution currently offering 110 undergraduate and postgraduate programmes, PhD programmes in 38 disciplines, and hosting a student body of 6,500. He emphasised the university's diverse and inclusive campus environment. He noted that during his long association with Amity University, he gained valuable insights into leadership—not only through academic study but also through practical experiences such as engaging with people and navigating crises.

He outlined the agenda of his presentation which he crafted keeping in mind the diverse backgrounds of the participants. He believed that leadership is all about nurturing people who in turn nurture the organisation. He said that people are the driving force behind a successful organisation and as such developing their skills and talent, supporting their well-being and giving more freedom to them is extremely important for building a strong relationship. According to him, these will allow people to be more productive, innovative, committed and contributing positively to their domain in sync with their own goal and the organisation's goals. He further mentioned that the role of a leader is not about being in charge but it is about taking care of all those in charge. He said that the concept of leadership has evolved in the last two decades with servant leadership which is more people-oriented rather than task-oriented. He explained that this leadership focuses on building a strong team and cultivating an environment that fosters commitment from individuals, building trust in the organisation and bringing positive outcomes by cultivating a performance-driven culture. He further highlighted John Kotter's three pillars of leadership -- vision, action and communication. These pillars stress the need to create a clear future by motivating individuals to take action and effectively communicate their vision. Prof. Madhukar believed that the team should look at the leader's vision as the shared vision and the leader must translate this vision into action by empowering people, mobilising resources and providing resources creating a culture of innovation and experimentation where the team can restore their trust and confidence in the leader.

According to Prof. Madhukar, leadership is a complex and dynamic concept as the core function of leadership is to influence people. He mentioned that influencing people involves dealing with multiple people, multiple situations, multiple issues, individual differences, and perceptual differences that collectively lead to the effectiveness of the leadership. He charted a few factors that signify leadership as a complex and dynamic concept, i.e. influence and context, dynamic interactions, complex systems, diverse skills and qualities, perceptions and interactions. He emphasised that it is extremely important for the leader

to understand and adapt to the environment and make decisions that are appropriate for the masses not for individuals. Another point he mentioned is that a leader should make a decision considering the welfare and well-being of everyone. Therefore, he suggested that there is no single standardised leadership style suitable for all situations. He recommended that leaders should constantly develop their skills and transformthem concerning the changing circumstances, situations, environment and the expectations of the stakeholders.

Prof. Madhurkar discussed the debated topic of whether leaders are born or made. He alluded to one school of thought that believes leaders are born, while also addressing the perspective that leaders are made. He stressed that leadership like any other discipline can be taught, skills can be transformed and leaders can be developed. He shared the interesting monozygotic twin studies that showed that 30 per cent of genetics plays a role but 70 per cent is something that can be developed. He mentioned that it was specified in a study that a specific gene RS4950 genotype located within the CHRNB3 gene is responsible for transferring leadership capability to the next generation, adding that an individual can transform himself into a strong, effective leader through his experiences, environment, surroundings, constant learning and education.

Prof. Madhukar illustrated the difference between management and leadership, stating that management emphasises function more while leadership is more about influencing, motivating, inspiring, creating, and mentoring. However, he pointed out that one can find a lot of overlapping between these two concepts and a manager is also a leader. He explained the difference between the leadership skills and management skills, enumerating that leadership skills involve motivation, progressive-thinking, visionary approach, empathy, emotional intelligence, and critical thinking while managerial skills are more of operational skills, organisational skills, supervisory skills, and strategy thinking. He compared the pre-pandemic times and post-pandemic times which have seen an enormous transformation in terms of thought processes, preferences, focus on work and well-being, work-life balance, mental well-being and technology. He highlighted the World Economic Forum Report of 2025 which stated that millions of jobs will be eliminated, and millions of new jobs will emerge in times to come with the advent of technology. He mentioned that technological advancements like AI, automation digitalisation, the remote and hybrid work will impact the future of work. He stressed that the skill set and demography of the workforce have changed and concerns about the environment, gender equality, and inclusivity have taken centre stage of the workforce. He further noted that with the changing expectations of the workforce, it becomes imperative for a leader to transform and build essential skills to cope with future challenges.

Prof. Madhukar shared some of the key points of the changing paradigm of leadership in the wake of the future of the job market. These include the shift from autocratic to collaborative leadership, focus on people and relationships, adaptability and agility, growing emphasis on communication and emotional intelligence, strategic thinking and effective change management, and the importance of digital transformation and data-driven decision-making. He mentioned that today's leaders are more people-oriented, focusing on employee well-being and fostering a positive work culture, stressing that a leader must have the right mindset and right perspective. According to him, the right leadership mindset is growth-oriented where the team members are prepared to embrace challenges, do not fear failure, and constantly learn from their mistakes. He mentioned that a leader must have a vision and purpose to

motivate the team members to achieve goals, adding that the leader should take responsibility for actions that build trust among the team members.

While discussing trust, he observed that there is a positive correlation between trust and team performance. He believed that trust is the magic glue that holds leadership together, enabling leaders to inspire, motivate, and empower their teams to achieve their full potential.

Prof. Madhukar described some of the instances where a leader can fail. He observed that leaders are at the risk of hubris, overconfidence and arrogance which can impact their decision-making process inevitably leading to failure. He also emphasised that a lack of adaptability and an unwillingness to learn or adjust strategies in a changing environment can be major obstacles to effective leadership. Furthermore, he noted that poor interpersonal skills and weak relationship management can damage a leader's ability to inspire and connect with others. He stressed that a lack of ethics, integrity, transparency, and accountability can severely diminish a leader's credibility and result in failure. He pointed out that a leader may fail due to poor strategic thinking and a lack of vision and firmly believes that without a clear vision, a leader is destined to fail. He further added that ineffective execution and a lack of consistent follow-up can also contribute to a leader's failure. He is convinced that leadership is all about balancing pressure and taking up other's stress which leads to burnout.

Prof. Madhukar emphasised the importance of fostering a collaborative environment by building trust among team members, mastering the art of delegation, and practising effective time management. He elaborately demonstrated an action plan for the transformation journey of the leaders, outlining four key questions that can help leaders assess their transformation journey: Which leadership skills need to be developed? What specific actions must be taken? What resources or support are required? And how will progress be measured?

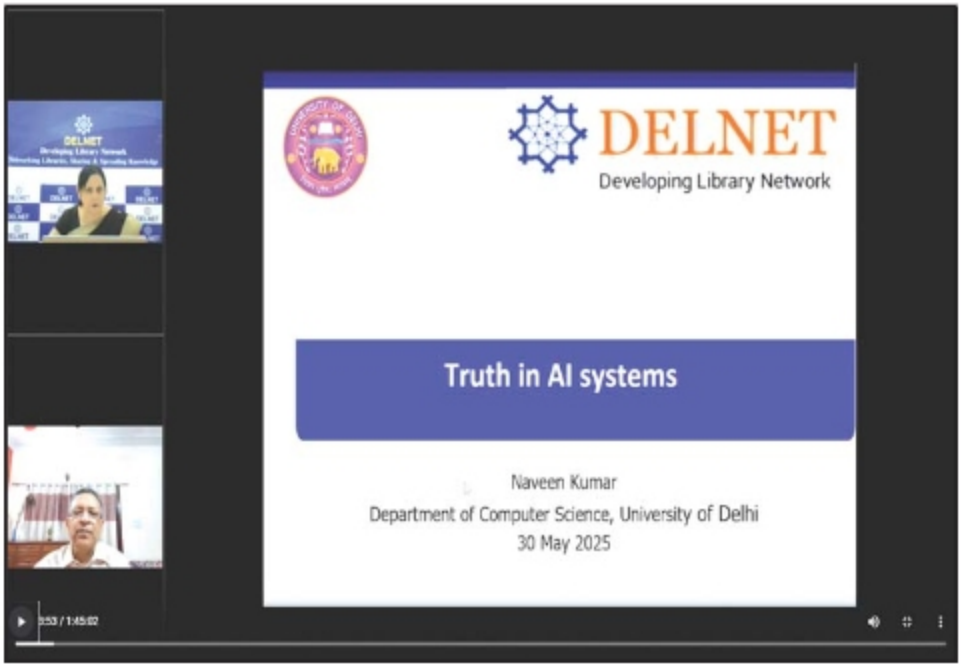
Prof. Madhukar concluded his presentation by highlighting that everyone is a leader in their domain and encouraged all participants to continuously evolve through their experiences. The presentation was followed by an interactive question and answer session.

Dr. Sangeeta Kaul thanked Prof. Vikas Madhukar for his brilliant thought-provoking presentation and shared her hope for more such enlightening opportunities in the future. ■

Number of Member-Libraries as on December 31, 2025 - 9695

Andaman and Nicobar	2
Andhra Pradesh	582
Arunachal Pradesh	8
Assam	71
Bihar	98
Chandigarh	23
Chhattisgarh	147
Dadra & Nagar Haveli	2
Daman and Diu	2
Delhi	352
Goa	47
Gujarat	380
Haryana	438
Himachal Pradesh	78
Jammu & Kashmir	39
Jharkhand	84
Karnataka	407
Kerala	429
Ladakh	1
Madhya Pradesh	617
Maharashtra	1529
Manipur	13
Meghalaya	11
Mizoram	4
Nagaland	3
Odisha	196
Puducherry	38
Punjab	314
Rajasthan	426
Sikkim	13
Tamil Nadu	1204
Telangana	722
Tripura	12
Uttar Pradesh	1068
Uttarakhand	124
West Bengal	183
& few outside India	
Total	**9695**

Truth in AI Systems



DELNET organised an insightful webinar on " Truth in AI Systems" on May 30, 2025. Prof. Naveen Kumar, Senior Professor, Department of Computer Science, University of Delhi was the distinguished speaker of the session.

Dr. Sangeeta Kaul, Director, DELNET extended a warm welcome to all the esteemed dignitaries, library professionals, computer science specialists, data analysts, AI experts, faculty, researchers, scholars and students who joined the session from various parts of India and across the globe. The webinar was attended by 961 participants.

Prof. Naveen Kumar started his presentation with an engaging outline of the key topics to be covered - a quick historical overview of artificial intelligence, the motivation behind seeking truth in AI, the importance of explainability in AI systems, and some models that can be used to modify AI actions, along with their limitations and its potential future in this field. He showed some ancient coins highlighting the fact that the notion of artificial humans or robots fascinated mankind even 2500 years ago. He further explained how, in 1986, Hinton and Williams introduced learning representations and fast back propagation algorithms. He said that this advancement was accompanied by the emergence of parallel computing and the development of software concepts that continued with the introduction of convolutional neural networks (CNNs), sequential models, and transformers ultimately leading to contemporary tools such as ChatGPT, Gemini Cloud, Microsoft Copilot, LLaMA, Perplexity AI, and others.

Prof. Naveen Kumar highlighted the significance of the ACM Turing Award, often considered the 'Nobel Prize of Computer Science'. He emphasised how the computer science community recognised the growing importance of Artificial Intelligence when, in 2018, three prominent AI researchers—Geoffrey Hinton from the University of Toronto, Yoshua Bengio from the University of Montreal, and Yann LeCun from the Courant Institute of Mathematical Sciences—were awarded the ACM Turing Award for their pioneering work in Artificial Intelligence. According to him, AI is omnipresent and extremely powerful. He gave a few interesting examples from Andrew Slavin-Ross PhD thesis "Right for the Right: Training Neural Networks to be Interpretable, Robust and Consistent with Expert Knowledge." The first example he gave was of a father teaching his son what a sports car is by examples. But the son misinterpreted that if the colour of the car is red it must be a sports car. He moved to the next example where an Artificial Neural Network (ANN) was trained to detect a tank partly hidden behind trees. However the ANN failed to discriminate between pictures of trees with partially concealed tanks and plain trees because of their shadows. The final example he highlighted was of an AI model that made an absurd prediction that asthma reduces the mortality risk for pneumonia patients. He explained that this was because asthma patients got aggressive care in the ICU, leading to improved prognosis, while other pneumonia patients were treated in general wards. The model failed to consider this context, but doctors identified this absurdity and rejected the model. Prof. Naveen Kumar further elaborated on how social media platforms continuously present content tailored to users' preferences as a strategy to generate revenue.

Prof. Naveen illustrated the concept of Explainable AI. He highlighted how AI has transformed since 2015, and Explainable AI has taken the centre stage. He mentioned that the Explainable AI provides a much more transparent prediction as it reveals the reason behind its recommendations and

also helps to figure out when the model can be trusted. He referred to a demonstration by Rivero and his colleagues, in which a classifier was used to distinguish between a wolf and a husky and the model correctly classified five out of six images. However, he explained that the model did not focus on the animals' faces but rather on the surroundings to make its predictions. He further pointed out that nowadays AI is used in several applications and decision-making processes and spoke about an AI model that was injected into the American legal system which turned out to be biased towards African Americans.

Prof. Kumar believed that wrong decisions of AI models can be very costly, stressing the importance of understanding model operations in several domains as it provides recourse to the affected individuals, facilitates debugging, enables bias detection and assesses trustworthiness of the system. He talked briefly about the XAI (Explainable AI) initiative launched by the US Department of Defence Advanced Research Projects Agency (DARPA). He acknowledged the growing importance of the notion of truth and explainability in AI systems and shared some of the online courses - Coursera (Duke University), Fiddler AI (Google Slides and Videos), AI Ethics and Explainable AI in Healthcare. (NanoSchool), Responsible AI (Microsoft Learn), Elements of AI (University of Helsinki), Data Ethics, AI and Responsible Innovation (University of Edinburgh). He also shared some of the international and national events on Explainable AI scheduled for 2025. He further highlighted some of the desirable characteristics of Explainers. According to him, Explainable AI models should be simple to understand for everyone, honouring the target audience. An example was cited of a user-friendly AI model that spotted fake news that houseflies can spread Coronavirus. Another desirable characteristic of Explainer which he emphasised is local fidelity, mentioning that the explanation must at least be locally faithful and correspond to its behaviour in the vicinity of the instance being predicted. He explained the concept using an example of an AI model designed to predict diabetes, illustrating the key features that the model considers during prediction and demonstrated how the model's behaviour and its explanations remain consistent, even with slight changes in the input features. He further presented a global assessment of the model using a Decision Tree to illustrate its global fidelity.

Prof. Naveen Kumar referred to Lloyd Shapley, a Nobel Prize-winning economist and mathematician who developed the economic theory for distributing rewards. He noted that it was in 2017 when computer scientists began applying this concept to machine learning, introducing it as Shapley values. He explained the theory with a simple example. According to him, the theory focuses on sampling a large set of features to present the final results. He shared their research, which used Shapley values to analyse over 20,000 genes, and identified a subset of genes associated with different classes of cancer. He also stressed the importance of counterfactual explanations, which highlight small changes in input features that could alter the model's prediction to a different predefined outcome. He affirmed that over 25,000 AI-based papers were written on Covid-19 for the use of the medical community but none of them were clinically deployable. He pointed out that the key issues of those AI-based papers are biased in small data sets, variability across different large data repositories, poor integration of data from multiple sources, and the difficulty of the task of prognostication. He further noted that most of the models did not even have a review from a clinical expert and those that had a clinical review, were not reviewed by data science experts.

Prof. Kumar reaffirmed that AI is extremely useful, powerful, omnipresent and that its actions have become explainable over time. However, he also cautioned participants about the potential dangers and unintended consequences caused by AI, highlighting some of the havoc caused by AI. The first instance of havoc he described was how the social media algorithm played a key role in spreading hate speech targeting minority communities in Myanmar. He explained that social media algorithms learned that hateful content has much greater potential to share and as a business-driven company their profit depends on sharing. He stated the 2018 UN fact-finding mission concluded that Facebook had been a useful instrument for vilifying the community. He presented the Amnesty International Report that detailed how Facebook's algorithms "proactively amplified" hate content, adding that the Meta Report 2018 where they admitted it was not doing enough to prevent its platform from being used to incite division and offline violence. The second instance of havoc was COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) a software tool deployed by the US criminal justice system. He mentioned that this model labelled the children from the African American background as serious offenders because the input data collected had a larger number of African Americans. He discussed how most of the war weapons are controlled by AI, referring to the discriminatory hiring algorithms that favoured a gender or ethnicity for a role. He gave the example of Amazon scrapping an AI tool in 2018 as it showed bias against women. He also explained that the stable diffusion model manipulates politicians' fake images during elections and

compromises on the issues of privacy and authenticity.

Prof. Naveen Kumar concluded his presentation with an enlightening quote by Stephen Hawking: "The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge." Finally, he emphasised that one of the most dangerous aspects of the AI-driven world is the growing pressure to accept AI-generated information without question, as people become increasingly reluctant to verify facts.

The presentation was followed by an interactive Q&A session with the participants. In the interactive session, the participants raised thoughtful questions on myriad issues of Artificial Intelligence. The first question was on how truthful AI tools are for reviewing articles. Prof. Naveen answered that most of the journals do not encourage the use of AI tools for article review as the tools are still in the experimental stage. However, he added that one can use the tools to polish and refine language and should keep in mind that AI is not 100 per cent correct. Another participant asked about the use of AI tools in the library and how library professionals can implement the technology in their libraries. Prof. Kumar replied that libraries should make AI tools available to the users, mentioning that universities should encourage students to take up online courses on these AI systems. He further suggested that libraries can buy some online courses and make them available for the user community. Adding to his response, Dr. Sangeeta Kaul observed that DELNET has created a special link for AI tools and technologies for the librarians, researchers and scholars. She explained that it is a huge directory of resources with descriptions. She genuinely believed that library professionals have a greater responsibility to educate the user community. She talked about their online courses portal which has a wide range of courses for young professionals, sharing DELNET's upcoming NACLIN conference where they scheduled an entire tutorial on AI tools and techniques. There were other questions relating to policies, training and creating models for libraries and ethical issues of AI. Prof. Naveen Kumar responded that there are no policies for AI tools as it has not been officially accepted. While discussing training and creating AI models for libraries, he stressed that it is the data scientists or AI engineers' job to train the AI models and library professionals are the users of these models. He affirmed that the most important job of library professionals is to manage content and not produce content. Another important question that was raised was who is responsible when an AI system spreads misleading information. At this, Prof. Naveen acknowledged that the legal system is very weak in this aspect, and he focused on the design of the algorithm that will give maximum user engagement. There were also questions related to the ethical use of AI, concerns about AI replacing human jobs, and copyright issues linked to AI tools. He stressed that AI does not make us lose ethics, but the real issue lies in placing excessive trust in it. Regarding the issue of job replacement, he acknowledged that such concerns arise with every technological advancement but is hopeful that human wisdom will find solutions for the same.

Dr. Sangeeta Kaul thanked Prof. Naveen Kumar for his insightful and empowering presentation and expressed her willingness to collaborate further in sensitising the user community. ■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Inaugurated on
October 4, 2025

Dr. H. K. Kaul Memorial Lecture - 2025

Libraries in the Age of AI and Big Data

DELNET organised the Dr. H. K. Kaul Memorial Lecture 2025 entitled "Libraries in the Age of AI and Big Data" on July 1, 2025 at DELNET, New Delhi. The esteemed speaker was Dr. Neeta Verma, former Director-General, National Informatics Centre (NIC), MeitY, Government of India, New Delhi and Chief Advisor (Information Technology), Election Commission of India, New Delhi.

Dr. Sangeeta Kaul, Director, DELNET extended a warm welcome to the distinguished invited speaker Dr. Neeta Verma. She also welcomed library and information science professionals, academicians, educationists, poets, writers and all participants—both online and offline—who joined the session from across India and other countries. The lecture was attended by 1060 participants online and more than 100 participants attended it in-person at DELNET, New Delhi.

Dr. Neeta Verma expressed her heartfelt gratitude and felt truly honoured to deliver the Dr. H.K. Kaul Memorial Lecture. She proudly remembered her long association with DELNET and admired Dr. H. K. Kaul as a true visionary who championed the fundamental concept of library networking, helping libraries to remain relevant in the digital era.

Dr. Neeta Verma acknowledged that libraries are bastions of knowledge and learning, evolving from the ancient collections of scrolls and manuscripts to today's comprehensive digital repositories. She mentioned that the traditional role of libraries has been to collect, organise, preserve and provide access to books and physical materials. She believed that libraries are quiet spaces where one can read, study, and research. While talking about big data and artificial intelligence, she pointed out that libraries have been concerned with the management, organisation, and dissemination of information and knowledge. She mentioned that big data and artificial intelligence have brought a seismic shift in the information landscape. According to her, while libraries face the challenge of managing the tsunami of knowledge, data and information with limited staff and resources, this also presents an opportunity to create something innovative. She discussed ways of leveraging technology to bring innovation into the existing library setting.

Dr. Verma illustrated the basic tenets of artificial intelligence and big data. She described big data as the data emanating from various sources like social media posts, YouTube videos, all kinds of online transactions and mobile devices. She mentioned that these data are used to uncover patterns, trends and insights that support decision-making. She pointed out that healthcare, education and business generate extensive data resulting in improved services, forecasting behaviour and developing smarter systems through analysis and visualisation of real-time information. She stated that 328 million terabytes of data are created daily and by the end of 2025, we will have 180 zettabytes of global data with an annual growth of 25 per cent. She spoke about some of the major sources of data: social media, mobile phones, IoT devices, E-commerce, healthcare, scientific research, education, government, finance, media and streaming. She focused on research data and how the volume of research data is increasing. She talked about observational data, experimental data, simulated data, survey and behavioural data, administrative and public records, and open data portals. She added that many academic institutions have opened their own data repositories, and DELNET also promotes this knowledge and data repositories.

Dr. Verma discussed the basic characteristics of Big Data. She maintained that just a large or substantial amount of data does not

become big data, it also needs volume and velocity. She observed that big data is no longer a structured database but encompasses diverse data types and sources. She emphasised the veracity of data that establishes the credibility or authenticity. She further highlighted the value of datasets that involve high-value datasets, medium-value datasets or low-value datasets. She described how traditional libraries have transformed over a decade. She mentioned that traditional libraries curated finite, static collections while nowadays knowledge production is continuous, decentralised and increasingly digital. She believed that the library system has become much more complex because along with the curation, one has to establish the veracity and value of the data. She stated that many journals are encouraging and asking researchers to attach their data repository. Moving on to Artificial Intelligence, she referred to it as the simulation of human intelligence in machines that have been programmed to think, learn and make decisions. She explained that AI systems use data, apply algorithms and over time create models, mentioning that earlier people needed a broad spectrum of data and computing power to create an AI model. She noted that nowadays AI is transforming industries like healthcare, education, finance and more with its capabilities like speech recognition, image analysis, language translation and problem solving. She affirmed that we interact with AI every day without even realising it and maintained that AI intelligently observes the patterns and accordingly presents the right information. She said that Digiyatra is a classic example of how an AI model has made the boarding process smooth and easy. She stated that AI is not a new concept. It has gained popularity recently due to its democratisation, making it accessible to everyone through tools like ChatGPT, search engines, autonomous cars, and more.

Dr. Verma emphasised the major streams of AI on which people are working and services are being developed -- Natural Language Processing (NLP), Machine Learning, Computer Vision, Robotics, Knowledge Representation, Planning and Decisionp-Making, Reasoning, Natural Interaction. She believed that AI has quietly made our lives easier, faster and more personalised primarily through Natural Language Processing and Generative AI. She added that AI has expanded the ability to connect far more and mentioned that India has initiated an AI Mission, with the government allocating Rs. 10,372 crore over five years. She talked about how they have set up a 34,000+ GPU which is fundamental for startups, research and public use and is accessible to everyone. She addressed the challenges of AI. The first challenge she pointed out is the biases and discrimination while delivering its decisions. Another challenge of the AI model is the risk of data privacy. She alluded to the lack of transparency, accountability, access and inequality of the AI models. She mentioned that over the last 10 years of Digital India, the government is working to bridge the digital divide so that everyone can have equal access to technology, internet and AI. Pointing out the challenge of misinformation and deepfakes, she said that, in light of the growing challenges, a new area of AI is emerging known as Responsible AI which is ethical and accountable, in design, development and deployment. The key principles of Responsible AI are – fairness, transparency, privacy, accountability, safety, human-centric, inclusiveness and sustainability.

Dr. Verma illustrated the difference between misinformation and disinformation. She observed that misinformation happens when someone inadvertently transmits inaccurate or wrong information and it becomes viral, while disinformation deliberately misleads and spreads wrong information. She maintained that combating misinformation requires media literacy, fact-checking, responsible platform governance, and public awareness to access accurate and credible information. She highlighted the bias and discrimination related to race, gender, ethnicity, and status because of inadequate data representation of these groups. She explained how libraries can help in addressing bias and discrimination in AI. According to her, libraries should promote AI literacy, curate inclusive data, facilitate ethical AI dialogues, provide access to fairness tools, support digital equity, partner with institutions and archive biased outcomes. She enumerated the technology-led drivers for library transformation - Explosion of digital content, rise of AI and Generative Tools, Intelligent Search and Discovery Platforms, User Expectations of Multimedia Access, Evolving Research Ecosystem, Digital Preservation and Long-Term Access and Research Data Management. While discussing data research management, she explained how institutions can build their repositories and accelerate research in the country by sharing data. She outlined how libraries can become trusted navigators for their users by building personalised learning and inclusive services. She maintained that libraries can be champions of equity and ethics and AI can become a big learning and innovation hub. She described the intelligent discovery systems which have shifted from keyword-based search to context-rich, exploratory knowledge journeys, suggesting that libraries can enable a conversational interface and integrate multilingual NLP tools to support users in diverse languages. She also talked about building context-aware search engines

that adapt to users' intent, academic level and field. She highlighted that there is also a shift in libraries from static cataloguing to a responsive knowledge ecosystem with virtual experience and enabling AI-curated reading lists for courses, disciplines or policy briefs. She spoke about how libraries transform information overload into opportunity by helping people, not just access information but to understand, use and trust it. She mentioned that libraries should promote and teach users to critically evaluate sources and sift through vast resources to curate high-quality, relevant and verified materials.

Dr. Verma highlighted the predictive and adaptive services of libraries, mentioning that libraries can become intelligent companions in personal and academic growth journeys by integrating AI models to predict researchers' needs. She commented that libraries can forecast demand, optimise acquisition strategies and manage inventory more effectively and further noted that libraries should generate metadata from the digital content. She cited the example of Stanford University research which shows that metadata can be generated even from an audio collection and placed in a searchable form. She emphasised using virtual assistants and chatbots to respond to routine queries using domain-specific AI bots. She also discussed how libraries can enhance their user experience by incorporating the right kind of interface.

Dr. Verma made it clear that AI cannot replace libraries, but rather, it should work alongside them to enhance their role as stewards of trust. She observed that the primary goal of the library is to make information accessible to everyone and therefore encouraged library professionals to integrate cognitive computing tools for the differently abled. She elaborated on how libraries can digitise and preserve rare books and scriptures with the help of AI functionalities like Optical Character Recognition (OCR), Natural Language Processing, and Image Enhancement algorithms. She cited the example of Punjab Digital Library which has digitised over 85 million pages, preserving South Asian heritage using AI-enhanced scanning tools. She said that libraries can provide research and academic support with AI Tools with AI-assisted Literature Review, Data Repositories and FAIR principles, Digital Scholarship and Visualisation tools. She further explained that libraries can truly become AI learning hubs. Libraries should be encouraged to educate their users by hosting workshops on AI basics, ethics and responsible use and thus help humanity in the long run. She maintained that the new age library should not be just a physical space for books, it should be a smart, inclusive, collaborative and technology-enabled knowledge and innovation hub. She also pointed out that transformation should be a long-term objective that requires skill upgradation of library professionals. She suggested that libraries should start small, understand their strengths, build prototypes, consult all stakeholders and continuously work on capacity building for the community.

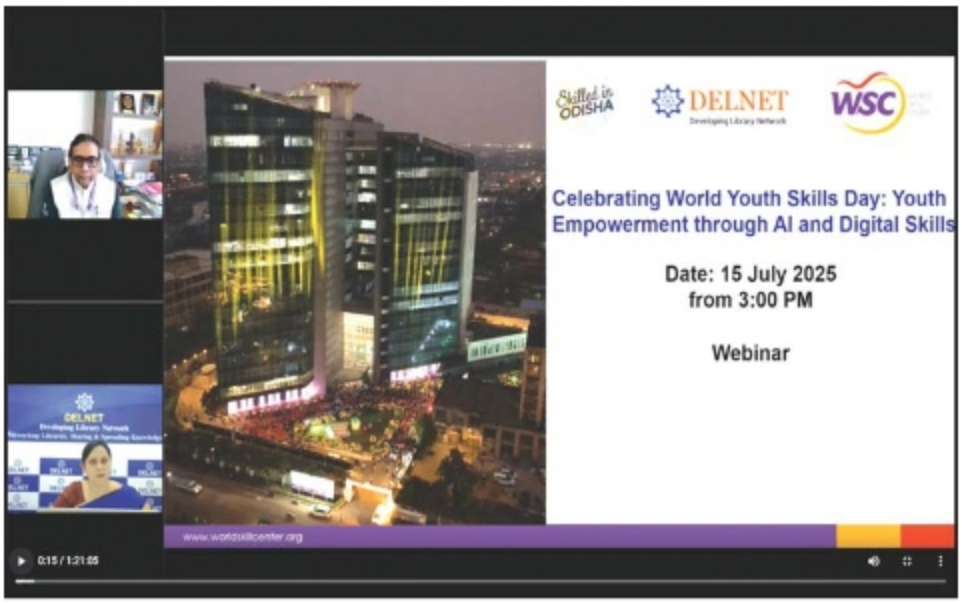
Dr. Verma concluded her presentation saying that as institutions are at the intersection of the tradition and transformation, libraries have a unique opportunity to lead humanity into a more informed, inclusive and intelligent future.

An interactive question-and-answer session followed the presentation. One participant inquired about fact-checking tools to combat misinformation and disinformation. Dr. Verma responded by emphasising the need to integrate AI tools into library science education. She suggested that libraries could start with basic AI courses and work with IT departments to build knowledge repositories and apply a data visualisation layer. Another question was about the specific areas where libraries need immediate attention. At this, Dr. Verma replied that conversational AI needs to be instantly leveraged as applying these models is handy, economical and easy to use. There was also a discussion on how to retain creativity in the age of AI tools. Dr. Verma emphasised the importance of allowing students to explore and understand these tools, so they can use them ethically and thoughtfully.

Dr. Sangeeta Kaul thanked Dr. Neeta Verma for her exceptionally brilliant and empowering lecture and hoped for her guidance on how DELNET can introduce responsible AI to strengthen the libraries and library community. ■

The entire videorecordings of the webinar sessions are available at DELNET's Youtube channel WEBVIEW at **https://www.youtube.com/@delnetwebview6284**

Youth Empowerment Through AI and Digital Skills



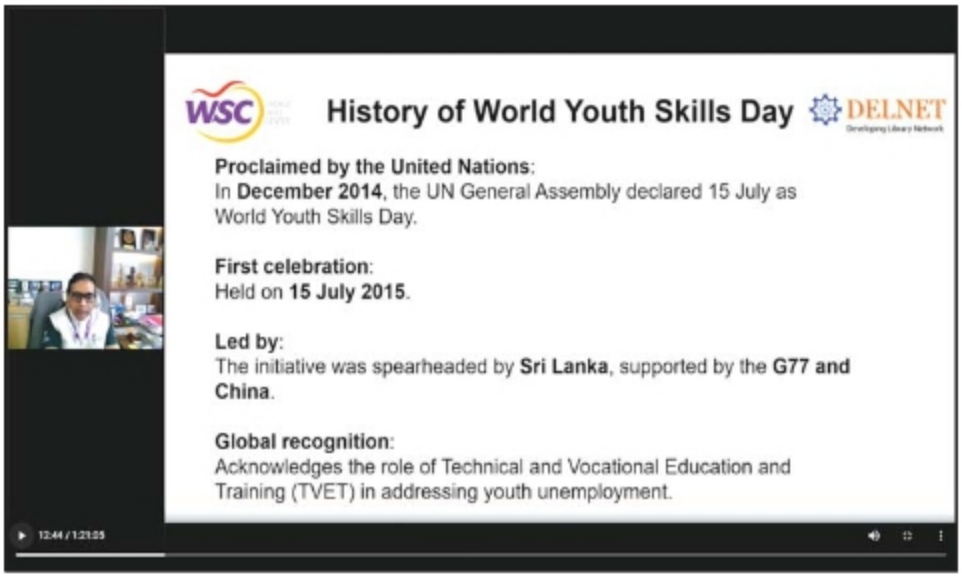
DELNET in collaboration with World Skills Centre, Bhubaneswar, Odisha celebrated World Youth Skills Day by organising an empowering programme on "Celebrating World Youth Skills Day: Youth Empowerment through AI and Digital Skills" on July 15, 2025. Prof. T. Thambyrajah, Principal, World Skill Centre, Bhubaneswar, Odisha was the distinguished speaker of the session.

Dr. Sangeeta Kaul, Director, DELNET, extended a warm welcome to the esteemed speaker Prof. T. Thambyrajah, officials from the World Skill Centre including Mr Niranjan Mahapatra, Manager, LRC, WSC, the online participants comprising librarians, LIS professionals, faculty, researchers, scholars and students who joined from various parts of India and many other countries. The session was attended by 546 participants.

At the very outset, Prof. T. Thambyrajah expressed his profound appreciation for the opportunity to collaborate with DELNET and recognised its instrumental role in enhancing student support and academic engagement. He talked about the WSC's Learning Resource Centre which is an integral part of their organisation not only for providing education but also promoting student advocacy using all the resources available at their disposal. He observed that World Youth Skills Day holds a special place for their organisation and this year too they had an excellent celebration graced by the Hon'ble Minister for Skills Development, Odisha. He mentioned that the celebration displayed over 49 projects and many awards were given. He affirmed their commitment to encouraging youth to demonstrate their technical skills and innovation capabilities in developing projects.

Prof. T. Thambyrajah gave a brief background on World Youth Skills Day. He said that World Youth Skills Day is celebrated on July 15 every year to raise awareness about equipping young people with skills for employment, decent work and entrepreneurship. He mentioned that the prime objective is to promote skill development as a strategic tool to empower youth, reduce unemployment and boost economies. He illustrated the global context behind celebrating World Youth Skills Day and mentioned that following the global financial crisis of 2008–2009, youth unemployment began to rise significantly making Technical and Vocational Education and Training (TVET) a global priority to bridge the gap between education and employment. He noted that according to the International Labour Organisation (ILO), the global youth aged 15 to 24 faced higher unemployment rates - often three times higher than adults. He further stated that the UN General Assembly declared 15 July as World Youth Skills Day in the year 2014 and following that the first celebration was held on 15 July 2015. He mentioned that the idea was mooted and spearheaded by Sri Lanka, supported by the G77 countries, and the focus was to acknowledge the role of TVET in addressing youth unemployment. He shared how this topic is very close to his heart as he has spent over 30 years in the TVET ecosystem. He strongly maintained that with skills, youth can make a life for themselves.

Prof. Thambyrajah illustrated the theme of World Youth Skills Day, 2025 "Youth Empowerment through AI and Digital Skills". He explained that the theme is foundational because there is a digital shift and the young generation should not be left behind in the digital shift. He highlighted that most of today's youth are digital natives actively using phones, social media, etc but that does not imply that they have the digital skills required for employment. He pointed out that the youth should also be creators of technology and not just consumers. According to him, the theme recognises that AI is rewriting the rules of education, work and inclusion- and youth must be familiar with this. He believed that in today's digital economy, lack of skills results in lack of access to knowledge, information and the ability to leverage technology. He pointed out that a survey revealed that 86 per cent of the students are not ready or prepared for an AI-



enabled workplace. He suggested that we should identify the foundational pieces that need to be built. Another point, he underlined was that 90 per cent of adolescent girls in low-income countries are disconnected from digital access and the government should implement policies to address this concern.

Prof. Thambyrajah discussed the importance of World Youth Skills Day. He noted that 7 in 10 young people are economically disengaged due to a lack of training. He strongly opined that youth without skills are societies without stability, further stating that the NEET rate (Not in Education, Employment or Training) is over 40 per cent which is extremely worrying. He pointed out that in countries like India, Singapore students who are less academically inclined cannot leverage higher education opportunities and hence choose TVET. He maintained that this thought process should not be encouraged, asserting that TVET is not Plan B but a parallel powerhouse that should evolve to prepare future-ready, AI-enabled youth. He further focused on how we need to build digital skills to address the safe usage of digital technologies because of the rise of cyberbullying. According to him, TVET unlocks the green road, not only for jobs but also for building sustainable economies and resilient youth. He also talked about the importance of acquiring new skills, saying that they have set up the learning resource centre and how they equipped the centre with organisations like DELNET.

Prof. T. Thambyrajah gave a brief outline of the Industrial Revolution and its context. He explained that the First Industrial Revolution began in 1784 with the advent of mechanisation, followed by the Second Industrial Revolution in 1870, which was marked by the introduction of assembly lines and mass production, enabled by electrification. He then discussed the Third Industrial Revolution, which started in 1969 and was characterised by the rise of automation and electronics. Finally, he focused on the Fourth Industrial Revolution, which began in 2011 and is defined by digitalisation. He elaborated that digitalisation means collecting information in cyber-physical systems networks and where humans work with robots and cobots. He enumerated key technologies – AI, Internet of Things (IOT), Robotics and Automation, Big Data and Analytics, Cloud Computing, 3D Printing, and Additive Manufacturing. He mentioned that the goal and objective is to create smart factories that are highly efficient, data-driven, and interconnected. He further emphasised that achieving this requires youth to be tech-savvy and adaptable.

Prof. Thambyrajah highlighted Industry 5.0 which emerged from mid-2020 emphasising collaboration between humans and machines. He stressed the key focus areas -- human-centric innovation, sustainability and green technology, personalisation and customisation, ethical AI and responsible tech. He mentioned that the goal of Industry 5.0 is to combine human creativity with machine efficiency and firmly believes that technology serves people and not replaces them. He talked about the impact that requires both technical and soft skills - creativity, critical thinking and emotional intelligence. He emphasised the importance of soft skills alongside technical skills, noting that the World Skill Centre has flagship courses on life and employability skills for ITI and Polytechnic graduates. He further asserted that the future of the job market is largely digital, with 85 million jobs displaced, and 97 million new roles created by 2025. He said that most of these new roles involve digital literacy, AI, data analysis and cloud computing, referring to the horizontal and vertical skills and how youth should inculcate horizontal skills of AI like prompt engineering, data analysis and so on. He further noted that AI is reshaping every sector from agriculture to healthcare by automating repetitive tasks, enhancing decision-making and creating new career paths. He showed a detailed data visualisation of the fastest-growing jobs and rapidly declining jobs and mentioned that they conducted a one-week course on nano satellite and even undergraduate students could do it because AI can write code.

Prof. Thambyrajah focused on the manufacturing sector to demonstrate

how AI has transformed current jobs and the required skills. He explained how AI can be applied in every step like the product design, development, robotics, automation, supply chain optimisation, quality control and predictive maintenance. However, he further pointed out that the interface needs to be designed by humans to understand what the client wants. He maintained that humans would move more towards the creative task and highlighted that at the World Skill Centre they have set up a 'Centre of Excellence' for Smart Manufacturing and Industry 4.0.

He demonstrated major initiatives that the Government of India has rolled out. He noted that AI is integrated into the school curriculum to create awareness and understanding of AI. He applauded the government's initiative of 'AI FOR ALL' and how INTEL helped build a curriculum for the students. He gave an overview of the curriculum which focused on hands-on activity-based learning and mentioned the three dimensions of the curriculum, i.e. ability to know, ability to do and attitude of developing ethics. While talking about implementation, he emphasised that the leaders have to be sensitised to build modalities for schools. Secondly, he stressed training the teachers and lastly at the stakeholder level to build a common ground for parents and everyone on the rationale of AI. He further shared a case study of the Institute of Technical Education, Singapore to integrate AI to enhance employability and innovation. He pointed out the goals – build foundational AI literacy for students, develop AI application capabilities across sectors, and align with industry demand and ethical practices. He further explained the curriculum design and pedagogy – Tiered learning, Responsible AI modules, Engaging Teaching Methods, Higher Nitec in AI applications, AI applications fundamentals Electives. He believed that infrastructure and industry partnerships are also critical and hence they have collaborated with Microsoft featuring a hands-on demo on Machine Learning and Natural Language Processing.

Prof. T. Thambyrajah ended his presentation reflecting on how AI homogenises our thoughts, hence AI should be introduced with care and responsibility. Lastly, he stressed that the first rung of the workforce ladder is shifting, and educators must align with industry trends and reinvent their academic framework.

Dr. Sangeeta Kaul, Director, DELNET thanked and admired Prof. Thambyrajah for his brilliant, thought-provoking and a truly empowering address on youth empowerment through digital skills. She observed that DELNET is in the process of developing a state-of-the-art digital skillsets portal using AR/VR technology.

An interactive QA session followed the presentation. There was a question about whether AI will replace human jobs. Prof. Thambyrajah answered that AI will replace the muscle brute force or the mental brute force but cannot replace the creative or emotive part of the job. Another question was on how to prepare students for second and third stage jobs along with first stage job knowledge. Prof. Thambyrajah responded by highlighting that educators should design curriculum with a strong alignment to industry needs, ensuring the development of foundational skills and actively collaborate with industry partners to facilitate internship opportunities.

Dr. Sangeeta Kaul thanked Prof. T. Thambyrajah for his enlightening presentation and expressed hope for future collaboration in developing a state-of-the-art digital skills portal. ■

Form IV

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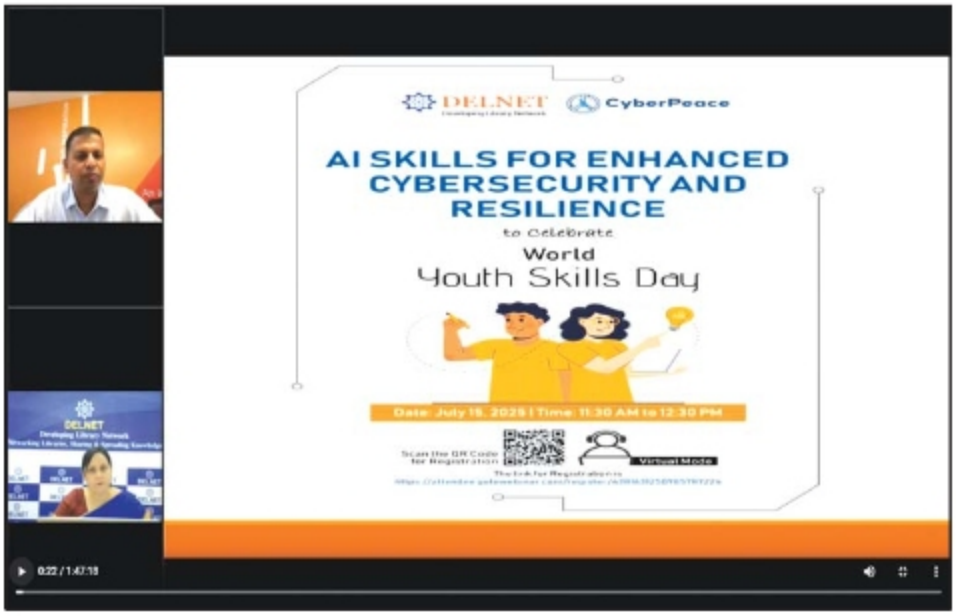
I, Dr. Sangeeta Kaul, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Dr. Sangeeta Kaul
Publisher

AI Skills for Enhanced Cybersecurity and Resilience

and

Smart Defence: AI Skills in the Age of Cyber Threats



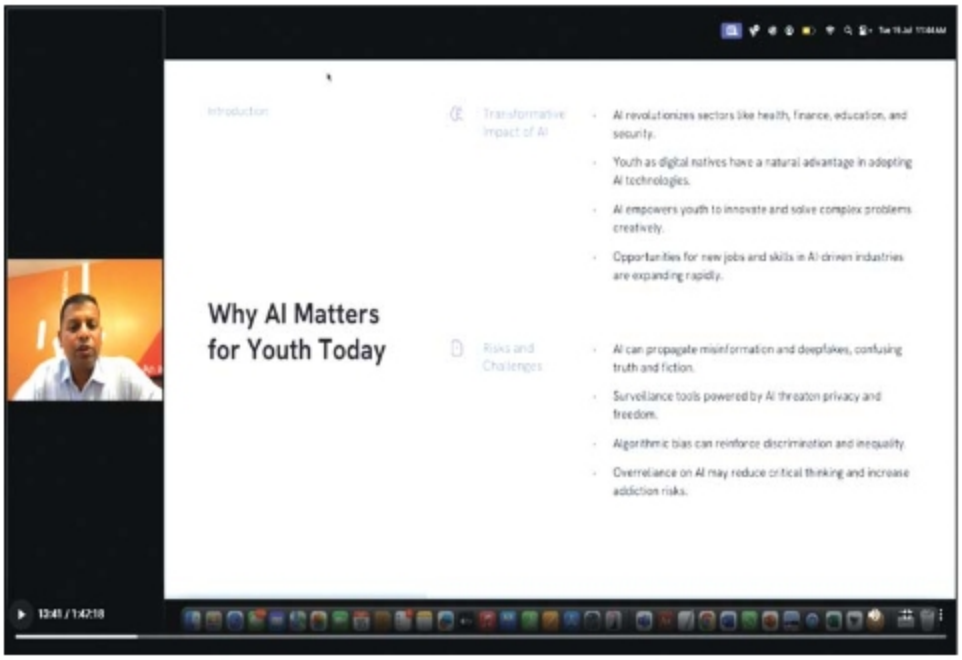
DELNET in collaboration with the CyberPeace Foundation, celebrated World Youth Skills Day by organising an online programme on July 15, 2025, featuring a webinar session on the topics "AI Skills for Enhanced Cybersecurity and Resilience" and "Smart Defence: AI Skills in the Age of Cyber Threats." Major Vineet Kumar, Founder and Global President, Cyber Peace Foundation and Dr. Shruti Mantri, Senior Associate Director, Institute of Data Science, Indian School of Business, Hyderabad were the eminent speakers of the sessions.

Dr. Sangeeta Kaul, Director, DELNET, extended a warm welcome to the distinguished speakers, esteemed dignitaries, researchers, library and IT professionals, students and participants who had joined the programme from across India and abroad. The session was attended by 733 participants.

Major Vineet Kumar, President, CPF expressed immense gratitude to DELNET for the collaboration. He gave an overview of his presentation which focused on empowering youth with AI for cybersecurity and resilience. In this presentation, he discussed the importance of AI among the youth and how Cyber Peace and DELNET as a platform can contribute to cyber, AI and emerging technologies. He also talked about youth-friendly skills, practical AI skills, and challenges youth face in the age of AI. He mentioned that the Government of India is hosting the AI Impact Summit in February 2026 focusing on AI literacy and safety. He also shared some case studies where AI has been abused in different forms. The main focus of his presentation was to make everyone aware of the threats, tools and processes of AI.

Major Vineet highlighted some statistics on youth and the tech space. While referring to digital access and connectivity, he mentioned that as per the ITU Report, 2023, 75 per cent of youth have Internet access and out of this 900 million youth are online and digitally active. He said that concerning mobile-first engagement, over 80 per cent of the youth access tech via smartphones. He noted a significant rise in the number of content creators worldwide, which has reached 100 million and affirmed the increase in gaming platforms and youth accessing those platforms like GitHub. He maintained that youth is seen as the driver of the digital economy.

Major Vineet Kumar discussed how AI has revolutionised various sectors, including healthcare, finance, education, security, agriculture and more. He mentioned that youth are seen as digital natives having a natural advantage in adopting AI technologies. He pointed out that CBSE, NCERT, and the Education Ministry have pushed AI and cyber education strongly within the academic systems. He said that AI empowers youth to innovate and solve complex problems creatively, commenting that the job skills in AI-driven industries are increasing. He cited the intersection of AI and drones as an example, explaining how drone pilots are being trained in AI to integrate AI in drone operations. He also illustrated the risks and challenges of AI, mentioning that AI can propagate misinformation and deepfakes, confusing truths and fiction. He spoke out against surveillance tools powered by AI which threaten privacy and freedom and also cautioned everyone to be careful of the algorithmic bias that



can reinforce discrimination and inequality. Another point, he highlighted is how over-reliance on AI may reduce critical thinking, diminish creativity and increase addiction risk. Interestingly, he revealed that AI de-addiction centres and cyber clinics are also being opened, offering support to people seeking help for AI-related addiction. He also pointed out that students using ChatGPT for their assignments are raising concerns about academic integrity and ethical use of AI tools. He warned everyone against AI-generated images and stressed the need for content moderation and ethical AI use. He raised the issue of child sexual abuse material where perpetrators have created images using generative AI and promoted them on social media. He talked about cases of cyber slavery where youth are lured with flashy job offers, illustrating how a person can make an entirely new website without knowing coding by misusing generative AI applications. He presented two videos to demonstrate how deepfakes can be misused to harm anyone, be it a celebrity or a common man. Hence, he advised using critical thinking and verifying any content before sharing.

Major Vineet outlined that AI-powered tools can track online activity and personal data without consent, raising concerns about privacy and unauthorised surveillance of youth. He mentioned that AI algorithms may reinforce existing biases, leading to unfair treatment or discrimination against certain groups, affecting youth opportunities and experiences. He shared examples of AI tools designed to lure young people and exploit their content, cautioning everyone against installing such apps, warning that they may access personal data without the users' knowledge. He spoke about a viral campaign called the "Sari Challenge," which encouraged young girls and women to share photos of themselves wearing saris and tag their friends. He noted that, in the process, a significant amount of personal information shared by participants was misused by the campaign's creators. He mentioned that AI can also be misused in various scams with fraudulent calls and job offers. He also discussed advanced scams like ransomware attacks targeting critical sectors, even academic institutions and universities.

Major Vineet Kumar illustrated why AI safety is so crucial for human security, mentioning that AI can unintentionally generate harmful, biased and misleading information that impacts users negatively and spreads misinformation. He commented on adversarial attacks which are malicious actors that can exploit AI models by feeding deceptive inputs to manipulate their behaviour, causing security breaches or false decisions. He stressed that AI must be designed with fairness and avoid any kind of reinforcement discrimination or biases, ensuring equitable treatment of users regardless of background. One such bias he observed while generating images for the presentation was the absence of Indian youth among representations of people working in AI. While talking about transparency, he mentioned how AI builds trust and allows users to identify errors of bias in AI-generated results. He further elaborated that we need to develop AI with ethical principles ensuring accountability, privacy and promoting responsible development to protect society.

Major Vineet Kumar shared some interesting AI Applications that represent the positive cases of AI. He highlighted how they developed an AI-powered phishing detector and a fake news and deepfake detector. He further mentioned that there are predictive cyber threats that predict emerging cyber threats by analysing patterns in data, enabling proactive defence against potential attacks. He said that they have deployed sectoral honeypots for research to collect data about attack patterns, apprising the participants that youth can contribute to current developments and encouraged them to reach out for any assistance. He specified that AI-powered chatbots also provide instant support and guidance on cybersecurity

issues, improving user response and awareness. He announced that they are going to launch the CyberPeace First Responders Programme with DELNET which will be a structured 10 hour certification programme on Generative AI and AI safety. He shared some advanced projects like Password Vault with AI to design a secure password manager that uses AI to score password strength and suggest improvements to enhance account security. He mentioned that the Government of India has launched a CCTV Cybersecurity Hackathon which aims for AI-based solutions for securing CCTV cameras.

Major Kumar addressed the key principles of AI safety for youth. These principles involve - transparency, fairness, privacy protection, and human oversight. He stressed human oversight as it is important to maintain human involvement in critical AI decisions to ensure ethical use, further elaborating that users and developers must take responsibility for AI's actions and impact. He enumerated a few points on how youth can practise AI safety – critically evaluating AI outputs, protecting sensitive data by not sharing private information with AI, reporting harmful content, contributing to safe AI and learning adversarial machine learning (ML). He shared a few initiatives that youth can contribute towards a safe and secure AI space, mentioning that we can organise competitive events where youth develop AI tools and create AI clubs to engage people in learning AI. He recommended that academicians launch programmes regarding AI risks, safe practices and how to identify deepfakes and AI-generated misinformation. He further suggested developing certification courses that validate AI and cybersecurity skills, boosting youth employability and confidence. He showed pictures of the CyberPeace Centre of Excellence and how it impacts different sectors. He highlighted their projecttitled "Trust Trace: Multimedia Misinformation Detection" hosted by the Centre of Excellence in Mumbai. Another tool he shared is Hive Moderation to detect AI-generated content and talked about how Smart Password Generators help to make strong passwords that can be integrated and embedded in different platforms.

Major Vineet concluded his presentation by emphasising that youth, as the future of the nation, must play a pivotal role in ensuring that AI is used responsibly for the greater good. He urged them to act as first responders in addressing any misuse or harm caused by AI technologies.

Dr. Sangeeta Kaul thanked Major Vineet Kumar for his insightful presentation and warmly welcomed Dr. Shruti Mantri to commence her presentation.

In her presentation, Dr. Shruti Mantri highlighted the skills that youth need to develop to make a career in the domain of AI and cybersecurity. She stated that according to the data security council report of 2024-2025, India has seen a very high increase in malware attacks targeting multiple devices. She mentioned that these detections happen across India with Telangana being the highest at 15.03 per cent followed by Delhi at 11.79 per cent and Tamil Nadu at 11.9 per cent. In terms of industrial insights, she stated that healthcare has the highest impact of malware attacks with 21.82 per cent, followed by BFSI at 17.38 per cent along with education at 15. 64 per cent. She explained that because of the exponential increase in data in the digital space, there is an increase in cyber attacks and hence we require more cyber professionals to curtail these attacks. She talked about Android-based malware where criminals send deceptive message links posing as authorities and once the link is clicked, the malware gets installed. She mentioned that this malware at times shares sensitive and personal data with cyber criminals. Warning everyone against the pop-ups that have different kinds of malware links, she said that most malware attacks happen on Android devices.

Dr. Shruti reiterated that there are many fake apps that have open Chat GPT targeting sensitive information. She stressed security and AI skills to deter and control these attacks. One such example she mentioned is Anomaly Detection, elaborating that when any device is infected by malware, it shows many signs and that is when cyber professionals investigate it and uncover patterns, outliers and anomalies to control the spread of the malware. She maintained that professionals need visualisation skills to uncover these patterns, noting that professionals need to detect the anomalies in real time and also do a root cause analysis to identify the IP addresses that trigger alerts and how many devices are involved. She also spoke about how professionals need to do time series analysis to identify the vulnerable nodes in real time.

Dr. Shruti shared a credit card fraud case as an example. She described that the credit cards of some users got cloned and professionals had to identify where the cloning started. She explained how the professionals did a time series analysis and checked all the users' credit card transactions. She maintained that technology does have a pivotal role at this crucial juncture, stating that professionals require analytical and visualisation skills along with thorough machine and AI learning to do such advanced-level analysis. She further outlined the following key reasons why AI is required in Cybersecurity: real-time threat detection, scalability, automation and adaptive learning. She explained that cyber professionals need to handle substantial amounts of data and automate threat response as this helps in reducing the incident response time. She also emphasised that professionals should continuously

evolve by learning from new threats, pointing out that AI algorithms learn from multiple data sources that involve government data, network data, data in the IoT devices, geographical data, etc.

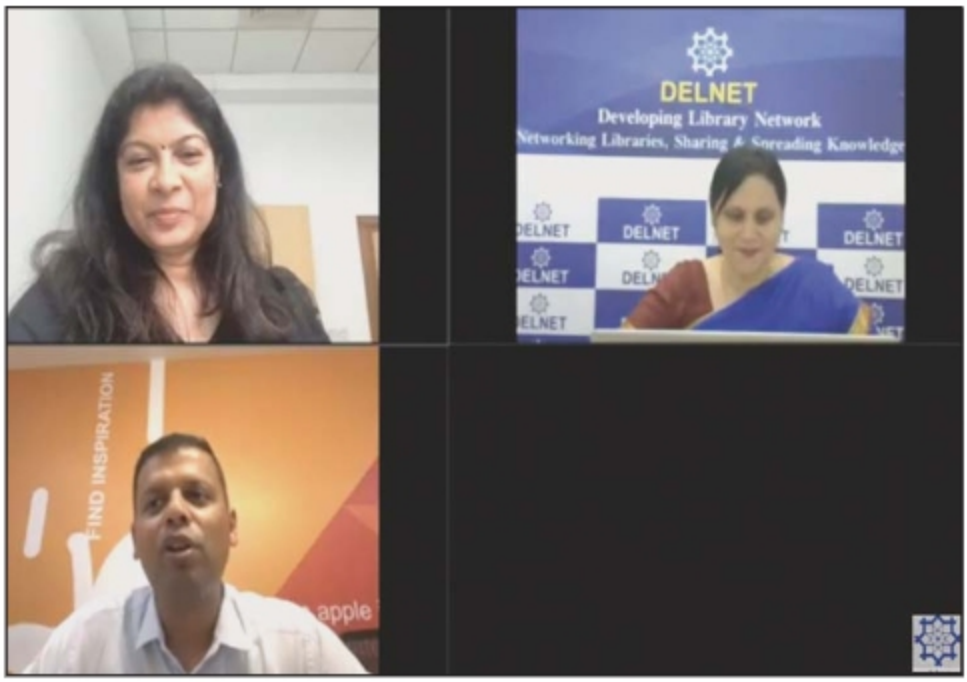
Dr. Shruti emphasised that vast amounts of data have been used to extract knowledge, generate insights and make predictions from structured and unstructured data. She mentioned that the basic skills used are statistics, computer science expertise and domain expertise. She stressed the importance of domain expertise for developing dashboard tools or making predictions and explained the life cycle of data science. According to her, this process involves cleaning and transforming data into a format for exploratory analysis, then allowing professionals to identify patterns, based on which they select appropriate algorithms, and determine the application of reinforcement learning. She said the skills that data scientists must have are maths and statistics, programming and databases, domain knowledge and soft skills, communication and visualisation skills. She further mentioned different AI and machine learning algorithms that work in the background of a fancy dashboard like linear regression, logistic regression, decision trees, and random forest. She added some unsupervised machine learning techniques like k-means clustering, hierarchical clustering, principal component analysis, association rule mining, and anomaly detection.

Dr. Shruti Mantri stressed that the AI algorithm or framework should be ethical, transparent, safe and assigned with human values to ensure fair and accountable results. She maintained that public trust is crucial so AI should be explainable and auditable to gain stakeholders' confidence. She highlighted that the core principles of responsibility are: fairness, transparency, accountability, privacy protection, robustness and safety, and human oversight. She illustrated that responsible AI algorithms should have bias mitigation in fraud detection, explainable AI for alert justification and compliance with General Data Protection Regulations (GDPR) and other data privacy acts.

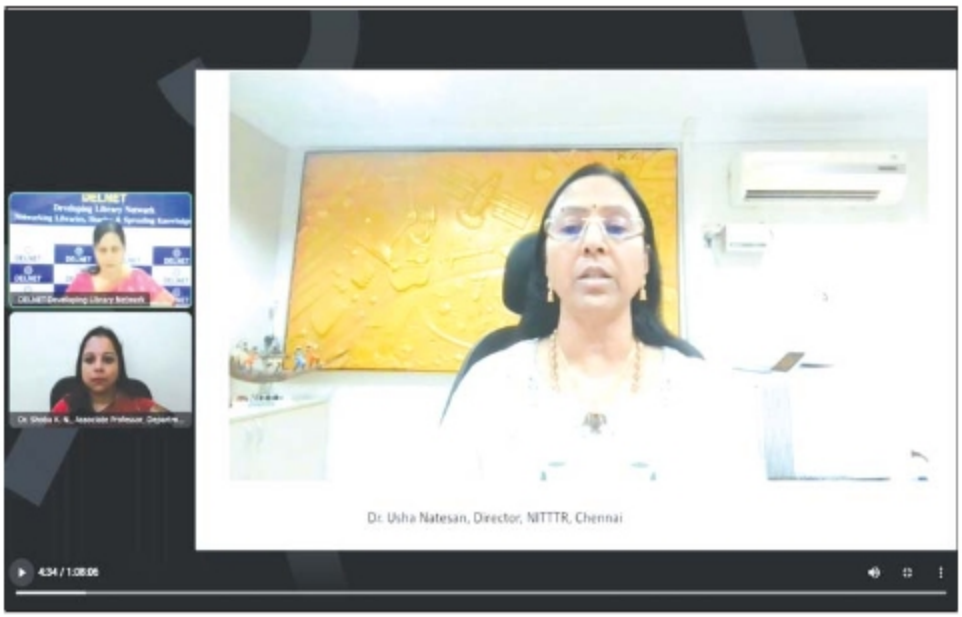
Dr. Shruti wrapped up and ended her presentation by affirming that AI and cyberspace offer a demanding yet rewarding career, with much to learn and explore.

The presentation was followed by an interactive question-and-answer session. One of the questions raised was about the basic AI and cybersecurity skills that students should learn and acquire today. Dr. Shruti answered the question by emphasising that students should inculcate visualisation skills by learning tools like Tableau and programming languages like Python. She also recommended Neo4j, which is a handy tool and freely accessible both in a desktop version as well as on online version. Major Vineet added that students can also use Google AI for Youth and Khan Academy AI for AI Literacy. Another question was on different courses for cybersecurity and platforms where these courses are available. Major Vineet recommended edtech platforms like Coursera, which offer a range of courses from basic to advanced coding skills, and also mentioned free certification programmes offered by Google. The interactive session concluded with a discussion on the DELNET-CPF initiative to develop a concise module that provides users with insights into cybersecurity courses and ongoing programmes.

Dr. Sangeeta Kaul thanked Major Vineet and Dr. Shruti Mantri for their empowering and enlightening presentations and hoped for more such collaborations. ■



The Changing Paradigm of Teaching Strategies



DELNET in collaboration with the National Institute of Technical Teachers Training and Research (NITTTR), Chennai celebrated Teacher's Day by organising an empowering webinar on "The Changing Paradigm of Teaching Strategies" on September 5, 2025. Dr. Shoba K.N., Associate Professor, Department of Education, NITTTR Chennai was the esteemed speaker of the session.

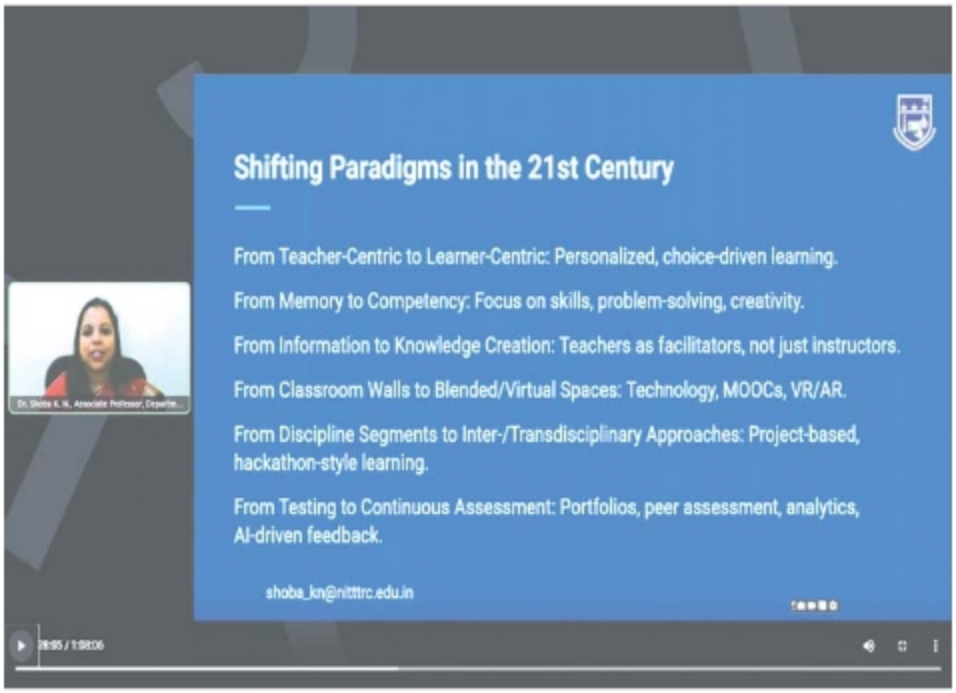
Dr. Sangeeta Kaul, Director, DELNET, extended a warm welcome to Dr. Usha Natesan, Director NITTTR, Chennai; distinguished speaker Dr. Shoba K. N., Associate Professor, NITTTR, Chennai; and all the professionals who joined the session from different parts of India and around the world. The session was attended by 759 professionals.

Dr. Usha Natesan, Director, NITTTR Chennai, commenced the webinar with a warm, insightful opening address. She extended her heartfelt wishes to every teacher who shaped the minds and future of students. According to her, teaching is not just a profession but a responsibility and an act of service. She observed that teachers have the power to inspire curiosity, spark creativity, and instil lifelong values, emphasising that their influence extends far beyond the classroom, with every word, gesture, and lesson becoming a seed for future greatness. On this special occasion, she reaffirmed their commitment to nurturing learners with passion, integrity, and compassion. She shared that together, we can build not just successful individuals but responsible citizens, with teachers continuing to be the torchbearers of knowledge and inspiration.

Dr. Shoba K.N. started her presentation with a heartfelt thanks for the wonderful opportunity to address the audience on the special occasion of Teacher's Day. She introduced her session by highlighting that teaching is no longer the transmission of knowledge but it is about the transformation of learners. She emphasised how teachers can become change-makers and trend-setters. She mentioned education is not just pumping in information but it is drawing out the best - which is also the etymological meaning of the word 'education'. She further explained the *paradigm* as changes that happen over centuries and talked about the traditional paradigm of teaching with a classroom where the teacher stands in front, with a blackboard and students are seated quietly. She pointed out that present-day classrooms have evolved with interactive blackboards, semi-circular and modular classrooms where students can stand, experiment and move around while learning.

Dr. Shoba illustrated the paradigms of a past traditional classroom, explaining how in a traditional classroom the teacher has the sole authority. While today teachers are expected to have a very high social and emotional quotient. She mentioned that teachers should be able to understand how students relate not just to the content but also to the teacher and other students. She noted that teaching is evolving from pedagogy to andragogy, to cybergogy, to peeragogy and finally to heutagogy. She elaborated that in the past the teacher was the sole authority who planned and controlled the class; the chalk and talk method was predominant. She further mentioned that the traditional classroom was discipline-driven and the focus was more on rote learning. She said that unlike traditional teachers, current teachers are more into interdisciplinary and transdisciplinary research. Another aspect she highlighted was the "one-size-fits-all" model of traditional teaching, noting that there was typically a single teaching methodology, and students were expected to fit into it. She further added that teachers today aspire to be facilitators and continuously learn to improve teaching inside the classroom.

Dr. Shoba shared how NITTTR focuses on skill-first approach and not on one-size-fits-all. She showed a snapshot of teachers' training which they are given



in their institution and referred to how teachers are trained to use emerging technologies like interactive boards, VR, and digital technology in the classroom. She mentioned that these technologies help teachers connect with students in the changing paradigm of teaching strategies, affirming that classrooms have become a fluid space with much openness in learning and teaching and talked about how teaching videos are becoming a valuable resource and a repository for teaching and learning and also discussed how teachers are lifelong learners by constantly updating themselves for the betterment of education.

Dr. Shoba commented on how teaching paradigms are shifting in the twenty-first century. She observed that with the invention of the printing press and the mass production of books, everybody could own a book, highlighting how the teaching process has progressed towards a learner-centric, personalised, and choice-driven approach. She referred to Howard Gardner's theory of multiple intelligences where an auditory learner can convert material into a particular mode of multimedia that is best suited. She stated that we are moving from memory to competency, focusing more on skill, problem-solving solving and creativity. Another shifting paradigm she mentioned was from information to knowledge creation, explaining how teachers have to convert data into useful information and transfer it as knowledge to students. She further discussed how social media can serve as a powerful tool for teachers in creating and sharing knowledge. She mentioned that teachers are facilitators of knowledge, stating that technology has transformed classroom walls to blended/virtual spaces like WhatsApp groups, MOOCS, AR/VR, and social media. She also emphasised that interdisciplinary approaches have taken the centre stage, i.e. project-based and hackathon-style learning. She explained that hackathons are conducted where industries have a problem and learners need to find practical solutions. She also reiterated that continuous assessment has become more effective today through the use of portfolios, peer evaluations, analytics, and AI-driven feedback.

Dr. Shoba talked about the contemporary strategies that drive change in education. According to her, a flipped classroom and blended learning ensure that the learning process is highly interactive, challenge-oriented and interesting. Another strategy she pointed out is gamification and micro-learning that encourages students to lead, compete and get validation for themselves. She also recommended design thinking and problem-based learning. She talked about universal design principles that focus on inclusivity, diversity, and equity, stressing problem-based learning where an actual problem is taken, analysed and a solution is found. She added that there is a range of AI tools that are not just resourceful for teaching but also for testing, classroom management, and engagement with learners. She then highlighted the multilingual and inclusive pedagogy mentioned in the National Education Policy 2020. She observed that multilingual pedagogy is possible through technology, as learning content can easily be translated into forms that are relatable and accessible to learners. She talked about how inclusive pedagogy is part of contemporary strategies especially for specially abled students. She commented on Collaborative Global Learning Networks like MOOCs, OERs, and online communities.

Dr. Shoba affirmed that the role of teachers has evolved. According to her, a teacher should possess career counselling and mentoring skills, emphasising that teachers play an integral role in the mental well-being of the students. She explained that teachers become learning designers by identifying how learning happens most

easily and logically for students. She opined that teachers should think like a statesman who shapes future generations by balancing high emotional quotient with digital fluency. She mentioned that today teachers have become community builders, not just content delivery, referring to a few efficient digital learning tools that have substantially contributed to teaching strategies. Another key aspect she emphasised was the GROW model, which stands for Growth mindset, Real-time learning, Opportunity seeking, and Work ethic. She discussed the significance of the term learnagility and how an agile learner understands any concept quickly.

Dr. Shoba then focused on the concept of Learning, Unlearning and Relearning. She referred to Alvin Toffler's book *Future Shock* that talks about how the illiterates of the twenty-first century are those who cannot read and write but those who are not prepared to learn, unlearn and relearn. She highlighted some paradigms that have transformed teaching strategies especially. She stressed Artificial Intelligence and stated that searches for AI have increased by 20 times over the past five years. She also focused on neuroeducation, which explores how psychology, pedagogy, and neuroscience work together, noting that micro learning boasts retention and flexibility for learners even in industries. She mentioned that nowadays immersive learning experiences can be created by AR and VR, further emphasising cloud-based learning, data-driven analytics, for optimising learning outcomes. She also recommended gamification as it enhances motivation, engagement, skill development and creates a sense of accomplishment.

Dr. Shoba concluded her presentation by urging everyone to rethink and re-evaluate current teaching strategies and broaden their pedagogical range. She affirmed that no nation can rise above its teachers, and what teachers impart today shapes what the country becomes in the next generation.

The presentation was followed by an interactive question and answer session. There was a question on how industrial skills can be developed at the school and college levels. Dr. Shoba responded thoughtfully, stating that teachers need to be empowered with proper industrial training so they can effectively transform their learners. She proudly shared that NITTTR has been a forerunner in industrial training and that they have completed many three-week industrial training programmes. She further stressed hackathon-based learning so that industrial methods of learning can be used in classrooms. Dr. Sangeeta Kaul also affirmed that with academy and industry partnerships, we should prioritise teachers' training to develop industrial skills.

Dr. Sangeeta Kaul thanked Dr. Shoba for her insightful and informative presentation and expressed her hope for more such enriching sessions in the future. ■

NACLIN 2026

November/December 2026 at Hyderabad

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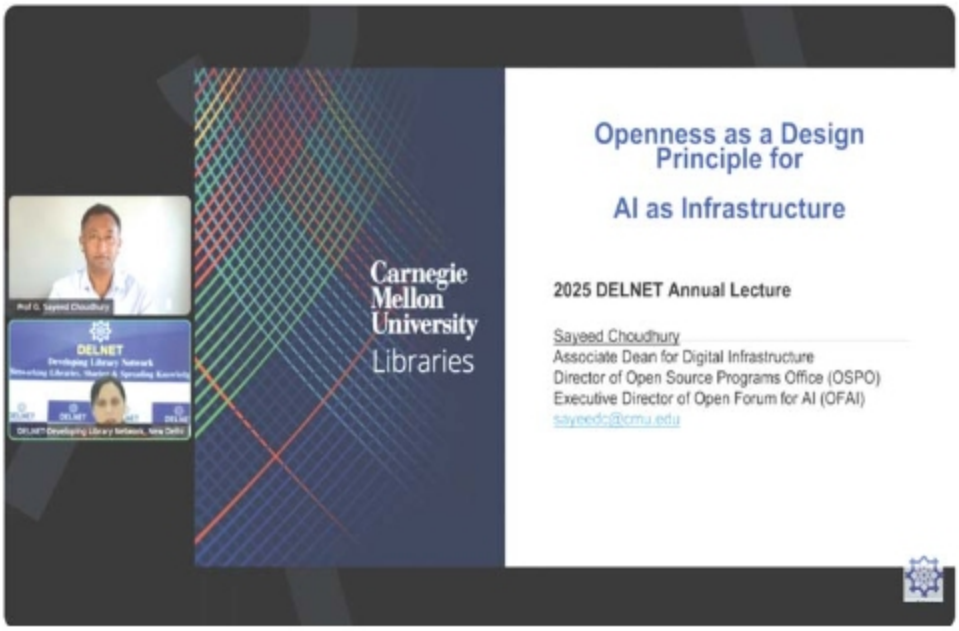
We are delighted to invite you to NACLIN 2026 at Hyderabad

The details will soon be made available at www.delnetnaclin.in

We look forward to Welcoming You!

Openness as a Design Principle for AI as Infrastructure



DELNET organised online its prestigious Annual Lecture 2025 on "Openness as a Design Principle for AI as Infrastructure" on October 8, 2025. Prof. G. Sayeed Choudhury, Associate Dean for Digital Infrastructure, Director, Open Source Programs Office (OSPO), Carnegie Mellon Libraries, Carnegie Mellon University, USA and Executive Director, Open Forum for AI, an eminent global AI expert, was the esteemed speaker for the session.

Dr. Sangeeta Kaul, Director, DELNET extended a warm welcome to Prof. Sayeed Choudhury and the participants who joined the session from different parts of India and across the globe. The lecture was attended by 387 participants.

In this presentation, Prof. Sayeed Choudhury spoke about openness as a design principle for AI as infrastructure which also resonates with his research area, 'Thinking About Openness in Design of Digital Infrastructure, in particular, the Internet and the Web'. He highlighted two key points: the trajectory of AI is yet to be determined and how we want to interact with AI as a service or as a download or as a set of components we can work with and build infrastructure. He began his presentation with a list of the most popular AI Chatbots in 2025 as per the US "AI Dominance". He mentioned that DeepSeek has risen to number two on the chart while still far behind OpenAI. Another significant point highlighted was that all the responses we get from Chat GPT or any other system are simply guesses and some guesses are better than others. He talked about different types of AI according to content and format like image-based AI, video-based AI like the latest version of Sora. He noted the increasing use of AI to accomplish tasks and spoke about how agentic AI is used to perform tasks and orchestrate workflows.

Prof. Sayeed discussed how foundational or frontier LLMs are becoming infrastructure. He referred to a statement by Chris Lehane, AI Chief Global Affairs Officer, who said "AI is core infrastructure for nation-building—akin to electricity." He emphasised that, in that spirit, it is important to ask how we want our infrastructure to be developed and managed. He mentioned that he is a firm believer in public infrastructure that is transparent, participatory and open to inspection to build an entire ecosystem of services on top. He further illustrated the role of academia, nonprofit and civil society organisations. He shared his experiences in the 'AI for Good Summit' addressing the urgent need for open foundation models by academia and resource sharing to counter the widening gap driven by unequal access to compute, data and expertise. He stressed on democratising access to AI not only to use the model to work but to utilise open components to build AI.

Prof. Sayeed Choudhury highlighted the Open Forum for AI (OFAI), an academic and non-profit initiative aiming to bend the arc towards more human-centred, responsible, transparent and ethical AI. He mentioned that OFAI supports iterative, continuous feedback from users and that has incorporated into the design of the system through deployment and then evaluates those systems. He highlighted another key element of OFAI i.e. the importance of balancing the roles of academia, government, and industry in shaping AI development. He then shifted his conversations around openness as a design principle for the internet and web. He presented one of the first diagrams for the TCP/ IP protocol that underlines the Internet. He also listed some universities, government organisations, and private companies involved in the development. He mentioned that there was a balanced partnership between these three and this protocol has profound benefits in the development of the internet. He described another open protocol for the web or HTTP, developed out of academia and the research sector at CERN. He noted that it was rolled out to the point where governments and

industry engaged and we have the World Wide Web. He then highlighted that one of the potential risks of multiple AI infrastructures and the users can keep switching between different AI platforms or infrastructures. He further pointed out that this makes it really hard to do things globally.

Prof. Sayeed shared that there is a definition for open source software and the organisation Open Source Initiative (OSI) is the steward of the definition. He mentioned that there are canonical licenses that exist around this definition. He explained that there are so-called freedoms associated with open source software and four main among them are - the ability to use, study, share and modify the software without restrictions. He spoke about the tremendous benefits of having this definition, licenses, and openness associated with software. He referred to a Harvard Business School study that revealed the value generated by open source software over time has been almost $9 trillion and has reduced the production cost of software by a factor of 3.5. He highlighted that the open source initiative led a global community-based process to come up with version 1.0 of a definition for open source AI, affirming the four freedoms of using, studying, sharing and modifying. He mentioned that OSI has worked with 150 individuals throughout the globe from various sectors, including experts, software developers, IT people working on software, and legal experts. He reaffirmed that AI is fundamentally more complex than software as there are engineering aspects of open source AI that need to be accounted for in subsequent versions of this definition. According to him, it was a community process, but there remain different reactions about how it is being perceived within the community. He talked about the components of the definition which focus on data, code and the weights. He pointed out some legitimate reasons where one cannot share data, but the software and the weights should be made freely available.

Prof Choudhury demonstrated another project titled the American Truly Open Model (ATOM) project. He mentioned that this project is signed by influential individuals across sectors. He shared important data from HuggingFace, an open platform where people can share data and build AI models. He mentioned that recently there has been a flip in terms of total downloads, with Chinese models surpassing US models. He also highlighted the graphical representation of the community preference of the AI model. He showed a slide from the Linux Foundation presented at the last Open Source Europe Summit. It observed how openness can play an important part in sovereignty at the national level in terms of making choices, governing and managing the trajectory of development of AI. He then shifted to the idea of protocols. He explained that unlike AI, open protocols for the internet and web were developed early in the process to foster interoperability and to be used across different contexts, domains, geographies and so on. He shared how ChatGPT began as an experiment, but quickly went viral, surpassing 100 million users. According to him, we should have protocols for how to use data across AI models, interaction between the models and so on. He mentioned Syft, from nonprofit organisation OpenMind started by Andrew Trask, which is in essence like Dropbox for AI. He said that it is an abstraction to handle the complexities of data while building an AI model. He further talked about the interoperability of agents with agents that originally came from Google. He highlighted a project at MIT titled Networked Agents in Decentralised Architecture (NANDA). He explained how it harmonised and brought elements like MCP, A2A, HTTPS, and NLWeb together essentially by an adapter. He added that there are a lot of implications about how our data is managed, data sovereignty and making sure people don't become passive and lose their critical thinking over time.

Prof. Sayeed opined that infrastructure involves both people and technology. According to him, most infrastructure development is sociotechnical in nature, and the social aspects of infrastructure are extremely important. He shared a research by Christopher Combemale that underlines the labor implications of AI. He noted that the framework of his research is a cone of automation that implies where automation occurs and emphasised certain factors that should be accounted for whenever a new technology is deployed. One of the key points he stated is that just because it's technically feasible doesn't make it economical or productive. He further mentioned that adoption is focused on division of labor, breaking complex tasks into smaller steps and machines are more sensitive to the complexity of tasks. Moving on to the second part of the research, Prof. Sayeed emphasized that the cone of automation can be expanded through generative AI. He noted that this expansion may be enhanced by adopting open approaches, which remains an open research question.

Prof. Sayeed concluded his presentation by emphasising that humans should remain the primary actors in any task, with AI serving a supporting or secondary role. He reaffirmed that people should have the autonomy to choose their own preferred AI tool and this can be fostered more with open approaches.

The presentation was followed by an interactive discussion session. The discussion began with a question regarding the comparison between network agents and centralized architectures. Prof. Sayeed answered that AI is not inconsistent with centralised architecture, but it is limiting. He said that decentralised architecture

fosters multiple approaches that agents can use leading to a wider variety of outcomes. Another important point of discussion on how the academic world is approaching AI and trying to safeguard the quality of education. According to him, everyone in academia should have access to and be able to experiment with AI platforms. But at the same time, he emphasised that students must also understand autonomy, flexibility, freedom and take that as a starting point for exploration. Another question was raised about the affordability of AI technology. He affirmed that there is an enormous amount of money poured into AI technology, and it is important to compare multiple approaches.

Dr. Sangeeta Kaul thanked Prof. Sayeed Choudhury for his outstanding presentation. She shared that the openness reflected in the presentation truly resonates with DELNET's vision, as it ensures that everyone is an integral part of the ongoing change. ■

We are pleased to inform that

DELNET has been conferred with

Jnana Jyoti Sammana

by

Central Sanskrit University,
New Delhi on March 26, 2025

at a conference held at IGNCA, New Delhi

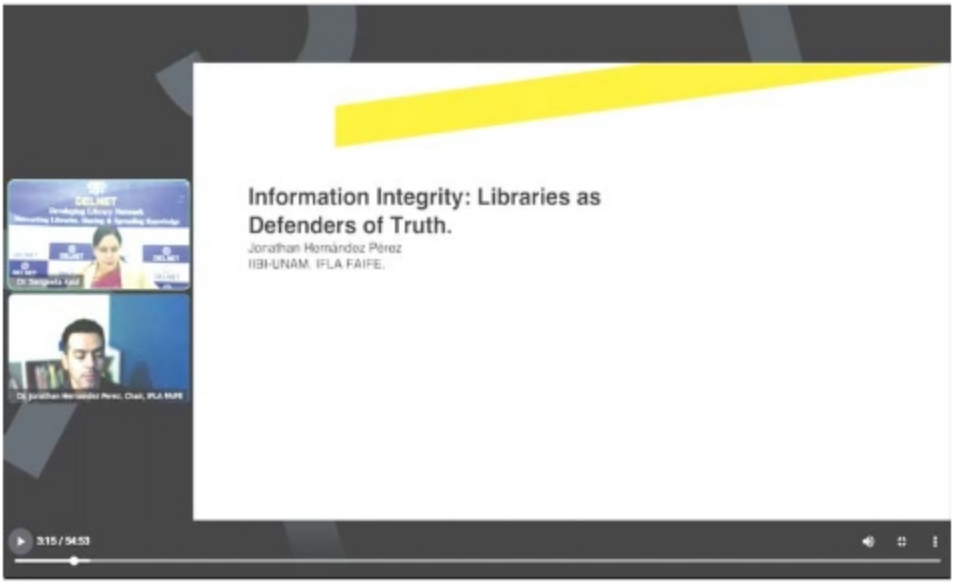
in the distinguished presence of

Prof. Shrinivasa Varakhedi, Vice Chancellor,
Central Sanskrit University, New Delhi

and

Prof. Santishree Dhulipudi Pandit,
Vice Chancellor, JNU, New Delhi

Information Integrity: Libraries as Defenders of Truth



DELNET organised an International Webinar on 'Information Integrity: Libraries as Defenders of Truth' on December 19, 2025, to mark the Library Networking Day observed on December 21st every year to commemorate Dr. H. K. Kaul's Birth Anniversary. Dr. Jonathan Hernandez Perez, Chair, Freedom of Access to Information and Freedom of Expression (FAIFE), International Federation of Library Associations and Institutions (IFLA) and Associate Researcher & Library Professor at the Library and Information Institute at the National Autonomous University of Mexico (UNAM), was the distinguished speaker for the session.

Dr. Sangeeta Kaul, Director, DELNET, extended a warm welcome to the speaker, Dr. Jonathan H. Perez, Chair, FAIFE, IFLA and to all the esteemed library professionals, faculty members, researchers, scholars, and participants who joined the session. The session was attended online by 294 participants from India and many other countries.

In his presentation, Dr. Jonathan Hernandez Perez outlined two important aspects - Intellectual Freedom (common global patterns) and Information Integrity. He began by asserting that the foundation of a democratic society are well-informed people who are capable of participating in a meaningful public discourse. He mentioned that this discourse includes informative debates and open exchange of various viewpoints that empower individuals to make good judgements to participate in civic life and hold institutions accountable. He emphasised that in a free society, it is essential to preserve collective memory and cultural heritage while guaranteeing that every citizen has fair access to diverse information. He noted that libraries emerge as a vital democratic institution in this crucial context.

Dr. Jonathan talked about the rising attacks against fundamental freedom and human rights. He observed that these attacks challenge the key values of intellectual freedom and the right to read/ learn from diverse sources. He pointed out that actions like growing demand for book bans and rapid spread of false information as misinformation, disinformation and other information disorder hinder the values of intellectual integrity. He highlighted that intellectual freedom and equity are interdependent and stressed that libraries have a critical mission to defend both intellectual freedom and equity.

Dr Jonathan H. Perez discussed the increasingly complex global operating environment for libraries and library professionals. He emphasised that this landscape is defined by persistent resource limitations, rapid digital transformation and rising socio-political pressures. According to him, libraries without resources cannot fight misinformation. He explained that an institution struggling with basic operational needs finds it harder to resist censorship, advocate for intellectual freedom or combat misinformation. He also stated that this dynamic creates a cycle of vulnerability that requires a strategic and principle responses from the global library community. He shared how at the Freedom of Access to Information and Freedom of Expression (FAIFE) advisory committee, IFLA, recognised the common global parallels and distinct regional variations. He mentioned that one of the missions of FAIFE is to monitor censorship and attacks on intellectual freedom at the regional and global scale. He emphasised how libraries are navigating a challenging landscape shaped by resource limitation, digital complexities and social and political pressures.

Dr. Jonathan highlighted key global patterns recognised by FAIFE. He mentioned that resource scarcity is a global pattern and a fundamental barrier to intellectual freedom. According to him, libraries require financial support, skill, staff and modern infrastructure to serve the communities effectively. He further pointed out that when libraries

lack enough personnel with specialised training, the quality of service declines specially in critical areas like digital literacy, data privacy, and emerging technologies like AI. He talked about how the constant pressure of limited resources can lead to the problem of the self censorship. He further noted that these self-imposed limits weaken the core principle of providing diverse perspectives. He said that libraries struggling to survive often cannot stand up against censorship and defend intellectual freedom in public spheres. Another common pattern that he pointed out is the dual challenge of online censorship and misinformation and disinformation. He noted that we are living in a platform society where platforms are pushing the economic environment. He mentioned that in today's platform society, freedom of expression and access to information face two major threats: online censorship—where the powerful groups block websites, remove content, or shut down the internet—and the rapid spread of misinformation and disinformation. He further emphasised that the phenomenon of misinformation/ disinformation is amplified by social media and artificial intelligence. He shared that IFLA reports, 2024 highlighted this problem where the authenticity of information is questioned because of sophisticated editing and AI-generated content. He said that the constant flow of misinformation polluted the information environment to such an extent that it prevents individuals from exercising the right to find and receive accurate knowledge.

Dr. Jonathan H. Perez discussed the distinct regional variation in intellectual freedoms. He mentioned that challenges like resource scarcity and sociopolitical pressures manifest differently in different regions. He pointed out five key themes to understand these variations - funding pressures, escalating organised censorship, consistent targeting, threats to librarians and drivers of censorship. He further opined that libraries are facing a perfect storm that includes budget cuts, and organised censorship campaigns that try to silence diverse voices. He pointed out that these threats are amplified by a much deeper problem in our digital ecosystem and it is not about books being banned but about the environment where information flow is contaminated in such a way that the truth becomes hard to find.

Dr. Jonathan emphasised the powerful perspective of information integrity. He defined integrity as ethical and technical strength that allows us to defend not only access to data but the honesty and reliability of what our society consumes. He stated that integrity has traditionally been addressed from three main perspectives: the integrity of information professionals, the integrity of library services, and academic and research integrity. He mentioned that the roots of information integrity are found in information security. He shared that this discipline was developed from computer science, information science and cybersecurity studies and is based on three fundamental pillars known as CIA Triad - confidentiality, integrity and availability. He talked about how the concept of information integrity evolved from a technical perspective to a more human rights perspective. He mentioned that the concept has evolved into a broader framework that not only considers the accuracy of data but also addresses systematic, structural dynamics that determine the information flow in the digital environment.

Dr. Jonathan highlighted the United Nations (UN) as a key actor in promoting the concept of information integrity. He referenced the UN's 2021 report "Our Common Agenda", which identified the information crisis as a global challenge, and the subsequent 2023 policy report that framed it as a central threat to the digital ecosystem. He stated the UN working definition of information integrity as the accuracy consistency, and reliability of content. He mentioned the three fundamental threats to information integrity i.e. disinformation, misinformation and hate speech. He further discussed the new definition of information integrity presented in the UN document 'From Principles to Practices'- information integrity refers to an information ecosystem in which reliable and accurate information is available to all, enabling people to engage meaningfully in public life, make informed decisions and exercise their rights. This ecosystem is shaped by the actions of a diverse range of actors, including government, technology companies, media, civil society and individuals. He added that a global principle for information integrity that is built on five core pillars known as societal trust and resilience, healthy incentives, public empowerment, independent free and pluralistic media and transparency and research. He also mentioned that the application of this framework becomes particularly important when analysing complex crises like climate change. He referred to the report 'Navigating Climate Crisis: Information Integrity and the Challenge of Misinformation/ Disinformation' by the University of Ottawa and 'Information Integrity about Climate Science - a systematic review'. Both these reports analyse how misleading information hinders the global response to the climate crisis. He further outlined how IFLA has been addressing the concept of information integrity and promoting its advocacy among librarians. He mentioned that IFLA Regional Priority Service 2025 defined information integrity as a modern variant of traditional library missions like education and literacy. He highlighted that information integrity is identified as a field where more evidence is needed to strengthen library services.

Dr. Jonathan H Perez opined that

information integrity is not a theoretical preference but a response to an urgent global reality. He explained that information integrity cuts across virtually every aspect of our lives and when the integrity of information is compromised, it becomes a systemic risk that destabilises our ability to solve collective problems. According to him, it is the foundation of our functioning society, a current platform society. He highlighted that libraries need to adopt the concept of information integrity to reaffirm their role as essential guardians of truth in a polluted digital environment.

Dr. Jonathan H Perez concluded his presentation by noting that promoting information integrity is a collective responsibility that requires both local courage and international cooperation. He emphasised that library professionals must continue to advocate for equitable access and intellectual freedom. He opined that by strengthening the institutions and embracing new perspectives, we can ensure libraries are the most trusted space for knowledge and empower citizens to participate freely in the future of our society.

An interactive question-and-answer session followed the presentation. One question focused on best practices for promoting information integrity in an academic setting. Dr. Jonathan responded that information integrity must be approached from a more open perspective. Dr Jonathan emphasised the need for a broader understanding of how the internet and artificial intelligence function. In conclusion, he suggested forming dedicated working groups to study information integrity from a library perspective.

Dr. Sangeeta Kaul, Director, DELNET profusely thanked Jonathan Hernández for his outstanding lecture which was truly empowering, enlightening and inspiring. ■

Participation in IFLA 2025

Poster Paper at IFLA 2025 by DELNET Officials

The 89th IFLA World Library and Information Congress (WLIC) 2025 was held from August 18-22, 2025 at Astana, Kazakhstan, attracting over 1,600 delegates from more than 110 countries.

Dr. Sangeeta Kaul, Director, DELNET, New Delhi and Mr. Deepak Yadav, Assistant Network Manager, DELNET, New Delhi attended the conference and presented their poster paper entitled "Harnessing the Power of Library Networking through DELNET: From Building Collections to Strengthening Connections and Collaborations" which highlighted DELNET's pioneering efforts as the largest resource-sharing library network in South Asia, connecting over 9,700 institutions in India and abroad. The poster emphasised DELNET's mission to empower libraries through collaboration, accessibility and affordability and addressed the "5 Cs" of library networking: Content, Customers (Users), Cost, Community, and Connectivity. The poster highlighted about DELNET's state-of-the-art platforms, such as the Discovery Portal (with a union catalogue of nearly 42 million resources), Vision Portal (subject expert video lectures) and the Global Research & Innovation Portal (GRIP)®. The poster also highlighted DELNET's competency-building initiatives, such as webinars, conferences, and YouTube channel, "WEBVIEW". It gave them an opportunity to meet the professionals from various countries and to explore the possibilities for collaborating with Libraries globally.

On August 22, 2025 the DELNET officials also visited Swami Vivekananda Cultural Centre (SVCC), Embassy of India, Astana. It is heartening to inform that the National Library of the Republic of Kazakhstan is a Member-Institution of DELNET and availing of DELNET resources and services. The membership is supported by Embassy of India, Astana. They had an interaction with Mrs. Nalini Singhal, Director, Swami Vivekananda Cultural Centre, exploring avenues for collaborative projects in the field of library modernisation, networking and knowledge sharing in Kazakhstan. ■

At SVCC, Embassy of India, Astana

DELNET Workshops

DELNET organised a number of Workshops during the year 2025 in various parts of the country and outside

Workshop on "Transforming and Empowering Librarians and Researchers in Higher Education in Bhutan" held from January 6-10, 2025 at Royal University of Bhutan, Thimphu, organised with the Institutional Association of DELNET-Developing Library Network, New Delhi, India. The Workshop was organised under the HAPPY Project (Qualitative research in Higher education teaching APProaches for sustainabilitY and well-being in Bhutan), Co-funded by the Erasmus+ Programme of the European Union.

A one-day DELNET Workshop in collaboration with Uttaranchal University, Dehradun, Uttarakhand was organised on April 12, 2025. Prof. Dharam Buddi, Vice Chancellor, Uttaranchal University, Dehradun delivered the Inagural address. Dr. Ramveer Tanwar, University Librarian, Uttaranchal University, Dehradun, Uttarakhand was the Local Coordinator of the Workshop.

A one-day DELNET Workshop in collaboration with Development Management Institute (DMI), Patna, Bihar was organised on May 3, 2025. Prof Debiprasad Mishra, Director, Development Management Institute (DMI), Patna delivered the Inaugural address. Prof. Gaurav Mishra, Associate Professor and Mr. Sanjay Kumar Mishra, Library Assistant, Development Management Institute (DMI), Patna, Bihar were the Local Coordinators of the Workshop.

Educational Visit to DELNET by Students and Faculty of Dept. of Library and Information Science, Sikkim University, Gangtok, Sikkim on May 13, 2025.

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A one-day DELNET Workshop in collaboration with I. K. Gujral Punjab Technical University, Kapurthala, Punjab was organised on July 31, 2025. Prof. (Dr.) Susheel Mittal, Vice Chancellor I. K. Gujral Punjab Technical University, Kapurthala, Punjab delivered the Inaugural address online. Dr. Madhu Midha, Deputy Librarian, I. K. Gujral Punjab Technical University, Kapurthala, Punjab was the Local Coordinator of the Workshop.

A one-day DELNET Workshop in collaboration with Kalinga University, Raipur, Chhattisgarh was organised on August 30, 2025. Dr. R. Shridhar, Vice Chancellor, Kalinga University, Raipur delivered the Inaugural address. Dr. Mohammad Nasir, Professor & Head, DLISc cum University Librarian, Kalinga University, Raipur, Chhattisgarh was the Local Coordinator of the Workshop.

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