



Shaping the Future 2021
Monday 6th & Tuesday 7th December 2021
Muscat, OMAN

DIGITAL ADDRESSING GLOBAL SOCIETAL CHALLENGES
DIGITAL DYNAMICS CONFRONTING THE NEW REALITIES OF DISRUPTION AND RESILIENCE

Sunday 5th December
Welcome Event [7:00 pm to 9:00 pm]

Monday 6th December [8:45 am - 12:30 pm]

Welcome Addresses [8:45 am – 9:15 am]

Opening Session: Future Visions [9:15 am – 10:30 am]

- Digital Visions in a World Full of Challenges

Session as a dialog, led by multi-disciplinary presentations on visions for the role of technology in human endeavor, recognizing the need to place technology in the context of solving the great problems facing all societies. We must find ways for governments to develop policies regarding the role of technology that protect privacy while stimulating innovations that contribute to problem solving

S1: Wireless and Wireline Infrastructures: the Upcoming Challenges [10:30 am – 12:30 pm]

- 5G: Global Status, Concerns, and Deployment Projections
- How Important is 5G for the Digitalization of the Economy?
- The Importance of Digital Infrastructure in Europe, North America, Asia, Africa
- Broadband access vs. Digital Infrastructure Investing
- The Business Case for Network Connectivity in Pandemic and Economic Post-Covid Recovery Plans
- How Wireless and Wireline Infrastructures support Climate Action, Energy, Mobility, Defense & Security
- Innovations & New Business Models for Networking Providers

Lunch [12:30 pm – 2:00 pm]

Keynote Session: [2:00 pm – 2:45 pm]

- Collaboration Between the Digital and Human Worlds: Importance of a Human Centered Approach
- Ethics of Emerging Tech

S2: Managing Disruptive Digital Technologies : Artificial Intelligences, IoT, Blockchain, 5G...[2:45 pm – 4:15 pm]

- Developing Policies for Trusting Artificial Intelligence
- Potential Value of AI in Global Sustainability
- Principles for Balancing Privacy with Public Safety in Pandemics
- The New Data Sharing Paradigms: Which Issues at Stake?
- Managing the Unknowns of emerging technologies such as Quantum Computing and Others (Machine Learning, Deep Learning, Predictive AI, Robots)
- Identifying Policy Issues for Managing Disruptive Technologies such as Quantum Computing
- Managing Risks with Centralized and Distributed Large Data Collections
- Issues with Human to Machine Integration - Augmented Reality / Virtual Reality Limits
- the Next Iteration of the Internet of Things: The Internet of ideas lol

Coffee Break

S3: Designing a Regulatory, Policy, &Governance Framework Addressing Safety Security &Accountability in a Complex World [2:45 pm – 4.15 pm]

- How, if at all, has the corona virus affected telecom and tech laws? How should have it impacted existing laws, where such changes have not yet occurred?
- Are these changes temporary during the pandemic or permanent? Should they be permanent? Should the laws treat high speed broadband as a Human Right?
- Will we continue to see more deregulation of the Telecom and Tech center or is there the need for more regulation, not less, to serve societal goals?
- Are US and EU telecom and tech laws becoming increasingly biased against the Chinese? Are we risking a bifurcation of tech systems between the West and the East? How can these laws be changed to be more open to Chinese vendors?
- Should telecom and tech laws be strengthened to protect consumers from privacy violations by the Social media companies.
- How can Telecom and Tech regulation and laws ensure the benefits of technology are more equally distributed to low income and other historically disenfranchised groups? Where have existing laws failed to achieve this objective?
- How can Telecom and Tech laws and regulations better address issues of social justice and racial equality? Where have existing laws failed to achieve this objective?

Coffee Break

S4: Industry 4.0 and Beyond [4.30 pm – 6.00 pm]

- Towards Development of International Collaborations
- How to Identify the Weak points, Who will pay, How to Mutualize the Risk on the Value Chain?
- Digitalization Transforming Energy, Industry, Finance, Agriculture, Commerce...
- Extreme Customization
- Process Productivity & Quality Control (Evolving Smart Factories –Robotics, Automation, Opportunities & Safety Issues; Liability & Insurance...)
- Logistics & Global Supply Chains (Mobility 4.0: Integrated & Intelligent Transport...)
- Blockchain
- AI Capabilities to Create Business Value
- What is an Industry4all – Making the Tools Available So Everyone Can Be an Industrial Partner & Prosumer

S5: Women Pioneers at the Intersection Between Economic and Environmental Development [4.30 pm – 6.00 pm]

- Emerging Skills in the Digital Economy (women angle)
- Women in Digital Start-ups
- Innovations in Services

GALA DINNER [7:30 pm to 10:30 pm]**Tuesday 7thDecember [8:45 am – 1:00 pm]****Keynote Opening Session Day 2 [8:45 am – 9:45 am]**

How digital is used for more resilient societies and at social innovation, where it's important in light of Covid-19 and other global threats and challenges to reexamine what we mean by sustainability and to re-define resilience in this context

- COVID-19 Impacts & Resilience
- How the Pandemic Changes Our Society and How to Design the Future
- Boosting Education Issues

S6: COVID-19 Pandemic Implications for Technology [9:45 am– 11:15 am]

- The Role of Technology in Fighting Pandemics
- The Impact of Teleworking on Corporations and Employees
- The Challenges of Virtual Education
- The Virtual Delivery of Government Services
- Innovation in Data Frameworks for Collaboration
- Cross-boundary Information Sharing Principles
- Protecting Privacy on a Global scale
- Changing the Way we Think about and do Research
- Services that Are Accelerated (Education, Government, Energy, Healthcare, e-commerce... etc.)

Coffee Break

S7: Sustainable Smart, Cognitive Cities, Regions & Communities & Tech for Good [11:30 am – 1:30 pm]

- Sustainable Urban Developments
- Decentralized Innovation in Cities in Mobility, Smart Energy, Intelligent Buildings ...
- Combining Digital and Nature Based Solutions
- Resilient/cognitive cities
- Data and Knowledge Sharing Issues / Interoperability (Public Data and Open Source)
- Investing in Innovation to Get Out of a Difficult Economic Situation
- Innovation in Smart Cities During COVID-19: New Health Challenges for Local Authorities
- IoT & Data Analytics Opportunities for Smart City & Smart Grid
- Digital & AI at the Service of the Citizen
- Mobility: AI+5G
- Digital as an Enabler for Sustainability, Climate Mitigation & Adaptation, Water Management Solutions, Renewable Energy
- Urban Agriculture and Digital Innovation. Towards a Self-Sufficient future?
- Community Engagement & Co-Creation
- Regenerative and Restorative Circular Cities, the New Localism and Digital Technologies

S8: Digital Healthcare & New Global Challenges [11.30 pm – 1.30 pm]

- The COVID Watershed: how the pandemic transformed public health priorities and healthcare implementation (need for high-quality data, medical records, vaccination, identification of patients treated for COVID, diagnostics, Prevention and surveillance, etc.)
- Digital and Mobile Health Technologies Addressing COVID and Beyond (Wearables, Track and Trace Apps, etc.)
- Smart Healthcare: Improving Safety, Quality, and Equity in Healthcare through Simulation, Learning Healthcare Systems, and Interoperability
- Patient-Centered Therapies: The Pitfalls and Promise of Precision Medicine
- Global Vision of Health Policy (Incorporating Data Privacy, Ethics, and Social Determinants of Health)
- Advances in the Provision of Care (Telemedicine/Telehealth, Smart Hospitals, Robotisation, Artificial Intelligence, Virtual Reality, AR, etc.)
- Patient Empowerment (User feedback, access to medical records and information, ranking of health care providers, quantified self, etc.)
- Connected Health / Benefits of Sharing & Interoperability – Country cases for best practices in public health systems

Lunch [1:30 pm – 2:30 pm]

Afternoon Special Program – Explore Oman [3:00 pm – 5:30 pm]

Option I: Hi-Tech Visit the AR/VR Design Lab at Knowledge Oasis Muscat (KOM)

Option II: Culture & History Guided tour Muscat old Town and National Museum – with some key technology features

Option III: Nature– boat tour Dolphins & Turtles (snorkeling optional)

International Scientific Committee

EUROPE & MIDDLE EAST

Ingrid Andersson, Associate Senior Expert, IKED, Sweden; **Marta Arsovska-Tomovska**, Former Minister for ICT and Public Administration in Macedonia, Advisor the Serbian Prime Minister for PAR and Digitalization; **M. Sherif Aziz**, Advisor Strategic Planning, Madayn, Oman; **Jean-Pierre Bienaimé**, Chairman, Institute of Economic & Social Research on Telecommunications (IREST), France; **Eyal Bloch**, Head & Co-founder, TOP Global, Israel; **Jean-Pierre Chamoux**, Professor, University Paris Descartes, France; **Mariane Cimino**, CEO, Hoa-Ora, France; **Philippe Denis**, Computer Scientist & Visual Artist, Digital Strategist and Innovative Thinker, France; **Margot Dor**, Director of Government Affairs, ETSI, France; **John Giusti**, Chief Regulatory Officer, GSMA, United-Kingdom; **Stéphane Grumbach**, Senior Scientist, INRIA; Deputy director IXXI, Complex Systems Institute, ENS Lyon, France; **Steven Lafosse Marin**, Founder & CEO, UMAN, France; **Hugo Kerschot**, Founder, IS- Practice, Belgium; **Latif Ladid**, President IPv6 Forum, Luxembourg; **Eric Legale**, Managing Director Issy Media, City of Issy-les-Moulineaux, France; **Desiree Miloshevic**, Senior Public Policy and International Affairs Adviser, Afilias, Ireland; **Jeremy Millard**, Senior Consultant, Danish Technological Institute, Denmark; **Sylvain Nacheff**, Director International Business Development, Bouygues Energie & Services, France; **Alice Pezard**, Attorney at Law & Arbitrator, France; **Pascal Poitevin**, Digital Strategy Consultant, France;; **Alfredo M. Ronchi**, Secretary EC Medici Framework, Politecnico di Milano, Italy; **Joël Ruet**, CNRS Researcher, Paris-North Economic Center, associated with the Management Research Center of Ecole Polytechnique; Chairman, TheBridgeTank, France; **Gérald Santucci**, Ambassador INTEROP-VLab, Belgium; **Philippe Scheimann**, Co-Founder, TOP Global, Israel; **Claudia Selli**, European Government Affairs Director, AT&T International External Affairs, Belgium; **Dan Shefet**, Lawyer founder of Cabinet Shefet, France; **Benedicte Suzan**, CIS, Technical Authority, R&T coordination & Innovation, Public Affairs, Airbus Defence and Space, France; **Daniel Van Lerberghe**, Co-Founder & Director, InnoGage Ltd, Belgium; **Colin Williams**, Director SBL, United-Kingdom; **Randy Yaloz**, Founding Partner & Attorney at Law, E.L.C. Group, France

ASIA & OCEANIA

Nitya Karmakar, Professor, Peter Faber Business School, Faculty of Law and Business, Australian Catholic University, Australia; **Eikazu Niwano**, NTT Research Professor, Secure Platform Laboratories, NTT Corporation, Japan; **Chetan Sharma**, COO & Director, Datamation Group, India; **Yoshio Tanaka**, Professor Tokyo University of Science, Japan; **Sarah Zhao**, Partner, Baker Hostetler, USA

NORTH AMERICA

Sylvie Albert, Professor, Department of Business and Administration, University of Winnipeg, **Katherine D. Blizinsky**, Policy Director , National Institutes of Health (NIH), USA, Canada; **Don Davidson**, Director Cyber-SCRM, Office of the President, Synopsys, USA; **Julia Glidden**, Corporate Vice-President, Commercial Strategy & Operations, Microsoft, USA; **Laszlo Horvath**, President ActiveMedia, USA; **Andrew D. Lipman**, Partner and Head of Telecom Group, Morgan, Lewis & Bockius, USA; **Samia Melhem**, Global Lead, Digital development Infrastructure and PPP Global Practice, The World Bank Group; **Brent Olson**, Vice President - Public Policy, AT&T, USA; **Murli Rajan**, Associate Dean, Kania School of Management, University of Scranton; USA; **Alan Shark**, Executive Director & CEO, Public Technologies Institute; Associate Professor, George Mason University, USA; **Dan Shoemaker**, Principal Investigator and Senior Research Scientist, University of Detroit Mercy - UDM's Center for Cyber Security and Intelligence Studies, USA; **Tamara Shoemaker**, Director University of Detroit Mercy Center for Cyber Security & Intel Studies, USA; **Michaël Stankosky**, Professorial Lecturer, Engineering Management & Systems Engineering, George Washington University, USA; **Theresa Swinehart**, Senior Advisor to the President on Global Strategy, ICANN; **Paul Wormeli**, Executive Director Emeritus Integrated Justice Information Systems (IJIS) Institute, USA;

AFRICA

Amadou Daffé, CEO & Co-Founder, Gebeya, USA; **Ali Koné**, COO & Co-Founder, Coders4Africa, USA; **Koffi Fabrice Djossou**, Regional Director, Gilat Telecom, Israel; **Effat El Shooky**, Director, Women-To-Work Program, National Council For Women, Egypt; **Anne-Rachel Inné**, VP Government Engagement, ICANN