Program

4TH INTERNATIONAL CONFERENCE ON DIGITAL ECONOMY
Emerging Technologies & Business Innovation
### April 15, 2019

**18:00 Welcoming Reception & Networking Session**

Traditional Dance

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### April 16, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>09:00 – 9:30</td>
<td>Welcome and Registration</td>
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<tr>
<td>09:30 – 10:00</td>
<td><strong>Opening Session</strong>&lt;br&gt;Organizing Chair: Mohammad Makki&lt;br&gt;Steering Committee: Dr. Rim Jallouli &amp; Dr. Mohamed Anis BachTobji&lt;br&gt;General Chair: Dr. Ibrahim Osman&lt;br&gt;Dean of SOBU at BIU: Dr. Farid Abdallah</td>
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<tr>
<td>10:00 - 10:45</td>
<td>Dr. Stefan B. Bazan, Digital Empowerment Advisor&lt;br&gt;“The Fake News mechanisms: When the Web goes wrong”</td>
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<tr>
<td>10:45 – 11:15</td>
<td>Coffee Break</td>
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<tr>
<td>11:15 – 12:30</td>
<td>Session 1: Digital Transformation (3 papers)</td>
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<tr>
<td>12:30 – 13:45</td>
<td>Session 2: E-Finance (3 papers)</td>
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<td>13:45 – 15:00</td>
<td>LUNCH</td>
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<tr>
<td>15:00 – 16:40</td>
<td>Session 3: Social Media communication (4 papers)</td>
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<td>16:40 – 17:00</td>
<td>Coffee Break</td>
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<tr>
<td>17:00 – 18:15</td>
<td>Session 4: Intelligent systems (3 papers)</td>
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<th>Time</th>
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<tr>
<td>9:00 - 9:45</td>
<td>Dr Nizar Abdelkafi, Head of Unit, Business Models: Engineering And Innovation, Fraunhofer Center IMW, Germany “Digital Business Models”</td>
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<tr>
<td>9:45 – 10:10</td>
<td>Dr Mona Al achkar Jabbour, Head of the Lebanese Information Technology Association, Co-Director of Cybercrime Center “General Data Protection Regulation (GDPR)”</td>
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<tr>
<td>10:10 – 10:40</td>
<td>Coffee Break</td>
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<tr>
<td>10:40 – 11:55</td>
<td>Session 5: E-Commerce &amp; Business Analytics (3 papers)</td>
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<tr>
<td>13:35–14:45</td>
<td>LUNCH</td>
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<td>14:45 – 16:00</td>
<td>Parallel Sessions:&lt;br&gt;Session 8: Data Science (3 papers)&lt;br&gt;Session 9: Digital marketing (3 papers)</td>
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<td>16:00 – 16:20</td>
<td>Coffee Break</td>
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<td>16:20 – 17:35</td>
<td>Session 10: Digital Business models (3 papers)</td>
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<td>17:35 – 18:15</td>
<td>Closing ceremony (best paper award, best reviewer award)&lt;br&gt;Announcement of ICDEc next edition’s host university</td>
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<td>19:00 – 22:00</td>
<td>Gala Dinner</td>
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<th>Time</th>
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<tr>
<td>09:00 – 12:30</td>
<td>Cultural tour: Geita Grotto</td>
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Welcoming reception & Networking Session
(April 15, 18:00)
Welcoming Reception and networking session including traditional Lebanese Dance – Multipurpose Room
Block D – Beirut Campus

Opening Session: (April 16, 10:00)
Chair: Mohammad Makki
Dr. Stefan B. Bazan, Digital Empowerment Advisor
“The Fake News mechanisms: When the Web goes wrong”

Keynote Speech 1: April 16 (10:00)
Stéphane B. BAZAN is the founder of TomKeen, a Digital Empowerment Advising company, based in Beirut. Born in Lyon, he graduated from Sciences Po Paris in 1993 and worked for the Agence Universitaire de la Francophonie for 8 years in Montreal, Québec and moved to Lebanon in 2000 to launch Educational Technology programs at Beirut’s Saint-Joseph University. He developed different academic and research programs in the field of Web Science and created a Digital Economy Master program at the Faculty of Economics.

“The Fake News mechanisms: When the Web goes wrong” The Fake News battle is raging on the Web. Between traditional media, governments, pressure groups and rogue states, the information war is on and fake news have become a new business model that takes direct advantage of the fundamental mechanisms of the web. The international economic and democratic structures are in direct danger of destabilization and responsibility to correct this alarming trend mainly lies in the hands of web platforms providers, advertising algorithms and other social machines that exist on the Web. Fighting back is essential, but solutions are not just technical. The whole mechanisms of revenue models on the Web are to be reinvented.

Keynote Speech 2: April 17 (9:00)
Nizar Abdelkafi is Deputy Head of the department of Corporate Development in international competition, and Head of Unit “Business Models: Engineering and Innovation” at Fraunhofer Center for International IMW, Leipzig – Germany. In 2018 he got his habilitation with the title “Essays on innovation, internationalization and sustainability: a business model perspective” from the University of Leipzig. In 2008, Nizar Abdelkafi received his doctorate at the Technical University of Hamburg on "Variety-Induced Complexity in Mass Customization: Concepts and Management". Previously, he worked as a project assistant at the University of Klagenfurt. In addition, he has a diploma in engineering from the University of Tunis Elmanar and a master degree from the Technical University of Munich. He has published his research papers in three monographs and over 65 scientific journals and collected works.

His area of expertise are:
- Analysis and optimization of existing business models
- Supporting companies in developing innovative business models
- Accompanying the implementation of new business models
- Key metrics and indicators for business models
- Business models in the service sector
- Digital transformation of business models
- Innovations through Standards and Standardization

“Digitization and Business Model Innovation: Reflections on the Present and the Future” Digitization technologies are transforming the economic and social structures in an unprecedented way. According to Gartner Hype Cycle for Emerging Technologies, Artificial Intelligence (AI), Augmented & Mixed Reality and Digital platforms are megatrends in 2018. These megatrends are blurring the boundaries between the physical and virtual world, putting big challenges on companies and their business models.

A business model describes the way companies communicate, create, deliver and capture value out of a value proposition. Companies have to innovate and transform their business models in order to leverage digital technologies and generate value for their customers. The keynote speech presents a method for business model development in the digitization era and presents a pyramid model that describes the steps, through which companies go through during their digitization journey. Finally, the presentation focuses on the future impact of digitization, in particular AI, on companies.
Keynote Speech 3: April 17 (9:45)

Mona Al achkar Jabbour, Professor of Law, Faculty of Law & Political Sciences-Lebanese University, Head of the Lebanese Information Technology Association, Member Founder of the Pan Arab Observatory for Cyber Security, Co-Director of Cybercrime Center, Permanent Member of the Panel of Information Security-World Federation of Scientists (Maj_aj@hotmail.com)

“General Data Protection Regulation (GDPR)” The main potential for economic value inventions and innovations lies in the aggregation of different personal data types. Nevertheless, with increasing numbers of data breaches, trust and confidence in cyber space are shaking. At the same time, the right of privacy is at risk with the emergence of sophisticated digital tools that are largely used by institutions and organizations in private and public sectors alike to track and profile internet users for a variety of intentions and goals, while privacy-related laws differ significantly across jurisdictions with different cultural, political and historical contexts. Hence, the idea of a technology that respects and serves human kind is at stake; that is why we do need a trustful environment for civil liberties and human rights that might support efficient digital development and avoid implications of misuse or abuse of personal data. In this context, we will discuss how the GDPR may succeed in setting the pillars of a system that would reshape the data protection strategies to allow the unlocking of personal data potential by balancing individuals’ rights and digital economy’s needs, for the interest of individuals, corporations, and states as well.

Competitive sessions ICDEc 2019 (April, 16 & 17)

Session 1 Digital Transformation

Tatiana Lezina, Olga Stoianova, Victoria Ivanova and Lyudmila Gadasina (Russia): Assessment the Company’s Readiness for Digital Transformation: Clarifying the Issue

Walid El Hoss and Farid Abdallah (Lebanon): The Impact of Management by Objectives (MBO) on Organizational Outcome in a Digital World: A Case Study in the Aviation Industry

Nadine Sinno (Lebanon): The Effect of Digital Transformation on Innovation and Entrepreneurship in The Tourism Sector: The Case of Lebanese Tourism Services Providers

Session 2 E-Finance

Mohammad Makki and Mira Abdallah (Lebanon): Testing the Significance of Artificial Intelligence Investment (AlI) in Determining Stock Prices*

Thabo J. Gopane (South Africa): The Interest Rate Behaviour of Bitcoin as a Digital Asset South Africa

Rami Al-Sabri (Yemen): Limitations of Digitizing Trade Finance Services in Yemeni Banking Sector

Session 3 Social Media communication

Hasna Koubaa and Rim Jallouli (Tunisia): Social Networks and Societal Orientation in the Hotel Sector: Netnographic Study

Wafa Hamzaoui, Nadine Tournois and Enes Hamzagic (France): Luxury and mass media: how can brands manage the paradox between luxury inaccessibility and social media communication tools?

Yamen Koubaa and Fares Medjani (France/ Algeria): The Return On Investment of Professional Social Networks

Lina Shouman (Lebanon): The use of celebrity endorsement in social media advertising and its impact on online consumers’ behavior: the Lebanese scenario(*)
Session 4  Intelligent Systems

Hamssa Hasrouny, Abed Ellatif Samhat, Carole Bassil and Anis Laouiti (Lebanon/France): A Trusted Group-based Revocation Process for Intelligent Transportation System

Imed Abbassi, Layth Sliman, Mohamed Graiet and Walid Gaaloul (France): On the Verification of Data Encryption Requirements in Internet of Things Using Event-B

Oumaima Mbazaia and Karim Kamoun (Tunisia): CaRT framework for Semantic Query Correction and Relaxation

Session 5  E-Commerce & Business Analytics

Emrah Bilgic and Yanqing Duan (Turkey/UK): Business Analytics and E-commerce: A Literature Review

Safa Kaabi and Rim Jallouli (Tunisia): Overview of E-commerce Technologies, Data Analysis capabilities and Marketing Knowledge

Hassan Choubassi, Sahar Sharara and Sarah Khayat (Lebanon): Ecommerce and commodity fetishism: Violence in new media marketing

Session 6  E-learning & Cloud Education

Kristian Dokic, Tomislava Lauc and Bojan Radisic (Croatia): Toward Information Overload: Measuring Visual Activity in Teaching Materials Production

Rabeb Mbarek (Tunisia): A Reflection on E-learning Effectiveness in Tunisia

Dina Shouman and Levon Momdjian (Lebanon): Deeper Learning versus Surface Learning: The SAMR Model to Assess E-Learning Pedagogy

Say Arem, Ben Zammel Ibticem and Najar Tharwa (Tunisia): Knowledge Acquisition via E-learning; the case of the Tunisian Context

Session 7  E-Commerce and Digital Economy

Rim Haidar, Nizar Hariri and Racquel Antoun- Nakhle (Lebanon): Transparency in the e-journals market: Controlled preferences and altered rational choices

Mohammed Rawwas and Mathew Bunker (USA): Website Adoption Process: A Theoretical Model and a Validation

Rania Abouyounes (Lebanon): Going Viral: Elements That Lead Videos to Become Viral

Yasmine Jarikji, Bassam Hussein and Mohamad Hajj-Hassan (Lebanon): A Quantitative Model for Replacement of Medical Equipment Based on Technical and Economic Factors

Session 8  Data Science

Kenza Rziga, Mohamed Aymen Ben Hajkacem and Nadia Essoussi (Tunisia): A New Spark based K-means clustering with Data Removing Strategy


Eya Chtouka, Wided Guezguez and Nahla Ben Amor (Tunisia): Reinforcement Learning for New Adaptive Gamified LMS
**Session 9  Digital Marketing**

**Mourad Touzani and Ahmed Anis Charfi (France):** Motivations and inhibitions behind the adoption and continuous use of IoT wearable devices: exploring and comparing three major frameworks

**Caroline Kassably (Lebanon):** Marketing Strategies in the Age of Technology

**Mouna Karoui Daoud and Imene Trabelsi Trigui (Tunisia):** Smart packaging: Consumer’s perception and diagnostic of traceability information

**Session10  Digital Business Models**

**Claudia Vienken, Nizar Abdelkafi and Cyrine Tangour (Germany):** Multi-sided Platforms in the Sharing Economy – a Case Study Analysis for the Development of a Generic Platform Approach

**Lino Markfort, Sebastian Haugk and Cyrine Tangour (Germany):** So you want to be a Platform: Where to Start?

**Cyrine Tangour, Marc Gebauer, Herwig Winkler and Luise Fischer (Germany):** Digital business model innovation opportunities for big pharmaceutical companies - A cluster analysis

(*) Pending decision regarding the paper publication in the Springer LNBIP Proceedings

**Closing Ceremony:**

Announcement of the ICDEc 2019 Best Paper and Reviewer Awards: Dr. Mohamed Anis BachTobji

Announcement of ICDEc next edition’s host university: Dr. Rim Jallouli

Final word by conference organizer: Mohammad Makki

**Cultural tour:**