


# The 8th International Conference on Technologies & Organization

# ICTO2024

AUGMENTED INTELLIGENCE FOR SMARTER SOCIETIES

DVRC, Paris, France

***Conference, June 27th & 28th, 2024***

***Preconference Workshop, June 25th & 26th, 2024***

**What is ICTO?**

*At ICTO Community Ethics, Diversity, Equity & Inclusion (EDEI) are the core of who we are. We are committed to promoting these principles and values across our practices, organisations and institutions while striving to advance them into our cultures.*

The ICTO2024 conference centers on "**Augmented Intelligence for Smarter Societies**," highlighting the partnership between human cognition and artificial intelligence (AI) to refine organizational decision-making. This theme reflects a significant shift from viewing AI as a substitute for human intelligence to a complementary force that enhances human capabilities (Harfouche, Quinio, Saba, & Saba, 2024).

**Venue** : DeVinci Research Center - **Campus de l'Arche** (Address : 47 boulevard de Pesaro, 92000 Nanterre)

Metro 1 La Défense or RER A Nanterre Prefecture or RER A La Défense (same walking distance) or Tramway: T2 La Défense

# ICTO2024 PROGRAM

**(All times are given in Central European Time)**

**June 25th, 2024**

**Day1 Pre-conference Workshop: Writing Empirical Papers for Top-Tier Journals**
Venue: DeVinci Research Center - Campus de l'Arche : 47 boulevard de Pesaro, 92000 Nanterre

9:00AM-12:30PM: Denis Dennehy & Mary Tate - Stream A- Publishing basics & Literature analysis to establish a gap in knowledge and a theoretical framework

12:30PM-2:00PM: Lunch at LE FAUBOURG LA DEFENSE, 38 Boulevard de Pesaro, 92 000 Nanterre

2:00PM- 3:00PM: Distinguished Professor Detmar Straub: "The Changing Nature of IS Research Over the Decades"

3:00PM- 3:30PM: Q&A with Detmar Straub

3:30PM- 5:30PM: Initial research pitch

**June 26th, 2024**

**Day2 Pre-conference Workshop: Publishing in high quality outlets**
Venue: DeVinci Research Center - Campus de l'Arche : 47 boulevard de Pesaro, 92000 Nanterre

9:00AM-11:00AM: Denis Dennehy & Mary Tate Stream B- Master-class in literature analysis

11:15AM-12:30PM: Distinguished Professor Detmar Straub: "The Art of Publishing in Top-Tier Journals" + Q&A

12:30PM-2:00PM: Lunch at LE FAUBOURG LA DEFENSE, 38 Boulevard de Pesaro, 92 000 Nanterre

2:00PM- 5:30PM: Round-table discussion of drafts for the ICTO2024 four special issues






**June 27th, 2024**

**Day 1 conference**
Venue: DeVinci Research Center - Campus de l'Arche : 47 boulevard de Pesaro, 92000 Nanterre

08:30AM - 11:00AM: Registration

09:00AM - 10:30AM: Parallel session 1

10:30AM - 10:45AM: Coffee Break

10:45AM - 12:15PM: Parallel session 2

12:15PM-2:15PM: Lunch at LE FAUBOURG LA DEFENSE, 38 Boulevard de Pesaro, 92 000 Nanterre

02:15PM - 03:45PM: Opening PLENARY SESSION

03:45PM - 04:00PM: Coffee Break

04:00PM - 06:00PM : Parallel session 3

*7:30PM – 11:30PM Social Dinner (Auteuil Brasserie Eurl – 78 rue d'Auteuil, 75016 Paris)*

**June 28th, 2024**

**Day 2 conference**
Venue: DeVinci Research Center - Campus de l'Arche : 47 boulevard de Pesaro, 92000 Nanterre

09:00AM - 10:30AM: Parallel session 4

10:30AM - 10:45AM: Coffee Break

10:45AM - 12:15PM: PLENARY KEYNOTE SESSION

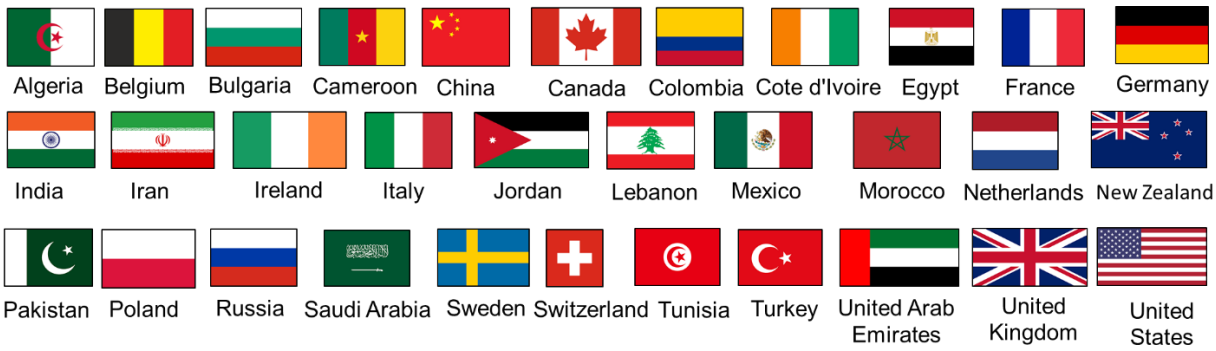
12:15PM-2:15PM: Lunch at LE FAUBOURG LA DEFENSE, 38 Boulevard de Pesaro, 92 000 Nanterre

02:15PM - 03:45PM: Parallel session 5

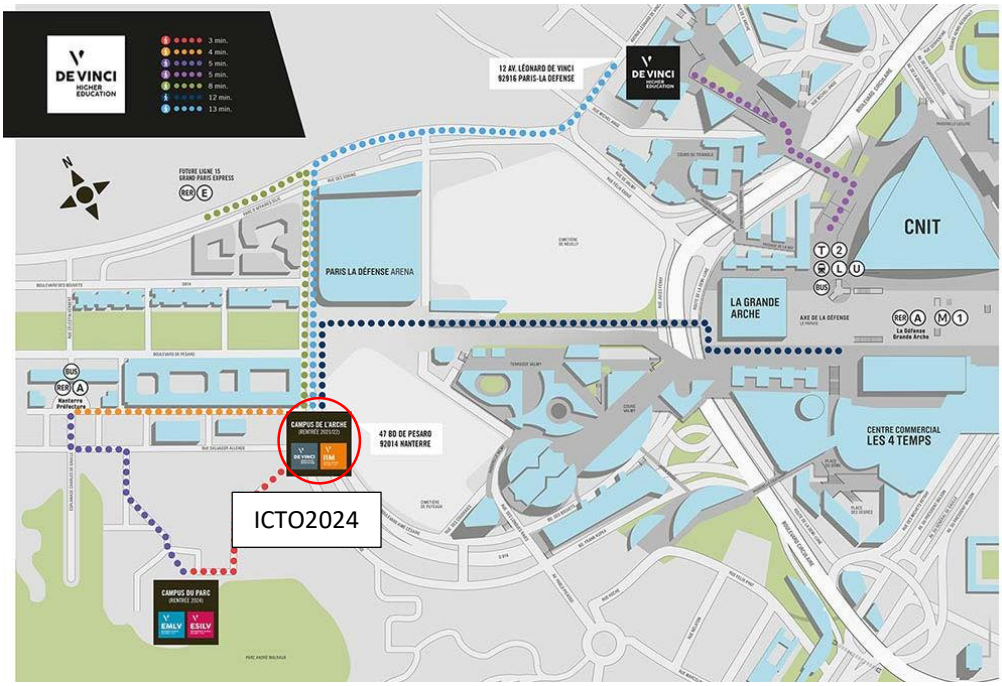
03:45PM - 04:00PM: Coffee Break

04:00PM - 05:00PM: CLOSING SESSION

# ICTO2024 countries




# CONFERENCE VENUE




DeVinci Research Center -

**Campus de l'Arche**

47 Boulevard de Pesaro, 92000 Nanterre

# ICTO2024 Committees

## Honorary Conference Chair



Prof. Marco De Marco, Uninettuno University, Italy

## Conference cochairs



Prof. Pascale Bueno Merino, EMLV, France



Prof. Samuel Fosso Wamba, TBS Education, France

## Program cochairs



Prof. Peter Saba, EMLV, France



Prof. Jonna Järveläinen, University of Jyväskylä, Finland



Prof. Antoine Harfouche, Université Paris Nanterre



Prof. Mohammad I. Merhi, Indiana University South Bend



Prof. Jihane Aayale, Groupe ISCAE, Morocco



Prof. Abdullah Albizri, Montclair State University, USA

## Ethics, Diversity, Equity, & Inclusion cochairs



Prof. Farhana Faruqe, University of Virginia, USA



Prof. Abbas Tarhini, Lebanese American University, Lebanon



Prof. Farid Nakhle, Temple University, Japan Campus (TUJ), Japan

## Proceedings cochairs



Prof. Alessandro Biancalani, ESILV, France



Prof. Jingshu Du, EMLV, France



Prof. Insaf Khelladi, EMLV, France

## Doctoral Consortium cochairs



Prof. Imed Ben Nasr, Excelia Group, France



Prof. Hajer Kefi, EMLV, France



Prof. Mohamed Amine Issami, Groupe ISCAE, Morrocco



Prof. Hossana Twinomurinzi, University of Johannesburg, South Africa

## International Liaison cochairs



Prof. Nizar Raissi, Umm al Qura University, KSA



Prof. Jamil Arida, University Saint Joseph, Lebanon



Prof. Bernard Quinio, Université Paris Nanterre, France

**Communication cochairs**

- Prof. Galina Kondrateva, EDC Paris Business School, France
- Prof. Sophie Agulhon, Paris 8 University, France
- Prof. Myriam Raymond, Laboratoire du Granem, IAE Angers

**Junior Faculty Consortium committee**

- Prof. Mauro Romanelli, University of Naples "Parthenope", Italy
- Prof. Mousa Albashrawi, KFUPM, Saudi Arabia
- Prof. Amir Abdulmuhsin, University of Mosul, Iraq

**Chairs of the French Sessions**



Prof. Pauline de Pechpeyrou, IAE Gustave Eiffel



Prof. Marc Bidan, University of Nantes

**ICTO Conference's Chair for Switzerland**



Prof. Mario Saba, Founder of the Higher Hospitality Academy of Switzerland

## Track 1. Collective Behavior in Complex Systems (CoBeCoSy)

**Track 1 chairs**

- Alessandro Biancalani, ESILV Engineering School, De Vinci Research Center
- Peter Saba, EMLV Business School, De Vinci Research Center

**Track 1 Scientific Committee**

- Alessandro Biancalani, ESILV/DVRC
- Francisco Chinesta, ENSAM/PIMM
- Xavier Garbet, CEA/IRFM
- Sofiane Khelladi, ENSAM/LIFSE
- Alessandro Retino, Ecole-Polytechnique/LPP
- Francesco Salvarani, ESILV/DVRC and University of Pavia, Italy
- Antoine Sellier, Ecole-Polytechnique/LadHyX

- Eric Sonnendruecker, Max Planck Institute, Germany

## Track 2. Challenges in the deployment of smart and intelligent systems

### Track 2 chairs

- Swaminath Venkateswaran, ESILV Engineering School, De Vinci Research Center
- Thuy Nguyen, ESILV Engineering School, De Vinci Research Center
- Jingshu Du (jingshu.du@devinci.fr), EMLV Business School, De Vinci Research Center

### Track 2 Invited Speakers

- Prof. Mark Thompson, Professor of Digital Economy, University of Exeter Business School, United Kingdom
- Prof Daniel Bonamy, Research Director at CEA, Université Paris-Saclay, France
- Prof. Vu-Hieu Nguyen, Associate Professor of Mechanical Engineering, Paris 12 Val de Marne University, France

## Track 3. Navigating the Complexity and Acceptability of Low-Carbon Energy Transition in the 21st Century

### Track 3 chairs

- Pascal Clain, ESILV Engineering School, De Vinci Research Center
- Insaf Khelladi, EMLV Business School, De Vinci Research Center

## ICTO2024 Scientific Committee

- Prof. Abbas Tarhini, Lebanese American University, Lebanon
- Prof. Abdullah Albizri, Montclair State University, USA
- Prof. Adriana Schiopoiu Burlea, University of Craiova, Romania
- Prof. Alessandro Biancalani, ESILV, DVRC, France
- Prof. Alice Robbin, Indiana University Bloomington, USA
- Prof. Amir Abdulmuhsin, University of Mosul, Iraq
- Prof. Ananth Chiravuri, UAE University, United Arab Emirates
- Prof. Andreja Pucihar, University of Maribor, Slovenia
- Prof. Anne-Celine Ginoux, IDRAC Business School, France
- Prof. Antoine Harfouche, Université Paris Nanterre, France
- Prof. Asli Sencer, Bogazici University Istanbul, Turkey
- Prof. Bernard Quinio, University Paris Nanterre, France
- Prof. Bessem Boubaker, Voltaire Business School, Switzerland
- Prof. Cecilia Rossignoli, University of Verona, Italy
- Prof. Charbel Chedrawi, USJ, Lebanon
- Prof. Cinzia Dal Zotto, Neuchâtel University, Switzerland

- Prof. David Claivaz, Acting Dean of Business School Lausanne, Switzerland
- Prof. Daniele Pederzoli, NEOMA BS, France
- Prof. Denis Dennehy, Swansea University, Wales, UK
- Prof. Detmar Straub, Temple University's Fox School of Business, USA
- Prof. Dina Sidani, University Saint Joseph, Lebanon
- Prof. Dominique Bourqui, Director of the Doctoral School at Business School Lausanne, Switzerland
- Prof. Duc Khuong Nguyen, Dean of EMLV, France
- Prof. Eleonora Veglianti, Lille Catholic University, France
- Prof. Elie Nasr, AUST, Lebanon
- Prof. Fabrizio D'Ascenzo, University La Sapienza Roma1, Italy
- Prof. Farid Nakhle, Temple University, Japan Campus (TUJ), Japan
- Prof. Flore Vallet, ESILV, DVRC, France
- Prof. Fons Wijnhoven, University of Twente, Netherlands
- Prof. Francesco Salvarani, DVRC, France
- Prof. Francisco Chinesta, ENSAM, France
- Prof. Galina Kondrateva, EDC Paris Business School, France
- Prof. Guillaume Biot-Paquerot, Burgundy School of Business, France
- Prof. Habil Dmitry Ivanov, Berlin School of Economics and Law, Germany
- Prof. Halimu Shauri, Pwani University, Kenya
- Prof. Imed Ben Nasr, Excelia Group, France
- Prof. Insaf Khelladi, EMLV, France
- Peof. Jamil Arida, University Saint Joseph, Lebanon
- Prof. Jean Babei, Université de Douala, Cameroun
- Prof. Jessy Nair, St. Joseph Institute of Management, India
- Prof. Jihane Aayale, Groupe ISCAE, Morocco
- Prof. Jingshu Du, EMLV, France
- Prof. Karine Aoun, INSEEC Grande Ecole, France
- Prof. Kalinka Kaloyanova, Sofia University, Bulgaria
- Prof. Kassem Danach, Université d'Artois, France
- Prof. Kenneth R Deans, Groupe Sup. de Co. La Rochelle, France
- Prof. Klaus-Peter Schulz, ICN Business School, France
- Prof. Komarov Mikhail, Graduate school of business, HSE University
- Prof. Konstantina Spanaki, Loughborough University, UK
- Prof. Laurence Carassus, Director of Research ESILV, France
- Prof. Leonel Matar, Saint Joseph University, Lebanon
- Prof. Lidija Nikolic, Director of the IIM Digital School, France
- Prof. Linda Hamdi-Kidar, tbs, France
- Prof. Luisa Varrial, University of Naples Parthenope, Italy
- Prof. Maciel M. Queiroz, Paulista University – UNIP, Brazil
- Prof. Marco de Marco, Uninettuno University, Italy
- Prof. Maria Mercanti-Guérin, IAE Paris - Sorbonne Business School, France
- Prof. Marina Johnson, Montclair State University, USA
- Prof. Mario Saba, The Higher Hospitality Academy of Switzerland, Switzerland
- Prof. Mazen El-Masri, Qatar University, Qatar
- Prof. Mehwish Waheed, Institut Mines-Télécom Business School, France.
- Prof. Michel Philippart, Place Escange, France
- Prof. Mohamad Akoum, Grenoble Ecole de Management, France

- Prof. Mohamed Amine Issami, Groupe ISCAE, Morocco
- Prof. Mohammed Al-Sharafi, University of Malaysia Pahang, Malaysia
- Prof. Myriam Raymond, Laboratoire du Granem, IAE Angers
- Prof. Nadia Tebourbi, ESCE Paris, France
- Prof. Neda Abdolvand, Alzahra University, Iran
- Prof. Nicolas Travers, DVRC, France
- Prof. Nizar Raissi, Umm al Qura University, KSA
- Prof. Noor Ul-Ain, EMLV, France.
- Prof. Osama Bassam Rabie, King Abdulaziz University, KSA
- Prof. Ovais Ahmad, Karlstad University, Sweden
- Prof. Parisa Maroufkhani, Universiti Teknologi Malaysia
- Prof. Pascal Brouaye, President of the Léonard de Vinci Association, France
- Prof. Pascal Clain, DVRC, France
- Prof. Pascal Pinot, Director of ESILV, France
- Prof. Pascale Bueno Merino, Director of Research EMLV, France
- Prof. Pauline de Pechpeyrou, IAE Gustave Eiffel, France
- Prof. Payam Hanafizadeh, Allameh Tabataba'i University, Tehran-Iran
- Prof. Peter Saba, EMLV, France
- Prof. Roeland Aernoudts, Radboud University, Netherlands
- Prof. Roland Ahouman, Ivory Coast
- Prof. Samuel Fosso Wamba, TBS, France
- Prof. Shahriar Akter, Sydney Business School, University of Wollongong, Australia
- Prof. Slim Turki, Luxembourg Institute of Science and Technology, Luxembourg
- Prof. Sofiane Khelladi, ENSAM, LIFSE, France
- Prof. Stella Despoudi, Aston Business School, UK
- Prof. Tatiana Pekarskaia Dauxert, SKEMA, France
- Prof. Teresina Torre, Università di Genova, Italy
- Prof. Tetsuo Noda, Shimane University, Japan
- Prof. Thierry Delecolle, Deputy CEO, Devinci Higher Education, France
- Prof. Thuy Nguyen – ESILV, France
- Prof. Uthayasankar Sivarajah, School of Management, University of Bradford, UK
- Prof. Wesley Palmer, York College, City University of New York, USA
- Prof. Yazan Alnsour, College of Business University of Wisconsin, USA

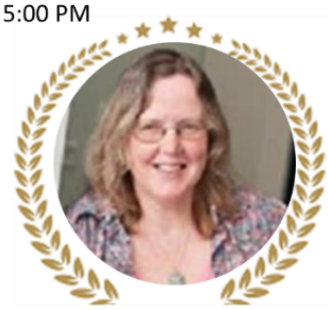
## Conference Partners

## ICTO2024 Pre-conference Workshop

TWO-DAY WORKSHOP ON
***WRITING EMPIRICAL PAPERS FOR TOP-TIER JOURNALS***
25 & 26 JUNE 2024
Hours: 9:00 AM-12:00 PM and 2:00 PM- 5:00 PM



**Co-Editors-in-Chief**
**Of the CAIS journal**



**DR DENIS DENNEHY**
Swansea University, Wales

**DR MARY TATE**
Victoria University of *Wellington*, New Zealand

# Pre-conference Workshop:

## Writing Empirical Papers for Top-Tier Journals

Venue: DeVinci Research Center - 47 boulevard de Pesaro, 92000 Nanterre

**June 25th, 2024**

**Day1 Pre-conference Workshop: Writing Empirical Papers for Top-Tier Journals**
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**June 26th, 2024**

**Day2 Pre-conference Workshop: Publishing in high quality outlets**
Venue: DeVinci Research Center - Campus de l'Arche : 47 boulevard de Pesaro, 92000 Nanterre

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2:00PM- 5:30PM: Round-table discussion of drafts for the ICTO2024 four special issues











# Pre-conference Workshop

## Day 1: June 25th, 2024 (9:00AM-5:00PM)

## Writing Empirical Papers for Top-Tier Journals

| ***June 25th, 2024<br>9:00AM-12:30PM<br>2:00PM- 5:30PM*** | **Pre-conference Workshop:<br>Writing Empirical Papers for Top-Tier Journals** |
|---|---|
| ***ROOM 603*** | *https://devinci-online.zoom.us/j/85291198649* |
| ***Chairs :*** | ***Prof. Denis Dennehy and Prof. Mary Tate*** |
| Asli Sencer, Bogazici University | |
| Nizar Raissi, Umm Al-Qura University | |
| Abdullah Albizri, Montclair State University | |
| Maria Menshikova, Universitas Mercatorum | |
| Tamilla Triantoro, Quinnipiac University | |
| Yunellis Del Carmen Burgos Pereira, Fundacion Universitaria Tecnologico Comfenalco – Cartagena | |
| Ekaterina Besson, PSB, Paris School of Business France | |
| Anas Hakeem, Umm Al-Qura University | |
| Imed Ben Nasr, Excelia Business School, CERIIM | |
| Gaby Bejjani. Lebanese German University | |
| Claude Chammaa, ESLSCA | |
| Guillaume Biot-Paquerot, LESSAC, CEREN, EA 7477, Burgundy School of Business – Université Bourgogne Franche-Comté | |
| Nadia Tebourbi, ESCE International Business School, OMNES | |
| Abbas Tarhini, Lebanese American University | |
| Sushant Kumar, IIM Lucknow | |
| Vipin Mogha, ESCE International Business School, OMNES Education | |

# Pre-conference Workshop

## Day 2: June 26th, 2024 (9:00AM-5:00PM)

| | |
|---|---|
| ***June 26th, 2024<br>9:00AM-12:30PM<br>2:00PM- 5:30PM*** | **Pre-conference Workshop:<br>Writing Empirical Papers for Top-Tier Journals** |
| ***ROOM 603*** | *https://devinci-online.zoom.us/j/85291198649* |
| ***Chairs :*** | ***Prof. Denis Dennehy and Prof. Mary Tate*** |
| Asli Sencer, Bogazici University | |
| Nizar Raissi, Umm Al-Qura University | |
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| Jamil Arida, University Saint Joseph | |
| Vipin Mogha, ESCE International Business School, OMNES Education | |

# Conference

## Day 1: June 27th, 2024 (9:00AM-5:00PM)

**Registration: Thursday June 27th, 8:30 AM – 11:00 AM**

**Parallel Session 1:** *Thursday June 27th, 2024, 9:00AM – 10:30AM*

### Session 1.1

| ***Thursday June 27th, 2024 9:00AM – 10:30AM*** | **Session 1.1 Exploring the Impacts of Advanced Technologies: Blockchain Security, AI Supervision, Cognitive Dynamics, and Generative AI Awareness** | |
|---|---|---|
| ***Room 603*** | *https://devinci-online.zoom.us/j/85291198649* | |
| ***Chair :*** | ***Prof. Abbas Tarhini, Lebanese American University*** | |
| **Paper 54** | Bilgin Metin, Boğaziçi University<br>Hasan Soydan, Boğaziçi University<br>Ala Rabea, Boğaziçi University | **" Impacts Of Blockchain Technologies for Third Party Cyber Security "** |
| **Paper 42** | Tamilla Triantoro, Quinnipiac University<br>Konrad Sowa, Kozminski University<br>Aleksandra Przegalińska, Harvard University, Kozminski University<br>Anna Kovbasiuk, SWPS University, Kozminski University<br>Leon Ciechanowski, Massachusetts Institute of Technology (MIT), Kozminski University | **" Supervising the Supersmart: Measuring the Psychophysiological Impact of Overseeing Advanced AI "** |
| **Paper 62** | Guillaume Biot-Paquerot, LESSAC, CEREN, EA 7477, Burgundy School of Business - Université Bourgogne Franche-Comté<br>Magalie Dubois, LESSAC, CEREN, EA 7477, Burgundy School of Business - Université Bourgogne Franche-Comté | **" Investigating the Dynamics of Wine Stress and Cognitive Dissonance in Wine-Lovers' Communities: An On-Going Experimental Economics Approach "** |
| **Paper 29** | Manas Nair, Carnegie Mellon University<br>Jessy Nair, St. Joseph Institute of Management, India | **" Random Forest Feature Importance Analysis of Consumer Perceptions Driving Aspirational Luxury Purchase Intention in Millennials and Gen Z Consumers in Emerging Markets "** |

*First Day, Thursday June 27th, 2024,* ***Parallel Session 1:*** *09:00AM – 10:30AM*

## Session 1.2

| | | |
|---|---|---|
| ***Thursday June 27th, 2024 9:00AM – 10:30AM*** | **Session 1.2 AI and FinTech: Enhancing Satisfaction, Competitiveness, and Decision-Making in Financial Markets** | |
| ***Room 605*** | *https://devinci-online.zoom.us/j/84608587003* | |
| ***Chair :*** | ***Prof. Jingshu Du, DVRC, EMLV*** | |
| **Paper 34** | Claude Chammaa, ESLSCA, France<br>Leina Haddad, Lebanese University, Lebanon | **" Behavioral Finance Biases and Artificial Intelligence Acceptance: Enhancing Lebanese Investor's Decision-Making Uncertainty "** |
| **Paper 55** | Boukary Tandamba, CEDOC Groupe ISCAE<br>Mohamed Amine Issami, Groupe ISCAE | **" Competitiveness in the Fintech Industry: is Disruption Sufficient? "** |
| **Paper 40** | Gaby Bejjani, Lebanese German University<br>Elena Toros, Cyprus International University<br>Jean Elia, Lebanese German University<br>Nada Jabbour Al Maalouf, Holy Spirit University of Kaslik (USEK), Kaslik | **" Technology Analytic Adeptness for Examining the Interrelatedness Between the Monetary Policy & Main Macroeconomics Variables in Lebanon Employing a Vector Autoregression (VAR)"** |
| **Paper 60** | Hajer Kefi, Léonard de Vinci Pôle Universitaire, Research Center, 92 916 Paris La Défense, France<br>Ekaterina Besson, PSB, Paris School of Business France<br>Kenny Caikin, Léonard de Vinci Pôle Universitaire, Research Center, 92 916 Paris La Défense, France | **" AI-Enabled Service Agents: The Determinants of Satisfaction in the FinTech Sector "** |

## Session Alfa (Room 704) Advances in Plasma Physics and Statistical Methods for Collective Dynamics

https://devinci-online.zoom.us/j/86515026314

9:00 K1, F. ZONCA, "Structure formation and transport in magnetized fusion plasmas" (40+10 min)
9:50 O1, L. DELLA MAESTRA, "Some Probabilistic & Statistical viewpoints and tools for collective dynamics and PDE's" (15+5)
10:10 O2, G. CIRAOLO, "A self-consistent k-epsilon reduced cross field transport model for edge tokamak plasma simulations" (15+5)

**Coffee break:** *Thursday June 27th, 2024, 10:30AM – 10:45 AM*

*First Day, Thursday June 27th, 2024, **Parallel Session 2:** 10:45AM – 12:15PM*

## Parallel Session 2: *Thursday June 27th, 2024, 10:45AM – 12:15PM*

### Session 2.1

| | | |
|---|---|---|
| ***Thursday June 27th, 2024 10:45AM – 12:15PM*** | **Session 2.1 Exploring AI adoption: A user (customer and employee) perspective** | |
| ***Room 603*** | *https://devinci-online.zoom.us/j/85291198649* | |
| ***Chair :*** | ***Prof. Insaf Khelladi, DVRC, EMLV*** | |
| **Paper 23** | Marvin Gradtke, IST University of Applied Sciences<br>Ina Kayser, IST University of Applied Sciences | **" Exploring Technology Acceptance for GenAI-Tools: A Necessary Condition Analysis through the Lens of ChatGPT "** |
| **Paper 22** | Karine Aoun Barakat, INSECC Grande Ecole,<br>Amal Dabbous, Saint Joseph University of Beirut,<br>Georges Aoun, Saint Joseph University of Beirut | **" AI-Enabled Service Delivery: A Customer Perspective "** |
| **Paper 32** | Eltabbakh Khaled Mohamed Ghazy, Helwan University,<br>Alena Fedorova, Ural Federal University,<br>Maria Menshikova, Universitas Mercatorum. | **"Collaborative robots integration in the hotel industry: evaluating of the employees' perception"** |
| **Paper 17** | Sushant Kumar, IIM Lucknow<br>Anis Ur Rehman, University of Hail | **" Role of Virtual Influencers on Trust Towards AI and Brand Love"** |

*First Day, Thursday June 27th, 2024,* ***Parallel Session 2:*** *10:45AM – 12:15PM*

## Session 2.2

| | | |
|---|---|---|
| ***Thursday June 27th, 2024 10:45AM – 12:15PM*** | **Session 2.2 The Impact of Smart Technologies and Green Investments on Sustainable Development: Insights from Tourism, Transport, and Urban Ecosystems** | |
| ***Room 605*** | *https://devinci-online.zoom.us/j/84608587003* | |
| ***Chair :*** | ***Prof. Hajer Kefi, DVRC, EMLV*** | |
| **Paper 1** | Nizar Raissi, Umm Al-Qura University<br>Anas Hakeem, Umm Al-Qura University<br>Wajih Khallouli, Umm Al-Qura University | **" Integrated Smart Cities Technology Dynamic Ecosystem and Its Impact on Green Investment: Case of Tourism, Transport, and Logistics in Saudi Arabia "** |
| **Paper 12** | Mohammad I. Merhi, Indiana University South Bend<br>Manjul Gupta, Florida International University<br>Arun Upadhyay, Florida International University | **" The Impact of Artificial Intelligence Investment on Societal Changes "** |
| **Paper 24** | Laura Rec Swaminath uero Virto, EMLV | **" Telecommunications radiation and green roofs: A challenge or an opportunity for the deployment of smart and intelligent systems? "** |
| **Paper 65** | Zhenzhen Zhao, Skema<br>Damien Renard, Université de Louvain<br>Catherine Lejealle, ISC Paris<br>Thierry Delecolle, Pole Leonard de Vinci | **" When Information Disclosure IS Required By Algorithms: Exploring The Presence-Privacy Tradeoff In Geomatching Applications For Sustainable Development "** |

*First Day, Thursday June 27th, 2024, **Parallel Session 2**: 10:45AM – 12:15PM*

## Session 2.3 Session en Français

| ***Thursday June 27th, 2024 10:45AM – 12:15PM*** | **Session 2.3 Transformations Digitales et Intelligence Artificielle : Durabilité, Sécurité et Performance** | |
|---|---|---|
| ***Room 604*** | *https://devinci-online.zoom.us/j/82608230871* | |
| ***Chair :*** | ***Prof. Marc Bidan, University of Nantes*** | |
| **Paper 48** | Thrycia Tite, University Paris Nanterre | **" Intelligence artificielle et durabilité dans les chaînes d'approvisionnement agroalimentaires "** |
| **Paper 4** | Celestin Koffi Ewool, Université Virtuelle de Côte d'Ivoire (UVCI)<br>Zahoua Roland Ahouman, Université Virtuelle de Côte d'Ivoire (UVCI) | **"Digitalisation des services de l'état : Cas de e-impôt en Côte d'Ivoire"** |
| **Paper 20** | Zahoua Roland Ahouman, Université Virtuelle de Côte d'Ivoire (UVCI),<br>Yacouba Kouraogo, Université Virtuelle de Côte d'Ivoire (UVCI),<br>Kouamé Wiliam Yoboue, ISTC Polytechnique de Côte d'Ivoire),<br>Behou Gérard N'Guessan, Université Virtuelle de Côte d'Ivoire (UVCI) | **" Enjeux Sécuritaires et Détection Des Cybermenaces dans un Ecosystème Digital : Cas de la Côte D'Ivoire "** |
| **Paper 7** | Behou Gerard N'Guessan, Université Virtuelle de Côte d'Ivoire (UVCI) | **" Modèle prédictif des performances académiques à L'Université virtuelle de Côte d'Ivoire (UVCI) : cas des étudiants de la licence 3 "** |

## Session Bêta (Room 704) Numerical Techniques and Simulations in Fusion Plasma Turbulence and Quantum Electrodynamics

https://devinci-online.zoom.us/j/86515026314

10:45 I1, A. MISHCHENKO, "Numerical tools for the investigation of turbulence, instabilities, and flows in fusion plasmas" (30+5)
11:20 I2, O. GURCAN, "Layering in dissipative drift wave turbulence" (30+5)
11:55 O3, L. FEDELI, "Simulating Strong-Field Quantum-Electro-Dynamics on contemporary supercomputers" (15+5)

**LUNCH:** *Thursday June 27th, 2024, 12:15PM - 02:15PM*

**LUNCH**

## Thursday June 27th, 2024,

## 12:15PM - 02:15PM

| | |
|---|---|
|  | **LUNCH** at LE FAUBOURG LA DEFENSE<br>38 Boulevard de Pesaro<br>92 000 Nanterre |

*First Day,* ***Opening PLENARY SESSION:*** *Thursday June 27th, 2024, 02:15PM - 03:45PM*

# ICTO2024 Opening Plenary Session

*Thursday June 27th, 2024, 02:15PM - 03:45PM*

## Keynote Session



**DR DENIS DENNEHY**
Swansea University, Wales



**DR MARY TATE**
Victoria University of *Wellington*, New Zealand

| ***Thursday June 27th, 2024 02:15PM – 03:45PM*** | **Opening PLENARY SESSION** *Thursday June 27th, 2024, 02:15PM - 03:45PM* | |
|---|---|---|
| ***Room AMPHITHEATRE*** | *https://devinci-online.zoom.us/j/89681071457* | |
| ***Time*** | ***Prof. Samuel Fasso Wamba, TBS Education, France*** | |
| **02:15PM-02:25PM** | **Prof. Thierry Delecolle, Directeur général adjoint du Pole Leonard de Vinci** | **Welcome Speech** |
| **02:25PM-02:30PM** | **Prof. Samuel Fosso Wamba, TBS Education, France** | **Inaugural Speech** |
| **02:30PM-02:35PM** | **Prof. David Claivaz, Business School Lausanne, Switzerland** | **"Artificial"** |
| **02:35PM-03:35PM** | **Prof. Mary Tate, Victoria University of Wellington, New Zealand** | **Keynote speech:** *"Finding your tribe with (C)AIS"* |
| | **Prof. Denis Dennehy, Swansea University, UK** | |
| **03:35PM-03:45PM** | **Q&A** | **Q&A** |

**Coffee break:** *Thursday June 27th, 2024, 03:45PM – 04:00PM*

*First Day, **Parallel Session**, Thursday June 27th, 2024, 04:00PM - 06:00PM*

## Session Gamma (Room 704) Advances in Computational Fluid Dynamics and Interaction Methods

https://devinci-online.zoom.us/j/86515026314

13:40 I3, A. RABIA "Computational Fluid Dynamics of the wind in the city" (30+5)

14:15 I4, M. SPECKLIN "Immersed Boundary Method for the prediction of interactions between fluid and other continuum" (30+5)

14:50 I5, A. BOURDIER, "Effect of atmospheric turbulence on modulational instability in laser-pulse propagation" (30+5)

15:25 O4, D. YAKOUBI and B. JAFFAL "A splitting method for a stationary second grade fluid model" (15+5)

**Parallel Session 3:** *Thursday June 27th, 2024, 04:00PM – 06:00PM*

## Session 3.1

| | | |
|---|---|---|
| ***Thursday June 27th, 2024 04:00PM – 06:00PM*** | **Session 3.1 Navigating Trust and Security: AI, Digitalization, and Blockchain in Modern Governance** | |
| ***Room 603*** | *https://devinci-online.zoom.us/j/85291198649* | |
| ***Chair :*** | ***Prof. Jonna Järveläinen, University of Jyväskylä*** | |
| **Paper 10** | Sophie Agulhon, Paris 8 University | **"AI's levers for cybersecurity governance in France"** |
| **Paper 52** | Burcu Kör, Utrecht University of Applied Sciences<br>Bilgin Metin, Bogazici University | **" The perceptions of digitalization and cyber security: The impacts of digitalization and cyber security on business functions "** |
| **Paper 66** | Elissar Toufaily, De Vinci Research Center, Leonard De Vinci Higher Education<br>Tatiana Zalan, American University in Dubai | **" Deconstructing The Trust Layer In Blockchain Ecosystems "** |
| **Paper 61** | Maria Menshikova, Universitas Mercatorum<br>Isabella Bonacci, Universitas Mercatorum | **" Towards the new normal work arrangements: defining a conceptual model for the employees' satisfaction measurement "** |
| **Paper 28** | Anas Hakeem, Umm Al-Qura University<br>Nizar Raissi, Umm Al-Qura University<br>Hassan Mousa, Jeddah International College | **" Sustainable industry 4.0 and corporate social responsibility challenges in environmental decision-making effectiveness "** |

*First Day, **Parallel Session 3**, Thursday June 27th, 2024, 04:00PM - 06:00PM*

## Session 3.2

| | | |
|---|---|---|
| ***Thursday June 27th, 2024 04:00PM – 06:00PM*** | **Session 3.2 Harnessing Artificial Intelligence: From Personalized Recommendations and Information Quality to Organizational Disruption and Human Empowerment** | |
| ***Room 605*** | *https://devinci-online.zoom.us/j/84608587003* | |
| ***Chair :*** | ***Prof. Guillaume Biot-Paquerot, LESSAC, Burgundy School of Business - Université Bourgogne Franche-Comté*** | |
| **Paper 25** | Marco De Marco, International Telematic University Uninettuno,<br>Emiliano Felicissimo, International Telematic University Uninettuno,<br>Claudio Fornaro, International Telematic University Uninettuno,<br>Luigi Laura, International Telematic University Uninettuno,<br>Marco Parrillo, International Telematic University Uninettuno, | **" Recommending Movies from their Posters "** |
| **Paper 38** | Gianni Jacucci, Department of Information Engineering and Computer Science - DISI - University of Trento,<br>Mike Martin, Newcastle Business School, Northumbria University, United Kingdom | **" Navigating AI Integration by Advancing Accountability in ICT Platforms: A New Paradigm for Interplay of Accountability and Interpretation"** |
| **Paper 45** | Tamilla Triantoro, Quinnipiac University | **" How AI Shapes Job Satisfaction and Burnout: The Job Demands-Resources Perspective "** |
| **Paper 30** | Imed Ben Nasr, Excelia Business School, CERIIM,<br>Ngoc Bich Dang, Excelia Business School, CERIIM,<br>Abdullah Albizri, University of Montclair,<br>Wissal Ben Arfi, PSB - Paris School of Business. | **" Exploring the Competencies of AI-Powered Robots: Enhancing Sense of Power and Well-Being in Human Interactions "** |
| **Paper 18** | Claude Chammaa, ESLSCA, France<br>Samar Aad, Lebanese University | **" Decoding decision-making: Unveiling role distribution and good governance practices in Lebanese NGOs "** |

*First Day,* **Parallel Session 3,** *Thursday June 27th, 2024, 04:00PM - 06:00PM*

## Session 3.3 Session en Francais

| | | |
|---|---|---|
| ***Thursday June 27th, 2024 04:00PM – 06:00PM*** | **Session 3.3 L'Influence des Réseaux Sociaux, de l'Intelligence Artificielle et des Nouvelles Méthodes de Travail sur l'Entrepreneuriat et la Créativité en Côte d'Ivoire** | |
| ***Room 604*** | *https://devinci-online.zoom.us/j/82608230871* | |
| ***Chair :*** | ***Prof. Pauline De Pechpeyrou, Université Paris Est Créteil, France*** | |
| **Paper 5** | Zahoua Roland Ahouman, Université Virtuelle de Côte d'Ivoire (UVCI)<br>Kouamé Wiliam Yoboue, ISTC Polytechnique<br>Aya Marie Francise Kouassi, Université Virtuelle de Côte d'Ivoire (UVCI)<br>and Rongting Zhou, University of Science and Technology of China (USTC) | **" L'impact du réseau social Facebook sur l'entrepreneuriat jeune en Côte D'Ivoire "** |
| **Paper 6** | Yoboue Kouame Wiliam, ISTC Polytechnique,<br>Ahouman Zahoua Roland, Université Virtuelle de Côte d'Ivoire (UVCI),<br>Kouassi Aya Marie Francise, Université Virtuelle de Côte d'Ivoire (UVCI) | **" Contribution de l'IA à l'amélioration de la création de contenu marketing chez les ''Community manager'' ivoirien"** |
| **Paper 15** | Adjé Blaise N'Tayé, Institut des Sciences et Techniques de la Communication (ISTC Polytechnique), Côte d'Ivoire | **" Collaboration intelligence artificielle et intelligence humaine, source de performance créative pour les infographistes : l'exemple de la Côte d'Ivoire"** |
| **Paper 19** | Komenan Simon Pierre Koffi, Université Virtuelle Côte d'Ivoire,<br>Roland Zahoua Ahouman, Université Virtuelle Côte d'Ivoire,<br>Doffou François N'Cho, Université Virtuelle Côte d'Ivoire | **" Flexibilité et Hybridation Des Modes De Travail en Côte D'Ivoire: Marché du Travail et Nouvelles Réalités Professionnelles "** |
| **Paper 14** | Amina Benelhadj Said, Complex System Laboratory<br>Nora Taleb, Complex System Laboratory<br>Ayoub Bouslah, Complex System Laboratory | **« Révolutionner la gestion des files d'attente : favoriser l'évolutivité grâce à une pile technologique de pointe »** |

## Session Delta (Room 704) Advanced Modeling and Analytical Techniques in Plasma Physics and Fluid Dynamics

https://devinci-online.zoom.us/j/86515026314

16:00 I6, B. DESPRES, "Coupled Vlasov-Euler models of thick sprays for heavy dusts" (30+5)
16:35 I7, D. DEL SARTO, "Phase space filamentation and departure from thermodynamical equilibrium in low collision fluids" (30+5)
17:10 O5, L. DE GIANNI, "An analytical model reveals the origin of the effect of magnetic geometry on Trapped Electron Mode instability in tokamak plasmas" (15+5)
17:30 O6, B. CLAVIER, "Artificial Intelligence generated surrogate model of plasma turbulence" (15+5)

*First Day,* ***Gala Social Dinner****, Thursday June 27th, 2024, 07:30PM - 11:30PM*

## Gala Social Dinner

*Thursday June 27th, 2024,*

*7:30PM – 11:30PM*




*Auteuil Brasserie Eurl*

*78 rue d'Auteuil, 75016 Paris*

# Second Day

# Friday June 28th, 2024

**Registration:** *Friday June 28th, 2024, 8:00 AM – 9:00 AM*

## Parallel Session 4: *Friday June 28th, 2024, 09:00AM – 10:30AM*

## Session 4.1

| | | |
|---|---|---|
| ***Friday June 28th, 2024 09:00AM – 10:30AM*** | **Session 4.1 Exploring Sustainability and Innovation: Cognitive Dynamics, Technological Advancements, and Community Engagement** | |
| ***Room 603*** | *https://devinci-online.zoom.us/j/85291198649* | |
| ***Chair :*** | ***Prof. Mohammad I. Merhi, Indiana University South Bend & Prof. Imed Ben Nasr, Excelia Group, France*** | |
| **Paper 56** | Yang Li, Montclair State University<br>Ahmad Jumah,<br>Abdullah Albizri, Montclair State University | **" A Domain Specific LLM Framework for Sustainability "** |
| **Paper 58** | Muhammad Ovais Ahmad, Karlstad University<br>Osama Albaik, Al Ahliyya Amman University | **" Symbiotic Nexus between Social Sustainability and Large-Scale Agility in Nordic Technology Enterprises "** |
| **Paper 47** | Anis Hentit, Léonard de Vinci Pôle Universitaire, Research Center, 92916 Paris La Défense, France<br>Farah Ait Salaht, Léonard de Vinci Pôle Universitaire, Research Center, 92916 Paris La Défense, France<br>Marcos Dias De Assunção, Dept. of Software Engineering and IT, Ecole de Technologie Supérieure, Univ. of Quebec, Montreal, Canada<br>Nora Izri, Léonard de Vinci Pôle Universitaire, Research Center, 92916 Paris La Défense, France | **" Advancing Sustainable ICT: Edge Computing and AI Innovations for Energy Efficiency "** |
| **Paper 57** | Vipin Mogha, ESCE International Business School, OMNES Education<br>Nadia Tebourbi, ESCE International Business School, OMNES Education | **" Digital platform to scale initiatives for community engagement and social impact: first exploratory results of a case study in the Indian plastic recycling industry "** |

*Second Day, **Parallel Session 4**, Friday June 28th, 2024, 09:00AM – 10:30AM*

## Session 4.2

| | | |
|---|---|---|
| ***Friday June 28th, 2024 9:00AM – 10:30AM*** | **Session 4.2 Smart Technologies: Transforming the Future of Logistics and Supply Chain** | |
| ***Room 605*** | *https://devinci-online.zoom.us/j/84608587003* | |
| ***Chair :*** | ***Prof. Kalinka Kaloyanova, Sofia University & Nadia Tebourbi, ESCE International Business School, OMNES*** | |
| **Paper 33** | Yunellis Del Carmen Burgos Pereira, Fundacion Universitaria Tecnologico Comfenalco – Cartagena,<br>Luis Perez-Dominguez, Departamento de Ingeniería Industrial y Manufactura, Universidad Autónoma de Ciudad Juárez,<br>Darwin Ramos Franco, Universidad San Buenaventura,<br>Elvira Gómez Verjel, Investigador Independiente,<br>Lucia Isabel Ramos Gomez, Institucion Universitaria Mayor De Cartagena | **" Smart Strategies for Innovation, Logistics and Productivity in the Industrial Sector in Cartagena de Indias, Colombia: A Focus on Data Analysis"** |
| **Paper 53** | Asli Sencer, Bogazici University<br>Selcan Yuksel, Bogazici University | **" Generative AI in Sustainable Supply Chain Management and Data Analysis "** |
| **Paper 51** | Hang Zhou, Research Center, Léonard de Vinci Pôle Universitaire, La Défense, 92916 Paris, France<br>Swaminath Venkateswaran, Research Center, Léonard de Vinci Pôle Universitaire, La Défense, 92916 Paris, France<br>Zhe Yuan, Research Center, Léonard de Vinci Pôle Universitaire, La Défense, 92916 Paris, France | **" Data-driven Last-mile Delivery Optimization: A case-study using Meituan dataset "** |
| **Paper 31** | Magalie Duarte, LEMNA, Nantes Université | **" How to manage the disruptive role of artificial intelligence on social purpose organizational routines: an in-depth case study in the social housing sector "** |

*Second Day,* ***Parallel Session 4,*** *Friday June 28th, 2024, 09:00AM – 10:30AM*

## Session 4.3

| | |
|---|---|
| ***Friday June 28th, 2024 9:00AM – 10:30AM*** | **Session 4.3 Advanced Materials Characterization and Analysis: From Fracture Mechanics to Biomedical Applications and 3D Printing** |
| ***Room 604*** | *https://devinci-online.zoom.us/j/82608230871* |

| | | |
|---|---|---|
| ***Chair :*** | ***Prof. Thuy Nguyen, ESILV Engineering School, De Vinci Research Center*** | |
| **Invited speaker** | Daniel Bonamy, Université Paris-Saclay, CEA CNRS, SPEC 91191 Gif-sur Yvette, France | **« Crack growth in lattice materials: Fracture toughness selection and fracture surface roughness"** |
| **Invited speaker** | Vu-Hieu Nguyen, MSME, CNRS UMR 8208, Univ Paris-Est Créteil, Univ Gustave Eiffel, F-94010, France. | **" Ultrasound characterization of bone-implant interfaces : modelling and simulation aspects "** |
| **Invited speaker** | Laura Schittecatte, DVRC & CEA SPEC/NIMBE, France | **"3D printed polymers by photopolymerization : link between resin chemistry, printing parameters and mechanical properties "** |

## Session Epsilon (Room 704) Advanced Mathematical and Physical Models in Fluid Dynamics and Biophysics

https://devinci-online.zoom.us/j/86515026314

9:00 I8, R. TALHOUK, "Asymptotic Models in shallow water" (30+5)
9:35 I9, E. LESCHIERA, "Mathematical modelling of tumour-immune interactions: discrete and continuum approaches" (30+5)
10:10 O7, T. NICOLAS, "Electric field control using waves in collisional magnetized plasma filters" (15+5)

**Coffee break:** *Friday June 28th, 2024, 10:30AM – 10:45AM*

**PLENARY KEYNOTE SESSION :** *Friday June 28th, 2024, 10:45AM - 12:15PM*

*Second Day,* ***Plenary Keynote Session****, Friday June 28th, 2024, 10:45AM – 12:15PM*

## ICTO2024 Plenary Keynote Session

*Friday June 28th, 2024, 10:45AM - 12:15PM*




| ***Friday June 28th, 2024 10:45AM – 12:15PM*** | **PLENARY KEYNOTE SESSION** *Friday June 28th, 2024, 10:45AM – 12:15PM* | |
|---|---|---|
| ***Room AMPHITHEATRE*** | *https://devinci-online.zoom.us/j/89681071457* | |
| ***Time*** | ***Prof. Samuel Fasso Wamba, TBS Education, France*** | |
| **10:45AM-10:55AM** | **Prof. Peter Saba EMLV, France** | **Welcome Speech** |
| **10:55AM-11:05AM** | **Prof. Antoine Harfouche, Université Paris Nanterre, France** | **Introducing the Keynote speakers** |
| **11:05AM-11:35AM** | **Prof. Detmar Straub, Temple University's Fox School** | **Keynote speech 1** *"How Rosy is the Future for Research on AI/GenAI"* |
| **11:35AM-12:05PM** | **Prof. Mark Thompson, University of Exeter Business School** | **Keynote speech 2** *"The importance of engaging with the human in organizational practice (especially in the age of AI…)"* |
| **12:05PM-12:15PM** | **Q&A** | **Q&A** |

**LUNCH:** *Friday June 28th, 2024, 12:15PM - 02:15PM*

## Session Zêta (Room 704) Innovations in Plasma Physics: Particle Methods and Turbulence Dynamics

https://devinci-online.zoom.us/j/86515026314

10:45 O8-R, M. CAMPOS PINTO, "Variational particle schemes for Vlasov-Maxwell equations" (15+5)
11:05 O9-R, S. YI, "Radial zonal flow pattern formation by phase synchronization in ITG turbulence." (15+5)
11:25 O10-R, F. MILITELLO, "The nature of the Boundary Turbulence in tokamaks and why it is not as you expect" (15+5)
11:45 O11-R, A. BOTTINO, "Particle-in-cell methods in edge plasma physics" (15+5)

**LUNCH**

**Friday June 28th, 2024,**

**12:15PM - 02:15PM**

**LUNCH:** *Friday June 28th, 2024, 12:15PM - 02:15PM*



**LUNCH** at LE FAUBOURG LA DEFENSE
38 Boulevard de Pesaro
92 000 Nanterre

*Second Day,* ***Parallel Session 5:*** *Friday June 28th, 2024, 02:15PM – 03:45AM*

## Parallel Session 5: *Friday June 28th, 2024, 02:15PM – 03:45AM*

## Session 5.1

| ***Friday June 28th, 2024 02:15PM – 04:45PM*** | **Session 5.1 Revolutionizing Education and Social Systems: Cutting-Edge Technologies for Scalability and Ethics** | |
|---|---|---|
| ***Room 603*** | *https://devinci-online.zoom.us/j/85291198649* | |
| ***Chair :*** | ***Prof. Abdullah Albizri, Montclair State University*** | |
| **Paper 67** | Antoine Harfouche, University Paris Nanterre<br>Peter Saba, EMLV<br>Denis Dennehy, Swansea University, UK | **" The recursive theory of knowledge augmentation through interactions with AI"** |
| **Paper 16** | Kassem Danach, Al Maaref University<br>Malak Ghandour, Al Maaref University<br>Bassam Hamdar, Al Maaref University | **" Leveraging Blockchain Technology for Securing and Verifying Educational Certificates "** |
| **Paper 36** | Dounia Bougamza, ESILV Engineering School<br>Fatima-Zahra Kaghat, Léonard de Vinci Pôle Universitaire, Research Center Paris La Défense, France<br>Ekkarat Rodthon, IIM Digital School<br>Ahmed Azough, Léonard de Vinci Pôle Universitaire, Research Center Paris La Défense, France | **" Pose estimation, Holoportation and Mixed reality for hybrid education"** |
| **Paper 50** | Gianni Jacucci, Department of Information Engineering and Computer Science - DISI - University of Trento | **« Applying Epistemology to AI in the Social Arena: Exploring Fundamental Considerations »** |

*Second Day,* ***Parallel Session 5:*** *Friday June 28th, 2024, 02:15PM – 03:45AM*

## Session 5.2

| | | |
|---|---|---|
| ***Friday June 28th, 2024 02:15AM – 03:45PM*** | **Session 5.2 Advancements and Challenges in Clinical Data, Medical Simulations, and Information Pollution** | |
| ***Room 605*** | *https://devinci-online.zoom.us/j/84608587003* | |
| ***Chair :*** | ***Prof. Swaminath Venkateswaran, ESILV Engineering School, De Vinci Research Center*** | |
| **Paper 13** | Kalinka Kaloyanova, Sofia University,<br>Elitsa Kaloyanova, 365 Company LTD. | **" Extending Primary Analysis: Exploring Clinical Data Modeling for Secondary Applications "** |
| **Paper 21** | Edouard Pignot, EMLV<br>Jean-Etienne Joullie, EMLV | **" Accounting for the dark side of gamification: An ethnography of a medical serious game "** |
| **Paper 2** | Asghar Ali, Department of Management Sciences, Virtual University of Pakistan<br>Rizwan Anwar, Center for Learning and Cultural Development, Kinnaird College for Women University, Lahore<br>Muhammad Athar Rasheed, Faculty of Business & Management Sciences, Superior University, Lahore | **" Unfolding the Roles of Innovation-Oriented HRM and Leadership to Promote Intrapreneurial Behavior and Boost Innovation Performance in Small and Medium-sized Enterprises "** |

*Second Day,* ***Parallel Session 5:*** *Friday June 28th, 2024, 02:15PM – 03:45AM*

## Session 5.3 (Online Session)

| ***Friday June 28th, 2024 02:00AM – 04:00PM*** | **Session 5.3 The Virtual session** | |
|---|---|---|
| ***Room 604*** | *https://devinci-online.zoom.us/j/82608230871* | |
| ***Chair :*** | ***Prof. Faten Ben Bouheni, Menlo College California*** | |
| **Paper 26** | Faten Ben Bouheni, Menlo College California,<br>Manish Tewari, Menlo College California,<br>Andrew Salamon, Menlo College California,<br>Payson Johnston, Crowdz,<br>Kevin Hopkins, Crowdz. | **" Credit Sales for FinTech Startups & Risk-Return Trade-offs "** |
| **Paper 8** | Loubna Saleh, Saint Joseph University of Beirut, Lebanon<br>Karim Bourdoukani, Saint Joseph University of Beirut, Lebanon<br>Jamil Arida, Saint Joseph University of Beirut, Lebanon | **« Adoption of Augmented Intelligence in the private Higher Educational Institutions of Lebanon »** |
| **Paper 59** | Sahbi Missaoui, UMM AL-QURA UNIVERSTY | **" Technology Integration and Board Independence: Examining their Influence on Earnings Management in the French Stock Market Post COVID-19 "** |
| **Paper 46** | Mina Jafari, Department of Social Sciences and Economics, Alzahra University<br>Neda Abdolvand, Department of Management, Faculty of Social Sciences and Economics, Alzahra University<br>Saeid Homayoun, Faculty of Education and Economics, University of Gävle, Kungsbäcksvägen 47, SE-801 76 Gävle<br>Saeedeh Rajaei Harandi, Department of Management, Faculty of Social Sciences and Economics, Alzahra University | **" Business Sustainability Performance Transformation and Economic Performance in stakeholder-oriented countries versus shareholder-oriented countries: Data Mining Approach "** |
| **Paper 43** | Vajiheh Javani, Faculty of Physical Education & Sport Sciences, University of Tabriz, Tabriz, Iran<br>Elshan Davarn Hagh, Islamic Azad University, Shabestar, Iran | **" Renewable-Integrated Hybrid Power Systems for Sustainable Stadium Operations: An Optimization Study in Iran"** |
| **Paper 63** | Alida Etong Ngono, Catholic university of Central Africa<br>Ange Gillian Andela Sikini, Catholic university of Central Africa<br>Will Boutchouang Kenge, Catholic university of Central Africa<br>Astride Fankap Kouegoue, Catholic university of Central Africa | **" GENERATIVE AI AWARENESS "** |

## Session Êta (Room 704) Modeling and Simulations in Plasma Physics and Complex Systems

https://devinci-online.zoom.us/j/86515026314

13:15 O12-R, F. VALENTINI, "The interaction between shocks and plasma turbulence: hybrid-PIC simulations" (15+5)
13:35 I10, G. GUERARD, "Socio-technical complex system modeling" (30+5)
14:10 I11, D. GOSSARD, "Energetic-particle induced geodesic acoustic modes in plasma regimes of ITER" (30+5)
14:45 O13, E. SOLAI, "Numerical models and uncertainty quantification applied to innovative energy systems" (15+5)
15:05 O14, R. VARENNES, "Capturing patterns in plasma turbulence simulations using data-driven surrogate models" (15+5)
15:25 O15, S. A. RAIESSI TOUSSI, "A stochastic variational principle for a two-fluid model arising in fusion plasma physics" (15+5)

*Second Day,* ***Conference conclusion:*** *Friday June 28th, 2024, 04:00PM – 05:00PM*

**Conference conclusion:** *Friday June 28th, 2024, 04:00PM – 05:00PM*

## CONFERENCE CONCLUSION

Friday June 28th, 2024, 04:0PM – 05:00PM

| ***Friday June 28th, 2024 04:00PM – 05:00PM*** | **CONFERENCE CONCLUSION** *Friday June 28th, 2024, 04:0PM – 05:00PM* | |
|---|---|---|
| ***Room 603*** | *https://devinci-online.zoom.us/j/85291198649* | |
| ICTO2024 PROGRAM COCHAIR | Prof. Peter Saba, EMLV, France | ICTO2024 figures |
| President of ICTO ICTO2024 CONFERENCE COCHAIR | Prof. Samuel Fosso Wamba, TBS Education, France | ICTO alliance: What has been done? |
| ICTO2024 PROGRAM COCHAIR | Prof. Antoine Harfouche, Université Paris Nanterre, France | ICTO alliance: What still to be done |
| ICTO2025 conference chair | | Welcome to ICTO2025 |

## Session Thêta (Room 704) **Mediators in Plasma Dynamics and Advanced Fluid Flow Models**

https://devinci-online.zoom.us/j/86515026314

16:00 I12, J. N. SAMA, "Zonal flows as mediators of energetic particles and turbulence in magnetized plasmas" (30+5)
16:35 O16, A. THOMAS, "Modeling blood flow in a stenosed artery" (15+5)
16:55 O17, R. ALLPORT, "Viscosity Splitting scheme to solve Navier-Stokes equations with dissipative boundary conditions

# PROGRAM OF ICTO-COBECOSY-2024

**(All times are given in Central European Time)**

## First Day

## Thursday June 27th, 2024

### SESSION Alfa

9:00 K1, F. ZONCA, "Structure formation and transport in magnetized fusion plasmas" (40+10 min)

9:50 O1, L. DELLA MAESTRA, "Some Probabilistic & Statistical viewpoints and tools for collective dynamics and PDE's" (15+5)

10:10 O2, G. CIRAOLO, "A self-consistent k-epsilon reduced cross field transport model for edge tokamak plasma simulations" (15+5)

10:30 Coffee break (15 min)

### SESSION Bêta

10:45 I1, A. MISHCHENKO, "Numerical tools for the investigation of turbulence, instabilities, and flows in fusion plasmas" (30+5)

11:20 I2, O. GURCAN, "Layering in dissipative drift wave turbulence" (30+5)

11:55 O3, L. FEDELI, "Simulating Strong-Field Quantum-Electro-Dynamics on contemporary supercomputers" (15+5)

12:15 Lunch break (1 h 25 min)

## SESSION Gamma

13:40 I3, A. RABIA "Computational Fluid Dynamics of the wind in the city" (30+5)

14:15 I4, M. SPECKLIN "Immersed Boundary Method for the prediction of interactions between fluid and other continuum" (30+5)

14:50 I5, A. BOURDIER, "Effect of atmospheric turbulence on modulational instability in laser-pulse propagation" (30+5)

15:25 O4, D. YAKOUBI and B. JAFFAL "A splitting method for a stationary second grade fluid model" (15+5)

15:45 Coffee break (15 min)

## SESSION Delta

16:00 I6, B. DESPRES, "Coupled Vlasov-Euler models of thick sprays for heavy dusts" (30+5)

16:35 I7, D. DEL SARTO, "Phase space filamentation and departure from thermodynamical equilibrium in low collision fluids" (30+5)

17:10 O5, L. DE GIANNI, "An analytical model reveals the origin of the effect of magnetic geometry on Trapped Electron Mode instability in tokamak plasmas" (15+5)

17:30 O6, B. CLAVIER, "Artificial Intelligence generated surrogate model of plasma turbulence" (15+5)

# ICTO-COBECOSY-2024

## Second Day

## Friday June 28th, 2024

https://devinci-online.zoom.us/j/86515026314

## SESSION Epsilon

9:00 I8, R. TALHOUK, "Asymptotic Models in shallow water" (30+5)

9:35 I9, E. LESCHIERA, "Mathematical modelling of tumour-immune interactions: discrete and continuum approaches" (30+5)

10:10 O7, T. NICOLAS, "Electric field control using waves in collisional magnetized plasma filters" (15+5)

10:30 Coffee break (15 min)

## SESSION Zêta

10:45 O8-R, M. CAMPOS PINTO, "Variational particle schemes for Vlasov-Maxwell equations" (15+5)

11:05 O9-R, S. YI, "Radial zonal flow pattern formation by phase synchronization in ITG turbulence." (15+5)

11:25 O10-R, F. MILITELLO, "The nature of the Boundary Turbulence in tokamaks and why it is not as you expect" (15+5)

11:45 O11-R, A. BOTTINO, "Particle-in-cell methods in edge plasma physics" (15+5)

12:05 Lunch break (1 h 10 min)

## SESSION Êta

13:15 O12-R, F. VALENTINI, "The interaction between shocks and plasma turbulence: hybrid-PIC simulations" (15+5)

13:35 I10, G. GUERARD, "Socio-technical complex system modeling" (30+5)

14:10 I11, D. GOSSARD, "Energetic-particle induced geodesic acoustic modes in plasma regimes of ITER" (30+5)

14:45 O13, E. SOLAI, "Numerical models and uncertainty quantification applied to innovative energy systems" (15+5)

15:05 O14, R. VARENNES, "Capturing patterns in plasma turbulence simulations using data-driven surrogate models" (15+5)

15:25 O15, S. A. RAIESSI TOUSSI, "A stochastic variational principle for a two-fluid model arising in fusion plasma physics" (15+5)

15:45 Coffee break (15 min)

## SESSION Thêta

16:00 I12, J. N. SAMA, "Zonal flows as mediators of energetic particles and turbulence in magnetized plasmas" (30+5)

16:35 O16, A. THOMAS, "Modeling blood flow in a stenosed artery" (15+5)

16:55 O17, R. ALLPORT, "Viscosity Splitting scheme to solve Navier-Stokes equations with dissipative boundary conditions: Application to the respiratory tract" (15+5)

17:15 END OF CONFERENCE

# ICTO-COBECOSY 2024 SPEAKERS

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**ICTO-COBECOSY 2024 KEYNOTE SPEAKER**

- Fulvio ZONCA (ENEA Frascati, ITALY)

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**ICTO-COBECOSY 2024 INVITED TALKS**

**(Alphabetic order)**

1) Alain BOURDIER (Univ. New Mexico, FRANCE)

2) Daniele DEL SARTO (Univ. Lorraine, Nancy, FRANCE)

3) Bruno DESPRES (Sorbonne Univ., FRANCE)

4) Didier GOSSARD (ESILV, FRANCE)

5) Guillaume GUERARD (ESILV, FRANCE)

6) Ozgur GURCAN (LPP Palaiseau, Ecole Polytechnique, FRANCE)

7) Emma LESCHIERA (ESILV, FRANCE)

8) Alexey MISHCHENKO (Max-Planck-IPP, Greifswald, GERMANY)

9) Aminallah RABIA (ESILV, FRANCE)

10) Juvert Njeck SAMA (Univ. Lorraine, Nancy, FRANCE)

11) Mathieu SPECKLIN (CNAM, FRANCE)

12) Raafat TALHOUK (ESILV, FRANCE)

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**ICTO-COBECOSY 2024 CONTRIBUTED TALKS**

**(Alphabetic order)**

1) Rebecca ALLPORT (ESILV, FRANCE)

2) Guido CIRAOLO (IRFM Cadarache, FRANCE)

3) Benoit CLAVIER (Aix-Marseille Univ., FRANCE)

4) Ludovica DE GIANNI (CEA, Cadarache, FRANCE)

5) Laetitia DELLA MAESTRA (ESILV, FRANCE)

6) Luca FEDELI (CEA, Saclay, FRANCE)

7) Basma JAFFAL (ESILV, FRANCE)

8) Timothee NICOLAS (Ecole Polytechnique, CPT-Palaiseau, FRANCE)

9) Sayyed Amin RAIESSI TOUSSI (Max Planck IPP, GERMANY)

10) Elie SOLAI (ENSAM, LIFSE, FRANCE)

11) Alexis THOMAS (ESILV, FRANCE)

12) Robin VARENNES (NTU Singapore, SINGAPORE)

13) Driss YAKOUBI (ESILV, FRANCE)

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**ICTO-COBECOSY 2024 CONTRIBUTED REMOTE TALKS** (alphabetic order)

14) Alberto BOTTINO (Max-Planck-IPP, GERMANY)

15) Martin CAMPOS PINTO (Max-Planck-IPP, GERMANY)

16) Hogun JHANG and Sumin YI (Korea Institute of Fusion Energy, SOUTH KOREA)

17) Fulvio MILITELLO (UKAEA, Culham, UK)

18) Francesco VALENTINI and Domenico TROTTA (Univ. of Calabria, ITALY)

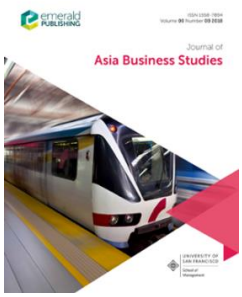
# ICTO2024 SPECIAL ISSUES



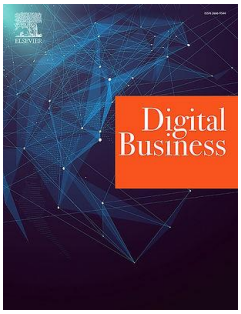

**Communication of the AIS**




**Journal of Decision Systems**




**Journal of Asia Business Studies**




**Digital Business**

# Special Issue 1

# Call for Papers: Emerging Technologies for Sustainable Development? The Grand Challenge

Closes: 30 Jan 2025

**Guest Editors:**
**Peter Saba,** Léonard de Vinci Pôle Universitaire, Research Center, *peter.saba@devinci.fr*

**Antoine Harfouche,** University of Nanterre

**Samuel Fosso Wamba,** TBS Education

**Sujeet Kumar Sharma,** Indian Institute of Management Nagpur

**Jocelyn Cranefield,** Victoria University of Wellington


Communications of the Association for Information Systems

Special Issue – Call for Papers: Emerging Technologies for Sustainable Development? The Grand Challenge

Special Issue Guest Editors

Peter Saba
Léonard de Vinci Pôle Universitaire, Research Center
peter.saba@devinci.fr
(Coordinating Editor)

Antoine Harfouche
University of Nanterre

Samuel Fosso Wamba
TBS Education

Sujeet Kumar Sharma
Indian Institute of Management Nagpur

Jocelyn Cranefield
Victoria University of Wellington

Abstract

Exploring the transformative role of Emerging Technologies in advancing inclusivity, sustainability, and the UN SDGs within the Information Systems field.

Keywords: Emerging Technologies, Artificial Intelligence, Sustainable Development, SDGs, Information Systems.

**Abstract**

Exploring the transformative role of Emerging Technologies in advancing inclusivity, sustainability, and the UN SDGs within the Information Systems field.

**Keywords: Emerging Technologies, Artificial Intelligence, Sustainable Development, SDGs, Information Systems.**

**Call for Papers**

In the midst of rapid technological evolution and complex global challenges, the Information Systems (IS) field is at a vital junction, as highlighted by the AIS Grand Vision Challenge and articulated by Isabel Ramos. This inflection point underscores the transformative potential of Information Technology (IT) and IS in reshaping our global society. The advancement of Emerging Technologies (ET) such as Artificial Intelligence (AI), blockchain, the Internet of Things (IoT), and big data analytics brings unprecedented opportunities and formidable challenges. These technologies are recognized for their ability to revolutionize productivity, societal equality, and environmental sustainability

(Wamba et al., 2024; Ncube et al., 2023).

Aligned with the 2030 Agenda for Sustainable Development and its 17 SDGs, there is an urgent need for IS research and practice to embrace inclusivity, sustainability, and equity. However, a discernible void exists in current research: a comprehensive analysis of how ET intersects with sustainable development is lacking (Corbett, 2023). This Special Issue aims to bridge this gap by enhancing our collective insight and catalyzing research into the nuanced interplay between ET and sustainable development. Addressing this is important, given the substantial yet largely uncharted impact ET could have on achieving all SDGs (Kotlarsky et al., 2023; Watson et al., 2020). This effort is fundamental in steering IS research towards leveraging AI and other ET to expand human and organizational capabilities in a manner that is responsible, inclusive, sustainable, and equitable (Harfouche et al., 2023; Tutun et al., 2022).

The IS literature on the topic of ET has burgeoned in the last decade, signaling a widespread acknowledgment of its importance. While the concept of ET is subject to a variety of interpretations, Rotolo et al. (2015) have identified key characteristics that generally encompass novelty, swift advancement, coherence across domains, recognizability, and inherent uncertainty. Emerging technologies extend beyond simple automation and data sourcing (Krasikov & Legner, 2023) introducing novel and considerable challenges that distinguish them from previous technological advances (Bailey et al., 2019), thereby presenting unique issues for the field of IS to address. The breadth of scholarly work reflects a diverse array of methodologies aimed at understanding and forecasting the trajectory of these technologies (Dennehy et al., 2021). However, this body of research often concentrates on specialized domains without addressing their impact across broader sub-fields. Some researchers point to attributes such as unpredictability, the network effect, societal and ethical implications, cost factors, geographical limitations, and research deficiencies as defining aspects of ET (Halaweh, 2013). Other researchers extend this definition to include specific fields like computing science, MEMS technology, biofuels, and mobile technology (Groen & Walsh, 2013).

**“ET Sustainability”: From Potential to Action**

This Special Issue advocates for a new “ET sustainability” paradigm, embracing technologies that serve environmental and social sustainability goals as posited by Gartner and the United Nations Environment Programme. However, despite emerging technologies' vast potential, the ET sustainability discourse within IS research lags behind practical developments (Corbett et al., 2023; Watson et al., 2021). This gap calls for IS scholars to engage in a more comprehensive exploration of how emerging technologies intersect with the broader sustainability objectives outlined by the SDGs.

**AI & Augmented Intelligence as Catalysts for Sustainable Development**

The dialogue surrounding Augmented Intelligence for Sustainable Development brings to light the symbiotic relationship between human insight and AI (Harfouche et al., 2023). This evolution advocates for AI as an augmentative tool to human intelligence, marking a transition towards utilizing AI to boost human capacity rather than replace it. This concept champions a collaborative model where decision- making harmoniously integrates the analytical power of AI and machine learning with human intuition (Yadav et al., 2023), leading to more nuanced and well-informed outcomes (Johnson et al., 2021).

The pursuit of Augmented Intelligence aims to amplify human decision-making capabilities, illustrating models where AI serves to enhance, not overshadow, human intellect. For example, the development of Human-Centric Informed AI highlights an interactive partnership between AI systems and their users, ensuring that AI-driven decisions are informed by a comprehensive dataset while remaining accessible and decipherable to all stakeholders involved. Looking forward, the creation of Responsible AI frameworks might draw on interdisciplinary insights, integrating knowledge from psychology and social sciences to deploy AI systems that align more closely with human values and sustainable development needs. These frameworks should also consider how negative past experiences with AI could impact future projects, potentially initiating a cycle of implementation failures (Saba et al., 2024).

The classification of SDGs into the dimensions of Society, Economy, and Environment (Karnama et al., 2019) serves as a strategic approach to examining AI's broad implications. Integrating the SDGs into this discussion further emphasizes AI's multifaceted role. AI emerges as a pivotal force in driving progress across various SDGs, highlighting its potential to enhance efficiency in resource utilization and to catalyze the development of smart cities and circular economies (Fuso Nerini et al., 2018; International Energy Agency, 2017). This aligns with the broader objectives of fostering sustainable economic growth, reducing inequalities, and ensuring environmental sustainability. Nevertheless, AI's implications for high energy consumption and the risk of widening social and economic disparities present significant challenges. These concerns accentuate the imperative for adopting sustainable technology practices and ethical considerations in AI deployment, aiming to balance technological advancements with environmental stewardship and equitable social progress (Schoormann et al., 2023).

**Shaping the Future of IS Research with ET Sustainability**

As we advance this discourse, this Special Issue seeks contributions that examine the efficacy, ethics, and sustainability of deploying ET. We call for research that not only investigates the positive enablers but also addresses the adverse effects that may exacerbate disparities and challenge social cohesion. The need for tailored research methodologies and safety research to predict and mitigate potential risks is imperative for the responsible integration of these technologies into society (Kranz et al., 2022).

The convergence of ET with sustainable development presents both an opportunity and an obligation. This Special Issue aims to cultivate a science-informed, global dialogue to establish shared principles and guide policy formulation. We invite IS scholars to contribute their insights and research to foster a future where the equitable distribution of ET's benefits advances the collective well-being and sustainability of societies worldwide.

This special issue seeks submissions that critically examine how IS research can contribute to a more equitable and sustainable future (Lakshmi & Corbett, 2023), through the lens of ET's impact on various sectors including healthcare, education, finance, commerce, governance, agriculture, and beyond. We invite scholarly contributions that delve into the nexus of ET and the SDGs, with a specific emphasis on unexplored territories within IS research. Hence, we invite submissions that address the following questions:

1. How can innovative IT solutions, leveraging ET such as AI, blockchain, Internet of Things (IoT), and big data analytics, contribute to poverty alleviation and promote inclusive growth in underserved communities?
2. How do technological advancements hold promise for enhancing agricultural efficiency, improving food security, and fostering sustainable farming practices?
3. In what ways can ET transform healthcare delivery, promote well-being, and ensure equitable access to healthcare services?
4. How can digital initiatives equipped with ET empower individuals with job-ready digital skills, enhance education quality, and bridge the digital gender divide?
5. What strategies can be implemented using ET to promote sustainable energy solutions, ensure affordable and clean energy access, and drive economic growth?
6. How does ET stimulate job creation, foster economic growth, and promote decent work opportunities?
7. What approaches can be taken to enhance ET infrastructure and connectivity, particularly in developing regions, to reduce inequalities and promote sustainable development?
8. How can ET effectively manage e-waste, promote responsible consumption and production, and mitigate climate change impacts?
9. In what ways are ET utilized for monitoring and protecting marine environments, conserving biodiversity, and supporting wildlife conservation efforts?
10. How effective are government-powered ET initiatives in promoting peace, justice, and strong institutions through enhanced governance and citizen engagement?

These questions are not exhaustive but are intended to stimulate critical inquiry into the intersection of ET and sustainable development. They serve as a starting point for exploring the role of innovative IT solutions in driving positive change and advancing sustainable development agendas. We welcome submissions that address these questions and delve into various aspects of the integration of emerging technologies within the context of

sustainable development, spanning from individual projects to broader societal impacts.

No methods or approaches are unwelcome, though we anticipate quantitative bibliometric research, case studies, design-oriented research, action research, and qualitative research to be prominently included to explain patterns of influence and their impact. No philosophical position is privileged over others, though we lean toward pluralist pragmatist perspectives. While respecting the existing journal guidelines for papers, we particularly welcome short papers (around 8000 words) that concisely present a focused research problem. The papers should be open to a wide range of audiences. Findings do not have to be universal or generalizable, though showing how others can apply or extend them is encouraged. Issues and solutions from anywhere in the world are welcome in keeping with CAIS as a publication with a global readership.

**Submission Requirements**

All manuscripts submitted to CAIS should be submitted in Microsoft Word format. Authors are encouraged to follow CAIS style guide (available on the CAIS website https://aisel.aisnet.org/cais/format.html) and use the CAIS author template for submissions of their manuscripts. Submissions must be made to the CAIS ScholarOne site (https://mc.manuscriptcentral.com/cais). If you do not have an account already, you will need to create one. Once you have logged in, and you begin the submission process, you will have the opportunity to submit the manuscript to the special issue ("SS" designation).

**Important Dates**

- Submission deadline: 30 January 2025
- First round notification: 15 March 2025
- Invited revisions deadline: 15 May 2025
- Second/final editorial decision: 15 July 2025
- Projected Publication: 15 November 2025

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- Cinzia Dal Zotto, Neuchâtel University
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# Special Issue 2

# Augmented Intelligence for Smarter Organisations

Closes: 01 Sep 2024

| | |
|---|---|
| **Journal:** Journal of Decision Systems<br><br>**Guest editors**<br><br>Antoine Harfouche, University Paris Nanterre, France, antoine.h@parisnanterre.fr<br>Peter Saba, EMLV Business School, peter.saba@devinci.fr<br>Mario Saba, The Higher Hospitality Academy of Switzerland, m-saba@outlook.com<br><br>Submissions Open: June 1st |  |

## Augmented Intelligence for Smarter Organisations

In an era where the integration of technology and human intelligence defines the boundaries of innovation, this special issue is dedicated to this topic: "*Augmented Intelligence for Smarter Organisations*". This theme underscores the evolving symbiosis between human cognitive capabilities and artificial intelligence (AI), aiming to enhance organizational decision-making processes.

## Augmented Intelligence and its implications

Augmented Intelligence represents a paradigm shift from traditional AI applications, focusing on the enhancement of human decision-making through the collaborative efforts of humans and AI systems. This concept transcends the notion of AI as a replacement for human intelligence, advocating for a harmonious integration that amplifies human capabilities without supplanting them. According to Harfouche, Quinio, & Bugiotti, (2023), organisations are increasingly adopting collaborative decision-making frameworks that leverage the strengths of both humans and AI, leading to more informed and effective outcomes.

This special issue aims to delve into the aggregated decision-making models, such as the one proposed by Shrestha et al. (2019), which serves as a cornerstone for understanding the mechanics of Augmented Intelligence. Such model elucidates the processes through which AI can assist in organisational decision-making by augmenting, rather than replacing, human knowledge and intuition.

Moreover, the recent development in Human-Centric Explainable Informed AI (Harfouche et al. 2023) involves a two-way interaction between user and AI. From one side, "Informed AI" refers to artificial intelligence systems that are developed and operate with a comprehensive awareness and integration of relevant data, context, and knowledge to make decisions or provide insights (Johnson, AlBizri, Harfouche A., Fosso-Wamba, 2021). Unlike conventional AI systems, which might work with limited or narrowly defined data sets, informed AI leverages a broader spectrum of information, including real-time data, historical data, contextual understanding, and even domain-specific knowledge, to enhance its decision-making capabilities. From another side, Explainable AI refers to AI systems designed to provide insights into how and why they arrived at a particular decision or output (Johnson, AlBizri, Harfouche, & Tutun, 2023). The goal is to make AI's decision-making process transparent, understandable, and interpretable for humans. This is in contrast to the "black box" nature of many AI models, where the decision-making process is opaque and difficult for humans to understand.

## Challenges and Future Directions

Despite the progress in XAI, there are ongoing challenges, including the trade-off between model complexity and interpretability, ensuring accuracy in explanations, and aligning AI explanations with human ethical and moral values. Future directions may involve developing standardized frameworks for XAI (Johnson, M., AlBizri, A. Harfouche, A., & Tutun, S., 2021), improving methods for testing and validating explanations, and exploring interdisciplinary approaches that incorporate psychology, ethics, and social sciences to design truly human-centric AI systems.

In summary, Human-centric Explainable informed AI aims to bridge the gap between advanced AI technologies and the humans who use them, ensuring that AI's decision-making is accessible, understandable, and trustworthy. This not only enhances user experience and trust in AI systems but also ensures that AI is used responsibly and ethically in various domains.

A significant focus of this special issue will be on Responsible AI (Johnson, M., AlBizri, A., & Harfouche, A., 2021) and ethical AI (Tutun, S., Harfouche, A., AlBizri, A., Johnson, M., & Haiyue, H. 2023) and its role in augmenting human intelligence by mitigating AI biases (Harfouche, A., Quinio, B., & Bugiotti, F., 2023). The advent of Human-Centric AI emphasizes the importance

of ethical considerations and the need for AI systems that complement human values and decision-making processes. This approach is critical in ensuring that the deployment of AI technologies contributes positively to societal advancement and the betterment of human lives.

**Special issue objectives**

- To explore the latest advancements in Augmented Intelligence and its applications in various sectors.
- To discuss the ethical, social, and technological implications of integrating AI with human decision-making.
- To foster interdisciplinary collaboration among researchers, practitioners, and policymakers in the field of AI and human augmentation.
- To showcase innovative solutions and case studies that highlight the practical applications of Augmented Intelligence in creating smarter organisations.

**Call for Contributions**

We invite researchers, industry experts, and practitioners to contribute their insights, research findings, and experiences related to Augmented Intelligence. By sharing diverse perspectives on the integration of AI in enhancing human decision-making, we aim to chart a path forward for the development of smarter, more responsive organisations.

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## Important Dates (Tentative schedule)

| | |
|---|---|
| From June 1st, 2024 to Sep 1st, 2024 | Deadline for submission of papers to the Special Issue |
| Oct 1st, 2024 | Authors advised regarding paper acceptance for review |
| Dec1st, 2024 | The first round of reviews was completed, and authors advised regarding review outcomes. |
| Feb 1st, 2025 | Deadline for revised papers |
| April 1st, 2025 | The second round of reviews was completed, and the authors advised regarding review outcomes. |
| June 1st, 2025 | Deadline for revised papers |
| July 1st, 2025 | Final editorial decision on papers accepted for the Special Issue |
| Aug 1st, 2025 | Special Issue papers submitted to JDS for publication |

## Guest editors BIO

**Antoine Harfouche,** PhD is an Associate Professor of Information Systems (IS) and Artificial Intelligence (AI) at University Paris Nanterre France. He was awarded the AIS Sandra Slaughter Outstanding Service Award in 2020. Dr. Harfouche completed his M.Sc. and Ph.D. in Management Information Systems at Paris Dauphine University. His research primarily examines how IS and AI impact individuals, organizations, and countries. His publications

appeared in peer reviewed journals (e.g., Information Systems Frontiers, International Journal of Information Management, Industrial Management & Data Systems, the Annals of Operation Research, Trends in Plant Science, Trends in Biotechnology, Information Technology and People, Journal of Global Information Management, Journal of Organizational and End User Computing, Informatics, …) and renowned conference proceedings (e.g., ICIS, AMCIS, ICTO,..). He is also a member of the editorial advisory board of the Journal of Enterprise Information Management. Throughout his career, Dr. Harfouche has obtained a considerable amount of funding—above 2 million dollars—from the French Research Council (ANR) and the European ERANSMUS +. In the ANR SCHOPPER project (ANR-DS0701/2016), he designed a new AI framework called Informed AI, in which human input is considered as an inextricable part of AI applications. In the ERASMUS + project VRAILEXIA, Dr. Harfouche has co-designed a strategic partnership project called "Partnership outside of the box: integrating artificial intelligence tools with Virtual reality to support higher education students with dyslexia." This innovative project was given a score of 98 out of 100 by the ERASMUS + agency, thus achieved first place in 2020.

**Peter Bou Saba,** PhD, Associate Professor of Information Systems at EMLV Business School (Paris, La Défense) and director of the Master's program in Management Information Systems. He conducts research on digital maturity and readiness, as well as on conflict prevention before and during IT implementation. Peter is author of several book chapters and articles related to user resistance & conflict prevention and digital transformation initiatives. He is also co-founder of Saba Business Circle (SBC), a European consulting firm specializing in innovation networks and management. Previously, Peter worked for several years in the field of innovation financing, and more recently, as a research director of In Extenso Innovation Croissance, a Deloitte France entity.

**Mario Saba,** PhD is a Professor of Information Systems (IS) at Business School Lausanne, IFM Business School Geneva, and the American University of applied sciences institute in Switzerland. He is fellow faculty at Washington State University, Carson College of Business. Dr. Saba is a researcher and expert in weak signals pertaining to informational intelligence. Respectively, he undertakes applied research that tackles IS technology uses, decision-making tools, artificial and augmented intelligence. Mario Saba is the founder of the Higher Hospitality Academy of Switzerland, an academy that undertakes applied research projects in IS, and converts hospitality values into competitive advantage. Respectively, he has developed consultancy and coaching programs for professionals across different industries.

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# Special Issue 3

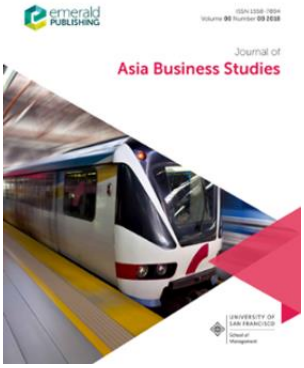
# Digital Transformation for Societal Sustainability and Human Betterment in Asian Countries: Strategies, Challenges, and Impact

Closes: 01 Sep 2024

Journal: Journal of Asia Business Studies

Guest editor(s):
Abbas Tarhini,
Amal Dabbous,
Antoine Harfouche,
Twinomurinzi Hossana,
Samuel Fosso Wamba

Submissions Open: June 1st




## Introduction

Societal sustainability and growth are pressing issues that require the collective efforts of individuals, organizations, and governments. In recent years, information systems (IS) and information technology (IT) have been recognized as key enablers of sustainable development (Fosso Wamba et al., 2024; Johnson et al., 2023; Singh et al., 2006), with the potential to drive economic, social, and environmental progress (Singh et al., 2023). Digital transformation can drive organizational innovation and growth and contribute significantly to societal sustainability and the betterment of humanity (Dennehy et al., 2021; Harfouche et al., 2022). Digital transformation is widely recognized as a critical catalyst for socioeconomic progress, offering significant enhancements in both the social and economic realms for individuals, businesses, and entire economies (Dabbous et al., 2024). The technological advancements of the Fourth Industrial Revolution have permeated into everyday life, encompassing cloud computing, artificial intelligence, mobility, analytics, and the Internet of Things (Collins et al., 2021; Patyal et al., 2022; Tarhini et al., 2022). These technologies are already demonstrating their potential to facilitate digital transformation efforts to address and adapt to the latest

challenges for a better and sustainable society (Dabbous et al., 2023; Wamba-Taguimdje et al., 2020; Harfouche et al., 2019).

This special issue aims to explore how digital transformation strategies can be harnessed to address pressing societal challenges, promote sustainability, and enhance human wellbeing. It aims at finding answers to questions like:

- What are the critical success factors in fostering community engagement and social impact through digital platforms, and how can such initiatives be scaled or replicated?
- How can digital platforms and crowdsourcing mechanisms be utilized for effective disaster response, humanitarian aid, and community resilience-building efforts?
- What ethical considerations and best practices should guide the development and deployment of AI technologies for social good, and how can potential biases and risks be addressed?
- What role can digital technologies play in monitoring and mitigating the impacts of climate change, and how can they facilitate the transition to a more sustainable and resilient society?
- How can digital financial services contribute to economic empowerment, poverty reduction, and financial inclusion for marginalized or underprivileged populations?

The objective of this special issue is to collect, process, examine, and circulate diverse issues related to the above questions.

## List of Topic Areas

- Digital Solutions for Sustainable Development Goals (SDGs)
- Civic Tech and E-Governance for Inclusive Societies
- Digital Health and Telemedicine for Improved Healthcare Access
- Education Technology (EdTech) for Lifelong Learning and Skill Development
- Smart Cities and Urban Innovation for Sustainable Living
- Digital Financial Inclusion and Economic Empowerment
- Climate Change Mitigation and Environmental Sustainability through Digital Technologies
- Ethical and Responsible AI for Social Good
- Digital Humanitarianism and Disaster Response
- Community Engagement and Digital Platforms for Social Impact
- Emerging Technologies and Their Role in Digital Transformation (e.g., AI, IoT, Blockchain)

- Big Data and Social Media Analytics for Business Intelligence and Digital Marketing Strategies
- Innovative applications of IS for sustainable agriculture, energy, transportation, water management, and other domains.
- Designing IS artifacts for sustainability, such as green software engineering, eco-feedback systems, and circular economy platforms.

## Submissions Information

Authors should select (from the drop-down menu) the special issue title at the appropriate step in the submission process, i.e. in response to ""Please select the issue you are submitting to".

Submitted articles must not have been previously published, nor should they be under consideration for publication anywhere else, while under review for this journal.

## Key Deadlines

Submissions Open: **June 1st 2024**

Submissions Close: **Sept 1st 2024**

## Guest Editors

**Abbas Tarhini**, Lebanese American University, Lebanon, abbas.tarhini@lau.edu.lb
**Amal Dabbous**, Saint Joseph University, Lebanon, amal.dabbous@usj.edu.lb
**Antoine Harfouche**, University Paris Nanterre, France, antoine.h@parisnanterre.fr
**Twinomurinzi Hossana**, University of Johannesburg, South Africa, hossanat@uj.ac.za
**Samuel Fosso Wamba**, TBS Education, France, s.fosso-wamba@tbs-education.fr

# Special Issue 4

# Unleashing the Power of IoT: Transforming Business Models, Fueling Innovation, and Navigating Digital Ecosystems

Closes: 17 July 2024

| | |
|---|---|
| Journal: Digital Business<br><br>Guest editors:<br>Prof. Samuel Fosso-Wamba, TBS, France<br>Email: s.fosso-wamba@tbs-education.fr<br>Associate Professor Mirko Presser, Aarhus University, Denmark<br>Email: mirko.presser@btech.au.dk<br>Prof. Hossana Twinomurinzi, University of Johannesburg, South Africa<br>Email: hossanat@uj.ac.za<br>Associate Professor Marialena Zinopoulou, Regent University, the UK<br>Email: m.zinopoulou@ucl.ac.uk<br><br>Submissions Open: June 1st |  |

**Special issue information:**

This Special Issue welcomes submissions addressing key theories, hallmarks, drivers, outcomes, and contingency factors impacting the usage of Internet of Things (IoT) technology on business model innovation.

**Overview:**

Today, businesses face an increasing need to adapt to changing market demands and stay competitive. Enterprises can enhance productivity and efficiency by adopting digital transformation due to technological advancements (George & Edghiem, 2023). The fourth industrial revolution, with the integration of advanced technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), and Big Data analysis, has led to the emergence of

intelligent, connected, and autonomous systems, enabling manufacturers/suppliers to use data and real-time insights, optimize production processes, increase efficiency, and reduce costs. The shift towards intelligent products (Porter & Heppelmann, 2014), as well as production in the industry with digital integration, relies on the use of IoT technology (George & Edghiem, 2023).

IoT offers numerous capabilities to develop smart applications that enhance daily life and have a profound impact on the economy and society across various fields of application. The current applications cover a wide range of areas, including personal, social, industrial, medical, environmental, logistics, and beyond. Various applications of IoT can be found in different categories like industry (e.g., procurement and product life-cycle management, industrial processes, tracking, quality control, supply control, industrial facility monitoring, warehouse management, and inventory), services (e.g., traffic management, automobiles, and energy management), agriculture (e.g., agriculture and animal husbandry, irrigation monitoring, and agricultural and feed production), health (e.g., medicine and healthcare), finance and banking (e.g. retail banking, payment systems, smart banking services, and banking service personalization), entertainment and tourism (Hanafizadeh et al., 2022). In order to succeed in the application of IoT in business, it is essential to have a profound understanding of the ecosystem of the technology.

The IoT ecosystem consists of a network of hardware, software, devices, databases, objects, sensors, systems, actors, and interconnected devices that have identities, physical characteristics, and virtual personalities and use intelligent interfaces (Egwuonwu et al., 2022). Li et al. (2011) highlighted that the IoT ecosystem could help shorten the feedback circle, allowing for a faster decision-making process, which helps mitigate delay risk and improve the efficiency of transmitting information related to production, locations of goods, quality assurance, distribution, and logistics. In the IoT ecosystem, it is critical to consider the entire value network beyond the provider-customer relationship. Developing a value proposition that benefits all stakeholders is essential, even if it necessitates some modifications to current business models (https://aioti.eu/wp-content/uploads/2022/12).

**Scope and focus of the special issue**

The prevalence of IoT technology has opened up many opportunities for new business models (Turber et al. 2014). Business models based on IoT, with their value-adding role, can contribute to the success of a company (Sofia & Soldatos, 2023). With the help of digital technologies and infrastructure such as Cloud Computing, Big Data, AI[1], Blockchain, and the like, IoT has provided the conditions for primary processing, storage, data exchange, distributed computing, and automatic analysis of activities (Bazeliuk et al., 2023). The integration of digital technologies, innovation, and the growth of digital startups have transformed industries and

business models (George & Edghiem, 2023) as IoT-related technologies (for example, RFID[2] tags, sensors, actuators, microchips, etc.). The nature of products, their intelligence, and connectivity have improved (Porter & Heppelmann, 2014). Many IoT sensors are used to share real-time information, which generates a large amount of data (Kim, 2023). Smart and connected products generate real-time data and allow organizations to continuously communicate with the customer through the product or service. With the help of the obtained information, new IoT-driven business models have emerged, which have additional components such as personalization compared to other business models because access to customer information enables faster and more personal contact (Dijkman et al., 2015).

These days, managing mutual relations between buyer and producer in a business has become much more complicated than before, so stakeholders face rapid changes in technology, increasing company expertise, and challenges to increase efficiency and innovation simultaneously. IoT significantly impacts the characteristics of products, services, and relationships between market actors (Falkenreck & Wagner, 2023). IoT can potentially improve the value proposition of a physical product by embedding digital services into it. In this way, monitoring and controlling operations with the help of IoT can lead to cost reduction and increased productivity. Also, data analysis and shared information from physical products may effectively influence e-collaboration. In addition, sharing data with a significant number of customers allows the supplier to create an opportunity to compare the use of products and interact with them for customers to ultimately modify the business model that benefits all stakeholders (Patricio et al., 2018). Therefore, options related to IoT may enhance or completely change the characteristics of new business concepts (Falkenreck & Wagner, 2023).

As a disruptive key technology, IoT technology can play a critical role in the activities of enterprises and economic systems (Atzori et al., 2010). From the organizational point of view, IoT-based products and services change the value chain, boundaries, and structures of the industry and create new markets and competitive value. To respond to new market requirements, organizations need to renew their strategic vision, stabilize their position, participate, develop new business models, reconfigure operational processes, and create new capabilities. Meanwhile, the adoption of IoT technology is faced with obstacles such as insufficient laws, security risks, privacy concerns, costs, data complexity, compatibility issues, lack of skills and expertise in working with the Internet of Things, gaps in technical knowledge, and weak hardware and infrastructure, which indicates the company's unpreparedness (Falkenreck & Wagner, 2023). In the IoT-driven business model, the value proposition, relationships with customers, and key partnerships are more important than other business model components (Dijkman et al., 2015). New capabilities of smart products, new services, and their increasing reliability can boost the value provided to customers and the value gained by enterprises (Zancul et al., 2016). IoT in business improves and makes activities more agile due to the creation of quick and accurate interactions among different stakeholders. This

interaction helps businesses track each enterprise's resources, production operations, and challenges in coordination with other enterprises. Business model innovation is a vital success factor in IT service-based enterprises that compete in dynamic environments (Foltean & Glovațchi, 2021). Although IoT is an emerging and promising technology, it is complex in nature. For this reason, business model innovation based on the Internet of Things requires careful guidance of the enterprise (Yopan et al., 2022).

IoT adoption and IoT-based business development are not simple tasks, and understanding these complexities is required to survive in the competitive business environment (Metallo et al., 2018), considering the fact that the adoption rate of IoT has increased in recent years, especially after the COVID-19[3] pandemic. Despite the increasing trend towards business models based on IoT and the studies conducted in this area, the research related to IoT is still in its early stages. Meanwhile, with the increasing adoption rate of IoT and its gradual evolution, more opportunities are emerging for the theoretical understanding of this technological phenomenon and its commercial applications. Regardless of their area of application, theories are valuable lenses for evaluating the role of a technological phenomenon and their impacts on day-to-day business-related issues in the field of specialization (Hanafizadeh et al., 2022). By structuring the relationships between effective constructs (concepts), theory can provide a compelling argument for the whatness, whyness, and howness of different IoT functions in business and support the generation of new theoretical insights (Gregor 2006). Thus, a deep and insightful theoretical understanding of IoT is crucial for successfully deploying in the real world (Hanafizadeh et al., 2022).

In response to these developments, this Special Issue welcomes submissions addressing key theories, hallmarks, drivers, outcomes, and contingency factors impacting the usage of Internet of Things (IoT) technology on business model innovation. We welcome conceptual, methodological, qualitative, quantitative, or pluralistic contributions grounded in relevant perspectives that address issues, including, but not limited to, the following:

- Which theories can explain the value of IoT-driven business models?
- How does the IoT ecosystem affect business models and value networks?
- Which industries have successfully implemented IoT-driven business models? What are the business models, use cases, and architecture of these business models? What are their theoretical and practical implications?
- What infrastructure is needed to apply IoT for innovative business models in various industries?
- How can suppliers address customer uncertainty in an IoT-driven business model?
- How can the business models based on IoT increase the efficiency and productivity of the company? What facilities are created using this business model, for example,

forecasting sales, categorizing customers based on various factors, analyzing supply chain data, etc.?

- Which management and organizational theories can explain the complexities of an IoT-driven business model?
- What are the ethical challenges and social implications of adopting IoT technology in business models, especially concerning data privacy and security?
- How do IoT-driven business models manifest differently in emerging economies, particularly in the Global South, compared to developed nations?
- How have IoT-driven business models evolved over time, and what factors have contributed to this evolution?
- What policy frameworks could support or inhibit the successful implementation of IoT in business models?
- What are the opportunities and challenges IoT brings to traditional business models?
- What is the role of big data and Artificial Intelligence (AI) in shaping IoT-driven business models? How can the application of these technologies, along with IoT, help create value?
- How can the combination of other technologies, such as blockchain, big data, cloud computing, Artificial Intelligence (AI) robotics, generative AI, and smart sensors, affect the use of IoT in business model innovation?
- How does IoT technology contribute to the innovation of service-based business models?
- What opportunities does IoT offer to manufacturing companies to develop services? What business models is this opportunity applicable to, and how will it help create value?
- What framework can be designed to describe, analyze, or classify business models based on IoT?
- How can the features of IoT enable digital transformation in business?
- What are the challenges SMEs and enterprises face in adopting IoT, and how can they be addressed?
- What innovative strategies can be used to develop theories in empirical IoT-driven BMs?

Some topics related to this special issue are

- IoT-driven Business Models
- AI-enabled IoT-driven Business Models
- New business models and applications of IoT in the digital economy
- Smart objects and IoT-enabled business environment
- IoT-enabled Innovation and Entrepreneurship
- IoT Applications and Industry 4.0

- Use of IoT systems for business research
- Ethical and Social Implications of IoT applicatons in business
- Case studies and theories in IoT usage in business Models development/innovation
- Perspectives of management and organizational theories in IoT studies
- The role of IoT technology in business model development
- The role of IoT in the innovation of business models
- Semantic communications for supporting business by IoT applications
- Security for IoT-based systems (industrial control, healthcare monitoring, Cyber-Physical Systems, etc.)
- Location-based services, presence, availability, and locality by IoT applications in business
- Effect of IoT mobility, localization, tracking, and security in business
- Integration of IoT and other technology with business logic
- Knowledge and information processing by IoT usage in digital business
- Applications of IoT in the digital transformation.

**Manuscript submission information:**

The Digital Business's submission system will be open for submissions to our Special Issue from 15/03/2024. When submitting your manuscript to Editorial Manager®, please select the article type "VSI: Unleashing the Power of IoT". Please submit your manuscript before 15/07/2024. There will be a 100% APC fee waiver for the duration of this Special Issue.

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**Keywords:**
Internet of Things, IoT, Industry 4.0, digital technologies, platforms, cloud Computing, Business model, Sustainable business model, Disruptive business models, Business model innovation, BMI, Business-model modifications, Business Opportunities, Business management, Digitalization, Digital transformation, smart logistic, Innovation capability

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