

# ICDL 2019

International Conference on Digital Landscape

## DIGITAL TRANSFORMATION FOR AN AGILE ENVIRONMENT

November 6–8, 2019 | IHC, New Delhi, India



#ICDL 2019 | #Act Digitally

CONFERENCE BULLETIN | DAY 1

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### INAUGURAL SESSION

#### INDIA'S DIGITAL LANDSCAPE SHINES AT GALA OPENING OF ICDL 2019 IFLA PRESIDENT LEADS THE POWER-PACKED GLITZY CEREMONY

**Welcome Address:** Nitin Desai, Chairman, TERI

**Special Address:** Christine Mackenzie, President, International Federation of Library Associations and Institutions; Bimal Dayal, Chief Executive Officer, Indus Towers Ltd

**Keynote Address:** Nikhil Seth, Assistant Secretary General, United Nations and Executive Director, UNITAR

**Inaugural Address:** Shri Sanjay Dhotre, Hon'ble Minister of State for Human Resource Development, Communications and Electronics and Information Technology, Government of India

The highly awaited global event, ICDL 2019 was inaugurated through a glitzy but serene ceremony. ICDL is focussed on stretching the recommendation of generation and usage of data and technologies in libraries to meet the SDG goals in future, with the theme of Digital Transformation for an Agile Environment. Digital transformation is about revolutionizing the way organizations and institutions are continuously changing internal operations and activities, addressing the needs of various stakeholders, and embracing new trends and technologies in a sustainable way. An agile approach is to roll out the new initiatives across the organizations, which will ensure that all the stakeholders quickly adapt, deliver key products and service innovations,

and survive in a rapidly developing digital world. In his inaugural address, Mr Nitin Desai, Chairman, TERI, presented an overview of the programme stating its objectives as to create a consensus of policies, people, and technologies to enable effective knowledge management in sync with the SDGs. He discussed about a collaborative workforce including industry, academia, regulators, etc. for the same, and he emphasized on the importance of knowledge economy.

Dr Amit Kumar, Director, TERI, discussed about 17 fundamental SDGs. He mentioned about digitization of knowledge management using the Internet, Artificial Intelligence, big data, etc., and discussed that the full potential of digitization can be achieved only through digital inclusion of the stakeholders.

Mr Nikhil Seth, Assistant Secretary General, United Nations and Executive Director, UNITAR talked about the potential and the limitations of digital learning. Education, gender equality, and sustainable infrastructure are some of the areas he discussed. He emphasized that extreme poverty, child mortality, unemployment level, rising intolerance, and threatening human rights are increasing.

He added that one of the greatest concern areas is lack of awareness among people about SDGs. He mentioned about various awareness-generation



initiatives like UNCC climate changing learning and UNSDG learning. He emphasized on blended learning methods, simulation, effective evaluation, constant feedback, and customized hyperlocal learning materials to overcome issues related to forgetting curve in digital learning.

Ms Christine Mackenzie, President, International Federation of Library Associations and Institutions mentioned that no value is more than access to the right information for the right people. She stated that the ICDL will shape the directions of the libraries in India to enable access to information.

Shri Sanjay Dhotre, Hon'ble Minister of State for Human Resource Development, Communications and Electronics and Information Technology, Government of India discussed the success of the 'Digital India' initiative, while talking about the programmes like Aadhar, BHIM. He mentioned about the digital lockers, which are quite helpful to connect and empower our society; cloud computing, big data, artificial intelligence, and other emerging technologies, which are true enablers for development. He further added that digitization can save money, space, and boost productivity, and emphasized that digital inclusion can truly blur the division between the 'haves' and the 'have nots'.

Dr P K Bhattacharya, Associate Director, TERI thanked the institutions, organizations, and individuals for their support in the run-up to the ICDL 2019.



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## OPENING SESSION

### IF INDIA ACHIEVES SDGs, THE WORLD WILL SUCCEED

**Chair:** Amit Kumar, Senior Director, TERI

**Keynote Speaker:** Shoko Noda, UNDP Resident Representative in India

Opening the first session of ICDL 2019, Dr Amit Kumar started by explaining the concept of sustainable development agenda. While defining the success of digital transformation, he mentioned about the three factors – inclusiveness, access, and affordability. In the opening session, Ms Shoko Noda, UNDP Resident Representative in India, discussed about using technology and innovation to achieve SDGs. While talking about emerging technologies like the Internet of Things, Artificial Intelligence, Automation, Fintech, etc., she emphasized on the participation of women in digitization and technology adoption.



She mentioned about various UNDP initiatives around digital finance, Accelerator Lab, women-specific hackathon, etc. As a part of sustainable development initiatives, the UNDP Task Force on Digital Financing has developed an inclusive digital finance ecosystem that offers a wide range of financial services, especially for low-income vulnerable communities. UNDP Accelerator Lab is going to be the world's largest and fastest learning network around development challenges. It aims to reimagine the development for the 21st century. In India, Accelerator Lab is working closely with innovators, students, and start-ups. It will soon come up with a new plan 'Speed Dating of Development'.

Ms Shoko Noda is quite optimistic about the SDG related initiatives in India. She found enough opportunities in the country to achieve SDGs, as she concluded her discourse by saying that "India will achieve SDGs and also the world will succeed."



## PLENARY SESSION

### DOES INDIA NEED TO DEVELOP NEW BUSINESS MODELS TO LEVERAGE DIGITAL TRANSFORMATION AND REALIZE THE SDGs? EXPERTS GRAPPLE WITH INTERESTING ANSWERS

**Chair:** Ajay Shankar, Former Secretary, Department of Industrial Promotion and Policy, Ministry of Commerce & Industry, Government of India

**Panellists:** R.K. Maurya, Director, Ministry of Statistics & Programme Implementation, Government of India; Gagandeep K. Bhullar, Founder & CEO, SuperHuman Race; Mohammad Ghouse Mohideen, Head – Technology Innovation Center, L&T Smart World & Communication; Anirban Ghosh, Chief Sustainability Officer, Mahindra Group

The plenary session attempted to find out the ROIs of SDGs. Mr Ajay Shankar set the context of the session with a pertinent question about the driving factors behind SDGs as the quantum of investment required to achieve SDGs globally is around 5 trillion USD.

Ms Gagandeep K. Bhullar indicated two driving factors behind SDGs: fear and fun. However, she also suggested that mindset change from fear to fun would help us to achieve SDGs in a better way. While discussing effective participation of people in SDG initiatives, she talked about digital content, data storytelling, and choice of architectural practices as interesting engagement tools which depict individual ROI. Mr Mohammad Ghouse Mohideen opined that all business models should embrace digitization at the grassroots level. He emphasized on the hyper local decision scenarios, paperless architecture, value-based business models for stakeholders, and proper IPR framework to encourage innovation in keeping with the aim of realizing the SDGs.

Mr R.K. Maurya discussed various government initiatives compatible with the SDGs. He emphasized on Big Data Analytics, Data Quality, Access of Data, Technological Advancements, Skill Upgradation, and Capacity Building initiatives. He also elaborated on the importance of National Indicator Framework in achieving the SDGs.



Mr Anirban Ghosh presented his discourse in the context of sustainable cities and communities. He related his seamless experience with shared cab services and mentioned that a similar sustainable model can be replicated for the public transport system by improving the information sharing system. While elaborating on ROIs related to sustainability practices, he mentioned that a people-centric approach is a more effective model.

The session concluded with an insight that effective use of technology can help people engage in a better way with SDGs. This practice could reduce the investment, required to achieve the SDGs, at least by 20 to 30 per cent.

## ICDL 2019 SESSION 1

### DIGITAL TRANSFORMATION IN LIBRARIES: CAPTURING EMERGING TRENDS

**Chair:** Payal Mago, Principal, Shaheed Rajguru College of Applied Sciences for Women, Delhi University

**Co-Chair:** Safurat Balogun, Head of Library Services, Goethe- Institut

**Keynote Speaker:** Hal Kirkwood, Bodleian Business Librarian, Said Business School, University of Oxford & President, Special Library Association

**Speakers:** Gagandeep Singh Sapra, Co-founder Sprout Box and Co-founder Makersbox; Sanjukta Ray, Global Head, Information Resource Centre, Tata Consultancy Services

Mr Gagandeep Singh Sapra spoke of his first company in 1983 which he started at the age of 11 to transform the libraries and make them more relevant for users. Ms Safurat Balogun said libraries should create such information which Google cannot. Mr Hal Kirkwood talked about how libraries can be transformed by connecting them to the websites, web cameras, etc. He elaborated

on how libraries have been transformed from the card catalogue to OPAC, books to e-books, journals to online databases. Ms Sanjukta Ray talked about business 4.0, and how it's based on 4 technology pillars: Agile, Intelligent, Automated, and Cloud. She also talked about how TCS is participating in digital transformation as an information resource centre.



## ICDL 2019 SESSION 2

### DIGITAL TRANSFORMATION FOR SMART GROWTH AND INDUSTRY MANAGEMENT

Co-Chairs: R R Rashmi and Amit Kumar

Mr RR Rashmi initiated the session and gave a brief introduction about the session's theme, issues, and challenges. He broadly classified technologies into three dimensions, namely, people, natural resources, and institutions and their processes. Mr. Amit Kumar situated the SDGs in the Industry 4.0 scenario. He talked about historical development in line of Industrial Revolution till arrival of Industry 4.0 or smart industries. He also mentioned about centralized and decentralized models of industrialization. In this session, Mr. Kunal Kumar spoke about philosophical foundations behind India's Smart City Mission. He said "smart cities are a journey than a destination". Ms. Gagandeep K Bhullar spoke on Digital Transformation in Smart Industries. She preferred the term 'business' than 'industry', as industry means act of providing goods and services while businesses helps in creating values. Mr. M.G. Mohideen spoke on digital transformation for SDGs, where he highlighted core verticals of L&T Construction's Technology Innovation Centre. He also discussed their on-going integrated smart city projects in Pune, Hyderabad, Mumbai, Panaji, Vizag, and other metropolitan cities. Mr. Rajiv

Vijh spoke on Smart Manufacturing for inclusive and sustainable industrial development. He focused on activities of UNIDO in supporting SMEs in their digital transformation as well as their preparedness in Industry 4.0. Ms Ramaya Hebbalaguppe spoke on augmented reality (AR)-based industrial inspection and maintenance repair, where she highlighted core verticals of TCS Innovation Labs. She demonstrated some of their on-going AR projects helping the industrial partners in India and the world. Prof. Matthias Hemmje spoke on ontology-based process planning for manufacturing, production and assembly. He highlighted German experience of the knowledge-based production planning (KPP). Other speakers in the session included Dr. Sankhadip Das of MEITY, and Mr. Umesh Bhutoria of Energy Tech Ventures. They spoke about their institutional experiences in implementing industry 4.0 activities. From the invited presentations, Mr. Vijay Bhaskar spoke on solar irradiation project and Ms Rajalakshmi Gopalakrishnan on e-waste management project in Bengaluru.



## ICDL 2019 SESSION 3

### NEED FOR LONG-TERM POLICY STRUCTURE

Chair: Kalpana Dasgupta

Co-chair: Sanjay Bihani

Invited talk: Sarah Ziebell

Guest speaker: Partha De

Contributed speakers: T P Sankar and Reeta Sharma, Chhavi Jain, Manoj Kumar Verma, Manoj Kumar Sinha, and Ravi Shukla

Ms Kalpana Dasgupta, Advisory Board Member, Read Global and Former Director, Central Secretariat Library, Government of India commenced the session by divulging that only a few libraries have long-term policy structure for digital libraries. Ms Sarah Ziebell, Regional Public

Engagement Specialist, US Embassy, New Delhi exhorted libraries to engage local communities in learning for awakened and well-informed citizenry. She emphasized on the need and utility of borderless education via open education resources, MOOC (massive open online courses), and their effectiveness in reducing digital inequalities. Mr Partha De, Librarian, Advisor (Special Projects to Director), IIT-ISM, Dhanbad dwelt upon the significance of citations and quality research in ameliorating the ranking of IITs. He advocated international collaborations in jointly taking big projects and publishing research papers.

Mr T P Sankar, Knowledge Resource Centre, TERI and Ms Reeta Sharma, spoke about digital repository NSTMIS, which they developed on LAMP (Linux, Apache, MySQL, PHP) platform for all science and technology publications. The repository is searchable by Boolean, term, phrase, or title search.

Ms Chhavi Jain briefed about the portal of National Repository for Indian Government Publications developed by National Informatics Centre. Mr Manoj Kumar Sinha demonstrated a scientometric analysis of ICT research output generated through Scopus database. Ms Kalpana Dasgupta gave a valedictory statement suggesting government and library professionals to synchronize their efforts for larger digitization and developing digital libraries.



## ICDL 2019 SESSION 4

### DIGITAL LIBRARY STANDARDS AND POLICY: NEED FOR A POLICY FRAMEWORK

Chair: Dr. Bablu Sutradhar

Guest Speaker: Dr. M. Madhusudan

Invited Speaker: V. N. Shukla

Speaker 1: Akhlaq Ahmad

Speaker 2: Meera B. M.



Dr Bablu Sutradhar gave a brief introduction about the topic Digital Library Standards and Policy. Dr V. N Shukla spoke on Evaluation of Multimodal Multilingual Digital Libraries. He spoke regarding emergence of digital library, methodologies, user model of digital library, IR, standard and how standards can be developed for digital library. He gave the example of M curve and how libraries have become multimodal multilingual because of the use of language technique which is an important aspect in digital library.

## ICDL 2019 SESSION 5

### INFORMATION ACCESS FOR ALL

Chair: R K Sharma, Librarian, UN Information Center for India and Butan

Co-Chair: Manas R Panigrahi, Senior Programme Officer Education, CEMCA

Keynote Address: Christine Mackenzie, IFLA President

Speakers: M Aslam Alam; Geeta Malhotra Country; Kirsty Crawford; Tariq Ashraf

Dr R K Sharma mentioned the 5 principles regarding SDGs: People, Planet, Prosperity, Partnership, and Peace. Christina Mackenzie made important points on information access for all and said 98% of the information is now available online, but 44% of the world still has no Internet access. Dr M Aslam Alam mentioned issues and challenges of information access in Bangladesh. Dr Geeta Malhotra talked about rural community libraries including early childhood development programme. Ms Kirsty Crawford focused on how libraries are performing in Bangladesh and the citizens are striving to meet the SDGs. Dr Tariq Ashraf touched upon how libraries need to diversify and start new community-based services, take new initiatives and extensively diversify their role to meet the future needs of SDGs.



## ICDL 2019 ON THE SIDELINES . . .

### INAUGURATION OF EXHIBITION

**Nikhil Seth**, Assistant Secretary General, United Nations and Executive Director, UNITAR; **K S Varaprasad**, Director General – HR, Defence Research and Development Organization, Govt of India; **Christine Mackenzie**, IFLA President; **Hal Kirkwood**, Bodleian Business Librarian, University of Oxford & President, Special Library Association; **Michael Seadle**, Director, Humboldt Universitat zu Berlin, Germany; **Shoko Noda**, UNDP Resident Representative in India; **Amit Kumar**, Senior Fellow & Programme Director, TERI

The inaugural exhibition at ICDL 2019 had a promising take-off in the presence of distinguished guests. The exhibition attracted exhibitors. With an objective to enable generation and usage of data and technologies in libraries to attain SDGs, ICDL emphasized on Digital Transformation for an Agile Environment. Digital Transformation is about revolutionizing the way organizations and institutions are continuously changing internal operations and activities, addressing the needs of various stakeholders, and embracing new trends and



technologies in a sustainable way. An agile approach is to roll out new initiatives across the organization, which will ensure that all stakeholders adapt, deliver key products and service innovations, and survive in a rapidly developing digital world.

## ICDL 2019 SESSION 6

### INFORMATION RETRIEVAL IN THE DIGITAL AGE: THE BURGEONING ISSUE OF 'DIGITAL CONTENT MIGRATION'

**Chair:** Partha De, Librarian, Advisor (Special Projects to Director) IIT-ISM, Dhanbad  
**Co-Chair:** Anand A Jha, Deputy Manager, Centre for Media Studies  
**Invited Talk:** Nabi Hasan, Librarian, IIT Delhi  
**Guest Speaker:** Projes Roy, Librarian, Shaheed Rajguru College of Applied Sciences for Women  
**Contributed Speakers:** Nasiruddin Mitul, Praveen Kr Choudhary

Mr Nabi Hasan gave a presentation on different ways of achieving information retrieval. He also mentioned various platforms users can utilize to locate, access, and share information and knowledge. Mr Projes Roy highlighted the incremental growth pattern of e-book market and the phase of artificial intelligence (AI)—through machine learning to deep learning. He also drew attention to the paradoxical situations that although brilliant minds are indulged in software development, yet the software are not matching with the required levels of precision. Mr Nasiruddin Mitul expressed his views about the selection of e-resources in the university libraries of Bangladesh and constraints in their procurement. Mr Praveen Kr Choudhary spoke on the burgeoning issue of 'digital content migration'.

## ICDL 2019 SESSION 7

### DIGITAL LIBRARY SERVICES AND CASE STUDIES

**Chair:** Dr Debal C Kar  
**Co-Chair:** Dr Shiva Kanaujia Shukla  
**Guest Speaker:** Dr Bablu Sutradhar, Librarian IIT Kharagpur  
**Invited Talk Speaker:** Sara Duvall  
**Speakers:** DD Lal; Upasana Yadav; Priya Vaidya; Purbi Dey Kanungo

Ms Sara Duvall talked about knowledge and access since the primary level to district level to university level to national level. She presented the case study of four E-libraries: Ann Arbor Public Schools Library, Ann Arbor District Library, University of Michigan, Library of Congress. Dr Bablu Sutradhar discussed about the overview Digital Library services at Central Library Kharagpur. Mr DD Lal explained the different models of Consortium. Challenges faced by Delcon Consortia.

## ICDL 2019 SESSION 8

### IFLA PRESIDENT MS CHRISTINE MACKENZIE INTERACTS WITH LIBRARY ASSOCIATIONS

In a first of its kind, IFLA President Ms Christine Mackenzie had a one to one interaction with the office bearers of Indian professional library associations such as ILA, ASIALA, AMLA, IASLIC. She discussed the main issues with regard to library profession in India and offered her expert advice. She assured IFLA's support to professional activities and hoped that in coming years there will be increased interaction. Meeting officials expressed their thanks to IFLA and ICDL for providing them this interactive platform.



## IN CONVERSATION



### PROFESSOR MICHAEL SEADLE

BERLIN SCHOOL OF LIBRARY AND INFORMATION SCIENCE AT HUMBOLDT-UNIVERSITAET ZU BERLIN

- ? **How do you view ICDL as a concept?**  
I have been attending ICDL since its first year, and I consider it an important event. It brings together people from different cultures from around the world. It is mainly for intellectuals and participation is greater from India.
- ? **How do you view the Indian library and information science as a profession in the context of the vibrant digital landscape?**  
Libraries in India suffer due to lack of money. However, it is interesting to see how library and information science professionals are managing the libraries with limited funds. Indian library professionals are very competent and they have been doing interesting projects in their libraries.



### DR. ALKA SURI

DIRECTOR, DESIDOC, DRDO, DELHI

- ? **How do you preserve the contents at DESIDOC, DRDO?**  
We have taken several steps to preserve the digital content such as institutional repositories through repositories. Besides this, we have been harvesting the content.
- ? **Do you think libraries and librarians can sustain in the changing digital landscape?**  
Librarians have to reinvent themselves to sustain in this modern age. LIS schools need to restructure themselves so that their students can be relevant in a changing working environment. Disparity is huge in our country. We ought to start community service through all types of libraries so that knowledge can be disseminated to every class of society.



### DR. H.K. KAUL

DIRECTOR, DELNET, DELHI

- ? **How do you see the development of ICDL over the years?**  
It was started to promote libraries, looking into the technological solutions and standards. However, it has been moved to digital landscape this time. Therefore, libraries have become a minute part of the whole digital environment. We have to see how ICDL is going to cover libraries in the future.
- ? **Library associations in India are not strong compared to libraries in the Western world. Please suggest how library associations in India can be strengthened?**  
Associations play a crucial role. Library associations in India should wake up. Associations should give recommendations to the government at both the national and state levels, and plead for financial support, staff training, and an improved quality of the working environment, and also generate more local digital content.