2019 3rd International Conference on Business and Information Management  
(ICBIM 2019)

2019 9th International Conference on Financial Management and Economics  
(ICFME 2019)

Paris, France

September 12-14, 2019

Sponsored by

Published by

http://www.iedrc.org/
Table of Contents

Welcome Remarks .................................................................................................................................................. 2
Conference Venue ................................................................................................................................................. 3
Instructions for Presenter .................................................................................................................................. 4
Information on Publication .................................................................................................................................. 5
Keynote & Invited Speakers Overview .................................................................................................................. 6
  Keynote Speaker I - Prof. Harri Ketamo .............................................................................................................. 6
  Keynote Speaker II - Prof. Giuseppe Ciccarone .................................................................................................. 7
  Keynote Speaker III - Prof. Alessio Ishizaka ..................................................................................................... 8
  Invited Speaker - Prof. Noriyuki Suyama .......................................................................................................... 9
Agenda Overview .................................................................................................................................................. 10
  Day 1 (September 12, 2019): On-site Registration Only and Materials Collection ............................................. 10
  Day 2 (September 13, 2019): Keynote Speeches and Authors’ Presentations ...................................................... 10
  Day 3 (September 14, 2019): City Visit .............................................................................................................. 11
Author Presentations Overview on September 13 ............................................................................................... 12
  Session I – Data Science and Computer ............................................................................................................ 15
  Session II – Finance and Economy .................................................................................................................... 19
  Session III – Enterprise Economy and Management .......................................................................................... 24
  Session IV – E-commerce and Economic Management ..................................................................................... 28
Poster Presentation .............................................................................................................................................. 32
Listeners’ List ....................................................................................................................................................... 37
Upcoming Conferences ....................................................................................................................................... 38
  ICSEB 2019 .................................................................................................................................................... 38
  IC4E 2020 ....................................................................................................................................................... 39
  ICEBA 2020 .................................................................................................................................................... 40
Welcome Remarks

On behalf of organizing Committee, we welcome you to Paris to attend 2019 3rd International Conference on Business and Information Management (ICBIM 2019) and 2019 9th International Conference on Financial Management and Economics (ICFME 2019). We’re confident that over the three days you’ll get theoretical grounding, practical knowledge, and personal contacts that will help you build long-term, profitable and sustainable communication among researchers and practitioners working in a wide variety of scientific areas with a common interest in Business, Information Management, Financial Management and Economics.

We hope that your work and that of your institution or company will be enhanced both by what you learn and by those with whom you connect over the next 3 days. Our field is enriched by the dialogue among colleagues from around the world which occurs during presentation sessions as well as informal conversations. We hope this is a memorable, valuable, and enjoyable experience!

On behalf of conference chair and all the conference committee, we would like to thank all the authors as well as the program Committee members and reviewers. Their high competence, their enthusiasm, their time and expertise knowledge, enabled us to prepare the high-quality final program and helped to make the conference a successful event. We hope that all participants and other interested readers benefit scientifically from the proceedings and also find it stimulating in this process. Finally, we would like to wish you success in your technical presentations and social networking.

Once again, thanks for coming to this conference. We are delegate to higher and better international conference experiences. We will sincerely listen to any suggestion for improvement and we are looking forward to meeting you next time.
The Novotel Paris 17 hotel is located in the Porte d'Asnières area (17th arrondissement of Paris). Located close to Porte de Clichy, So Ouest shopping center, the Champs Elysées and the center of Paris, the hotel has 140 spacious, soundproofed rooms with free WIFI. The hotel also boasts a children's play area, bar, modern restaurant, private car park (charges apply) and 8 modular meeting rooms. Come to the Novotel Paris 17 and enjoy a stay on the doorstep of our capital.

Novotel Paris 17 is only 15 minutes from the Arc de Triomphe (bus 341) and the Palais des Congrès Porte Maillot (bus PC). Metro Line 3 (Pereire stop) to Opéra de Paris in 15 minutes. Easy to reach by car, with direct access to the peripheral Bd. Easy travel with the T3B Tram. The hotel offers a pleasant, calm stay with quick access to the main Paris sights, such as the Défense, Eiffel Tower or Louvre.
Instructions for Presenters

Onsite Registration

1) You can also register at any time during the conference.
2) Certificate of Participation will be awarded at the end of your session.
3) Your paper ID will be required for the registration.
4) The organizer won’t provide accommodation, and we suggest you make an early reservation.

Oral Presentation

1) Devices Provided by the Conference Organizer:
2) Laptops (with MS-Office & Adobe Reader)
3) Projectors & Screens
4) Laser Sticks
5) Materials Provided by the Presenters:
6) Power Point or PDF Files (Files should be copied to the conference laptop at the beginning of each session)
7) Duration of each Presentation (Tentatively):
8) Regular Oral Presentation: 15 Minutes of Presentation, including Q&A
9) Keynote Speech: 40 Minutes of Presentation, including Q&A

Poster Presentation

Materials Provided by the Conference Organizer:
The place to put poster

Materials Provided by the Presenters:
Home-made Posters
Maximum poster size is A1
Load Capacity: Holds up to 0.5 kg

Best Presentation Award

One Best Oral Presentation will be selected from each presentation session, and it will be awarded after each session.

Dress Code

Please wear formal clothes or national representative clothing.

Important Notes:

The time slots assigned in the schedule are only tentative. Presenters are recommended to stay for the whole session in case of any absence.
The conference room is the public place, please be careful about your belongings, the conference will not be responsible for it.
Introductions for Publications

All accepted papers for the Paris conferences will be published in the proceedings and journals below.

2019 The 3rd International Conference on Business and Information Management (ICBIM 2019)

Accepted excellent papers will be published in the International Conference Proceedings Series by ACM, which will be archived in the ACM Digital Library, and sent to be indexed by EI Compendex and Scopus and submitted to be reviewed by Thomson Reuters Conference Proceedings Citation Index (ISI Web of Science).

ISBN: 978-1-4503-7232-9


Accepted papers will be published in International Journal of Trade, Economics and Finance (IJTEF)

ISSN: 2010-023X

DOI: 10.18178/IJTEF

Abstracting/Indexing: Engineering & Technology Digital Library, ProQuest, Crossref, Electronic Journals Library, EBSCO, and Ulrich's Periodicals Directory

Accepted papers will be published in Journal of Economics, Business and Management (JOEBM)

ISSN: 2301-3567


Introductions for Speakers

Keynote Speaker I

Prof. Harri Ketamo
Tampere University of Technology, Finland

Harri Ketamo, Ph.D., is an entrepreneur with 20 years of experience in cognitive sciences, computational intelligence, complex adaptive systems and game development. Currently he is founder & chairman of Headai, a company developing natural language based cognitive reasoning and semantic Digital Twins on knowledge domains, user groups and persons. He's also actively participating academic research as a senior fellow at University of Turku. Previously Ketamo has been e.g. founder & CEO of gameMiner (game AI), xTask (adaptive learning) and SkillPixels (serious games). He has had more than 300 presentations, published more than 100 peer-reviewed research articles and developed products (games, MOOCs, adaptive systems, AIs) used in more than 120 countries all over the world. Ketamo is awarded the Eisenhower Fellowship in 2017.

Speech Title: Enabling Cognitive Reasoning with Digital Twins

Abstract: Most of the natural language processing is currently done with machine learning algorithms focusing on multidimensional classification and/or grouping. That makes such applications narrow, dependent on training sets, and so makes cognitive reasoning, predictive analytics and explainable decision making very challenging. Furthermore, the privacy/security concerns related to black boxes are enormous.

Digital Twins are digital replicas on e.g. objects, entities or knowledge. Idea of Digital Twins raises from industry, but they have been applied in multiple contexts outside industry.

In this study, the strengths of unsupervised learning and reinforcement learning is brought together in order to build language based digital twins on knowledge domains. Digital Twins serves as prepared and cleaned data layer that enables cognitive, predictive and explainable operations for next layer algorithms.

Digital Twins on i) job demand, ii) person's current skills and iii) course offering are demonstrated as real world examples. Training data consist of +10000000 job openings, relevant news and curriculums/syllabuses. When also individual's competences are modelled as Digital Twin, algorithms can set up learning goals relevant for career. Because the course offering (online, onsite, P2P) is modelled AI and construct a learning pathway relevant for career.

From company point of view Digital Twins can be used to strengthening both career planning and recruiting pipeline. In national level Digital Twins help industries to get optimal talent (minimum training time) and training companies / universities to build optimal curriculums (for companies and individuals).
Giuseppe Ciccarone, Full Professor of economic policy at the Department of Economics and Law of the Sapienza University of Rome, is the Director of the Sapienza School for Advanced Studies and the Delegate of the Rector for the Sapienza University Press. After graduating in Economics in the same University, he was awarded the M.Phil in Economics and the Ph.D in Economics at the University of Cambridge. He was then Post-Doctoral Fellow at the Department of Economics of Harvard University. From 2011-2017 he was the Dean of the Faculty of Economics and he is now Fellow of the Global Labor Organization and Member of the International Research and Expert Network, Pôle Emploi, Paris. He is the Editor in Chief of Economia & Lavoro – Interdisciplinary review of economic policy, sociology and industrial relations – and a member of the Advisory Board of the online review nelMerito.it. He is also a member of the Advisory Board of Labour – Review of labour economics and industrial relations – and a member of the Editorial Board of the Eurasian Economic Review, of the Bulletin of the North Caucasus Federal University and of the Central Asian Review of Economics and Policy. His main research interests are in labor economics and in monetary economics and policy, with particular attention to dynamic stochastic general equilibrium models. His recent work has focused on the role of undeclared work in affecting labor market dynamics and the ability of financial imperfections to modify the effects of monetary policy on rational asset price bubbles. He also devoted substantial research effort to behavioral economics and its applications, pioneering the introduction of imperfect rationality into macroeconomic general equilibrium models. He presented his work and delivered keynote speeches in many international conferences. He is the author of several books and his articles have been published in important Italian and international scientific journals like: Economic Theory, Journal of Economic Behavior and Organization, Public Choice, Economics Letters, Journal of Macroeconomics, Economic Modelling, B.E. Journal of Macroeconomics, Review of Political Economy, Journal of Modern Italian Studies.

**Speech Title**: Asset Price Bubbles. Theories, Assets and the Role of Monetary Policy

**Abstract**: The speech will first recall the theoretical difference between the asset price explanation based on fundamentals and the theory of rational bubbles, and will address the issue of whether bubbles are always bad for the economy. Second, it will present the main historical examples of asset price bubbles, from the Dutch tulip mania to Bitcoins. Third, it will discuss the role of monetary policy, juxtaposing the conventional policy (“lean against the wind”) and the alternative view that the interest rate should not be increased in the face of a growing bubble (“clean up the mess”). In this context, it will also summarize my own contribution showing that, under credit frictions and sticky prices, bubbles produce an expansionary effect (produced by the loosening of the collateral constraint), and a contractionary effect (due to the higher cost of borrowing funds and to the competition between the bubble and productive capital in the borrowers’ investment choice) The speech will finally present my current research on the subject matter, aimed at demonstrating that credit frictions and sticky prices allow us to replicate the existing empirical findings suggesting that a tighter monetary policy may adversely affect stock prices.
Alessio Ishizaka is Full Professor and head of the information systems, supply chain management and decision making department at NEOMA Business School (France). He was full professor in Decision Analysis, research lead and Deputy Director of the Centre of Operations Research and Logistics (CORL) at the Portsmouth Business School of the University of Portsmouth (UK). He received his PhD from the University of Basel (Switzerland). He worked successively for the University of Exeter (UK), University of York (UK) and Audencia Grande Ecole de Management Nantes (France). He has been visiting professor at the Università del Sannio, Politecnico di Torino, Università degli Studi di Trento, INSA Strasbourg, Université de Lorraine, Universität Mannheim, Università degli Studi di Modena e Reggio Emilia, Universität der Bundeswehr Hamburg, Université d’Aix-Marseille, Università degli Studi di Torino, Universität degli Studi della Tuscia and Università degli Studi di Padova. His research is in the area of decision analysis, where he has published more than 90 papers. He is regularly involved in large European funded projects. He has been the chair, co-organiser and guest speaker of several conferences on this topic. Alongside his academic activities, he acts as a consultant for companies in helping them to take better decisions. He has written the key textbook Multicriteria Decision Analysis: methods and software.

**Speech Title:** Two New Classification Techniques for Multicriteria Sorting Problems

**Abstract:** Good decisions are very important. However, they are often complex, especially if based on several criteria which may be conflicting. Therefore Multi-Criteria Decision Making methods have been developed. Their task is mainly for solved choice or ranking problems. In this talk, we developed two new methods for sorting problems: AHPSort and MACBETHSort. They will be illustrated in two case studies.

The first case studies classifies suppliers according to their performance. Moreover, we add the descriptive method GAIA as an extension to the AHPSort method that helps policy makers to gain insights into their decision problems. It allows users to visualise the different performances of suppliers within a review process and provide feedback for improvements.

In the second case study, we developed MACBETHSort for the ABC classification. Efficient companies need to know which their strategic products are. For this purpose, the ABC classification based on the item’s value was developed and was used for a long time. Later, it was recognised that several other criteria need to be considered and multicriteria ranking methods were applied. However, the classes have always been defined based only on a relative proportion. Therefore, the number of products in a class is independent of the actual importance of the products. In this paper, we correct this problem with MACBETHSort.
Noriyuki Suyama was born in Tokyo. He is a Professor in Global Business and Marketing at Bunka Gakuen University. His publications and research interest focus primarily on Global Marketing and Customer Relationship Management with quantitative methods. He received an undergraduate degree in Economics from Sophia University in Tokyo, M.B.A. in Marketing from University of Rochester, NY, M.S. in Econometrics and Ph.D. in Marketing from Senshu University in Tokyo.

He started business career at Daimaru Co. Ltd., one of major department store chains in Japan and was mainly involved in merchandising and marketing activities as a manager. He moved to Rakuten Inc., No.1 electric commerce firm in Japan and was double-assigned to general manager positions in merchandising division and client marketing division. He was also engaged in commercial real estate management and food business as a general manager and a CEO, respectively in overseas markets. His overseas assignment totals more than 10 years, mainly in Southeast Asia.

Currently, he is also an adjunct faculty of Marketing Research and International Marketing at Metropolitan University of Tokyo and Sophia University, respectively.

Dr. Suyama belongs to Japanese Society of Marketing and Distribution, Japan Marketing Academy, Japan Society for Southeast Asia Studies, Fashion Business Association and Japan Halal Association. He is a member of Gerson Lehrman Group (GLG) Council, who consults with clients.

**Speech Title:** Forecasting Customer Purchase with Maximization of Prediction Probability

**Abstract:** Customer base analysis that is crucial for CRM in retailing is concerned with distinguishing active customers from defected ones, and predicting their future level of transactions, considering their past purchase behavior. However, there are not enough empirical applications reported in the literature to prove the applicability and validity of these models in different purchasing settings. In this paper, several methodologies of customer retention analysis are described, exploring which model or with which variable contributes to a higher performance with analyzing POS data. Since the Abe [2004] model was described in the paper that the model could estimate each parameter more efficiently and simply than other models, adopted models for highest prediction rates are Abe [2004] and an artificial neural network models with data [2005] to investigate the prediction accuracy of each models. With different independent variables, an artificial neural network and a logistic regression model are adopted for estimating prediction efficiency. The odds ratio of logistic regression model is used to check the impact of each independent variable on the dependent variable.
## Conference Agenda

### Day 1 (September 12, 2019): Onsite Registration & Conference Materials Collection
(Note: September 12, 2019 is only for onsite Registration, but on September 13, 2019, the registration is also open outside the conference room, the conference room is on the 1st floor)

<table>
<thead>
<tr>
<th>Lobby</th>
<th>10:00-17:00</th>
<th>Registration &amp; Conference Materials Collection</th>
</tr>
</thead>
</table>

### Day 2 (September 13, 2019) (Morning) Keynote Speeches

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:10</td>
<td>Opening Remark</td>
<td>Prof. Harri Ketamo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tampere University of Technology, Finland</td>
</tr>
<tr>
<td>09:10-09:55</td>
<td>Keynote Speech 1</td>
<td>Prof. Giuseppe Ciccarone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sapienza University of Rome, Italy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speech Title: Asset Price Bubbles. Theories, Assets and the Role of Monetary Policy</td>
</tr>
<tr>
<td>09:55-10:15</td>
<td>Coffee Break &amp; Group Photo</td>
<td></td>
</tr>
<tr>
<td>10:15-11:00</td>
<td>Keynote Speech 2</td>
<td>Prof. Alessio Ishizaka</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neoma Business School, France</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speech Title: Two New Classification Techniques for Multicriteria Sorting Problems</td>
</tr>
<tr>
<td>11:00-11:45</td>
<td>Keynote Speech 3</td>
<td>Prof. Harri Ketamo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tampere University of Technology, Finland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speech Title: Enabling Cognitive Reasoning with Digital Twins</td>
</tr>
</tbody>
</table>

#### Lunch

Venue—Restaurant - N’ Cafe (1st Floor)
Day 2 (September 13, 2019) (Afternoon): Authors’ Presentation

<table>
<thead>
<tr>
<th>Time</th>
<th>Venue</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30-15:45</td>
<td>Salle MONCEAU 1</td>
<td>Session 1</td>
</tr>
<tr>
<td></td>
<td>1st Floor</td>
<td>Topic: Data Science and Computer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 papers</td>
</tr>
<tr>
<td>13:30-16:00</td>
<td>Sakke Perire</td>
<td>Session 2</td>
</tr>
<tr>
<td></td>
<td>1st Floor</td>
<td>Topic: Finance and Economy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 papers</td>
</tr>
<tr>
<td>15:45-16:15</td>
<td></td>
<td>Coffee Break</td>
</tr>
<tr>
<td>16:00-18:45</td>
<td>Salle MONCEAU 1</td>
<td>Session 3</td>
</tr>
<tr>
<td></td>
<td>1st Floor</td>
<td>Topic: Enterprise Economy and Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11 papers</td>
</tr>
<tr>
<td>16:15-18:45</td>
<td>Sakke Perire</td>
<td>Session 4</td>
</tr>
<tr>
<td></td>
<td>1st Floor</td>
<td>Topic: E-commerce and Economic Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 papers</td>
</tr>
<tr>
<td>19:00-21:00</td>
<td></td>
<td>Dinner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Venue—Restaurant – N’ Cafe (1st Floor)</td>
</tr>
</tbody>
</table>

Day 3 (September 14, 2019): City Visit
## Presentations Quick Review

### Session 1

**Theme:** Data Science and Computer

**Times:** 13:30-15:45  
**Conference Room:** Salle MONCEAU 1 (1st Floor)

**Session Chair:** Prof. Omid Tafreschi, Hochschule Darmstadt - University of Applied Sciences, Germany

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE2014</td>
<td>A Balanced Scorecard for Holistic Monitoring of Shared Services for Corporate Data Protection</td>
<td>Florian Weissgerber, Eszter Lazar and Omid Tafreschi</td>
</tr>
<tr>
<td>SE2042-A</td>
<td>Measuring Digital Trust in the Workplace: A Proposed Framework</td>
<td>Dave Escobarte Marcial and Markus A. Launer</td>
</tr>
<tr>
<td>SE2015</td>
<td>Effort based Information Retrieval Evaluation with Varied Evaluation Depth and Topic Sizes</td>
<td>Prabha Rajagopal and Sri Devi Ravana</td>
</tr>
<tr>
<td>SE2013</td>
<td>An Intuitionistic Fuzzy Decision Aid Approach to Analyzing Performance Indicators of Waterfall Project Management Framework</td>
<td>Mehtap Dursun, Nazli Goker and Hakan Mutlu</td>
</tr>
<tr>
<td>SE2046</td>
<td>An empirical investigation on Big Data Analytics (BDA) and innovation performance</td>
<td>Ahad Zareravasan and Amir Ashrafi</td>
</tr>
<tr>
<td>SE2058</td>
<td>Open Government Maturity Measurement on Social Media's Usage: The Ministry of Foreign Affairs in Indonesia Case Study</td>
<td>Rizky Perkasa Utama, Betty Purwandari, Riri Satria and Larastri Kumaramalita</td>
</tr>
<tr>
<td>SE3028-A</td>
<td>Information Technology Capabilities, Open Technological Innovation, and New Venture Growth</td>
<td>Weizhi Yao</td>
</tr>
<tr>
<td>SE2057</td>
<td>Analysis of Software Development Method Selection: A Case of a Private Financial Institution</td>
<td>Eunike Endariahna Surbakti, Betty Purwandari and Iis Solichah</td>
</tr>
</tbody>
</table>

### Session 2

**Theme:** Finance and Economy

**Times:** 13:30-16:00  
**Conference Room:** Sakke Perire (1st Floor)

**Session Chair:** Assoc. Prof. Themistokles Lazarides, University of Thessaly, Greece

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE0016</td>
<td>Reshaping the Banking Sector in Europe</td>
<td>Themistokles Lazarides and Georgia Charitoudi</td>
</tr>
<tr>
<td>SE1008</td>
<td>The analysis of influence of the monetary policy carried out by The National Bank of Georgia on the local business entities (based on the cases of development business)</td>
<td>Giorgi Katamadze</td>
</tr>
<tr>
<td>SE0012</td>
<td>Exchange Rate and Capital Flows of Thailand</td>
<td>Santi Termprasertsakul and Prin Seree-annoui</td>
</tr>
<tr>
<td>SE0009-A</td>
<td>New Insights in Explaining the Balance Sheet Growth Phenomenon. Evidence from Europe</td>
<td>Panagiotis Artikis, Georgios Papanastasopoulos and Lydia Diamantopoulou</td>
</tr>
<tr>
<td>SE2035-A</td>
<td>China’s capital account liberalization and asymmetric risk spillovers between Shanghai and Hong Kong stock markets</td>
<td>Kun Yang</td>
</tr>
<tr>
<td>Session 3</td>
<td>Theme: Enterprise Economy and Management</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Times: 16:00-18:45</td>
<td>Conference Room: Salle MONCEAU 1 (1st Floor)</td>
<td></td>
</tr>
<tr>
<td>Session Chair:</td>
<td>Assoc. Prof. Kai-Li Wang, National Taiwan Sport University, Taiwan</td>
<td></td>
</tr>
</tbody>
</table>

<p>| SE1013 | National Athletes? Or Social Athletes? : A study on Sports Crowd-Funding by the Public Sector in Taiwan |
| SE2012 | Expert Leadership Effect on organizational Innovation |
| SE2048 | Firm investment, strategy orientation, firm stability, and ownership structure: the determinants of corporate governance structure |
| SE2009 | Current methods for quality control in manufacturing companies in the Czech Republic |
| SE2010 | Workplace Multiple Roles Shape Employee’s Trust Centrality |
| SE3037 | Statistical Analysis of Time Series and Investigation of Seasonal Fluctuations on Beer Production |
| SE2005 | Trust Brokerage Drives Manager’s Exploration and Exploitation |
| SE3038 | Application of Wavelet Transform Method for Beer Production Forecasting |
| SE3018-A | Gen Y Engagement and Branding: An Integrated SEM-AHP Approach |
| SE3030 | Does Culture Affect Why We Work: a Comparative Study between Ghana and Turkey |
| SE2028 | The Inverted U-Shaped Relationship between Advice Seeking and Innovative Capability: The Moderating Role of Task Complexity |</p>
<table>
<thead>
<tr>
<th>Session 4</th>
<th>Theme: E-commerce and Economic Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Times: 16:15-18:45</td>
<td>Conference Room: Sakke Perire (1st Floor)</td>
</tr>
<tr>
<td>Session Chair:</td>
<td>Prof. Noriyuki Suyama, Bunka Gakuen University, Japan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session Code</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE3022</td>
<td>Forecasting Customer Purchase with Maximization of Prediction Probability</td>
<td>Noriyuki Suyama</td>
</tr>
<tr>
<td>SE3031</td>
<td>A Review of Social Media Posts from UniCredit Bank in Europe: A Sentiment Analysis Approach</td>
<td>Abdul Bashiru Jibril, Raphael Kwaku Botchway, Michael Adu Kwarteng, Miloslava Chovancova, Zuzana Komínková Oplatková</td>
</tr>
<tr>
<td>SE3024-A</td>
<td>Understanding Consumer decision-making in selecting Hotel Online: Impact of 360-degree virtual content</td>
<td>Pankaj Vishwakarma and Srabanti Mukherjee</td>
</tr>
<tr>
<td>SE3009</td>
<td>Community-based Businesses Cooperate with Agriculture and Commerce via Online Ordering</td>
<td>Chika Yoshida</td>
</tr>
<tr>
<td>SE0006-A</td>
<td>Import Technology Spillover, Industrial Correlation and its Influence on Productivity: An Analysis Based on Structural Decomposition</td>
<td>Zhao Di and Chen Jian</td>
</tr>
<tr>
<td>SE3036</td>
<td>Assessing pre-purchase risk attributes towards used-products: Evidence from e-Shoppers in the Czech Republic</td>
<td>Michael Adu Kwarteng, Abdul Bashiru Jibril, Raphael Kwaku Botchway, Owusu Victor Kwarteng, Michal Pilik and Miloslava Chovancova</td>
</tr>
<tr>
<td>SE0004-A</td>
<td>Impacts of High-Speed Railway on the Emission of Industrial Pollution in China</td>
<td>Xiaomin Fan and Yingzhi Xu</td>
</tr>
<tr>
<td>SE2039</td>
<td>Service Marketing Mix and Service Value: A Way to Increase Customer Satisfaction</td>
<td>Kittisak Jermsittiparsert</td>
</tr>
<tr>
<td>SE2055</td>
<td>Virtual Customer Service: Building your Chatbot</td>
<td>David Nunes Sousa, Miguel Abrunhosa Brito and Carlos Argainha</td>
</tr>
</tbody>
</table>
## Authors’ Presentations

### Session 1

**Topic:** Data Science and Computer  
**Time:** 13:30-15:45  
**Venue:** Salle MONCEAU 1  
**Session Chair:** Prof. Omid Tafreschi  
**Hochschule Darmstadt - University of Applied Sciences, Germany**

*The time slots assigned here are only tentative. Presenters are recommended to stay for the whole session in case of any absence.  
**After the session, there will be a group photo for all presenters in this session.*

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
</table>
| 13:30-13:45   | **Opening Speech**  
**A Balanced Scorecard for Holistic Monitoring of Shared Services for Corporate Data Protection**  
Florian Weissgerber, Eszter Lazar and **Omid Tafreschi**  
Hochschule Darmstadt - University of Applied Sciences, Germany  
**Abstract:** Data protection is one of the major challenges of the digital transformation. From a company’s point of view, the compliance of data protection is indispensable, effort consuming and cost intense. While these efforts and costs cannot be avoided in total, the efficiency of data protection can be optimized by minimizing its costs. For this purpose, this paper presents and evaluates a balanced scorecard. It embodies a holistic approach including four perspectives, goals and key performance indicators for corporate data protection. |
| 13:45-14:00   | **Measuring Digital Trust in the Workplace: A Proposed Framework**  
Dave Escobarte Marcial and **Markus A. Launer**  
Ostfalia University, Germany  
**Abstract:** The ever-changing technological innovations disrupt lives. It affects how we deal with people or things. It Influences our feelings and emotions. It changes the way we believe in the ability, reliability, and power of something or someone. A global research on digital trust in the workplace is conducted in collaboration and partnership with schools in Asia, Latin America, Europe, and the USA. It is lodged in a university in Germany. The research is primarily aimed at measuring digital trust in the workplace with an emphasis on people, technology, and process. This paper is aimed at describing the underlying principles and theoretical underpinnings of the research “Digital Trust in the Workplace.” Specifically, it presents the framework employed in the study. Likewise, it describes each theory and principles and their relationship to each other. An Input-Process-Output model was used in the formulation of the conceptual framework of the study, which was anchored on the principles of information systems. Theories and principles included in this study are Forrester Social Technologic Ladder, Decision-making models, Technology Adoption Theory, Management Theory, Software Quality Model, General Data Protection Regulation Principles, Digital Citizenship Principles, and Caldicott Principles. |
| 14:00-14:15   | **Monitoring Research on International Chinese Education Market based on Web Searching Data**  
Chong Zhang  
Beijing Language and Culture University, China  
**Abstract:** With the development of Internet and popularity of information technology, the Internet has
become one of the ways that access to the latest newsletter and learning resources. People use the search engine to see news and interesting information on the Internet, and also use social software such as WeChat, Facebook and Twitter to chat and share information. The Internet has become a huge database. Internet web search data records hundreds of millions of users’ search attention and demand, also reflects the behavior trends of people, and provides the necessary data basis for the study of social and economic behavior. The number of Chinese learners has changed since implementation of “The Belt and Road” policy. Therefore, studying the heat of Chinese learning is of great practical significance for promoting the better communication of Chinese and Chinese culture. This paper uses the number of foreign students studying in China as a measure of Chinese learning heat. On the basis of building theoretical frame of web search data and the number of Chinese learners, this paper selects initial keywords from interviews of 25 foreign students from 15 countries, and do Keyword expansion work by using Google and Baidu, composes the keywords into composite index which can be used in the regression model of this paper, processing panel data and modeling by using Eviews software, finally analyzes the relationship between the numbers of foreign students studying in China and the corresponding composite index. The fitting degree of model is 94.5%.

Effort based Information Retrieval Evaluation with Varied Evaluation Depth and Topic Sizes
Prabha Rajagopal and Sri Devi Ravana
University of Malaya, Malaysia

Abstract: The information retrieval accessed globally is a vital productivity boost for most organization. However, the outcome of information retrieval system evaluation does not agree with the real user’s satisfaction. Information retrieval systems retrieving low effort documents are preferred by users as effort factor influences user satisfaction. However, there lacks evaluation on deeper depth and reduced topic sizes with the incorporation of effort in evaluating the information retrieval systems. Therefore, this study aims to measure the effectiveness of evaluating information retrieval systems using effort-based relevance judgment with varied evaluation depth, and reduced topic sizes using effort-based relevance judgment. The evaluation depth is varied from 10, 100 and 1000, and the correlation coefficient between the baseline and those generated using effort-based relevance judgment is evaluated. Topic sizes smaller than 50 were also considered and measured to observe changes in correlation coefficient due to effort. As a result, standard evaluation depth, and reduced topic sizes are sufficient for evaluation using effort-based relevance judgment.

An Intuitionistic Fuzzy Decision Aid Approach to Analyzing Performance Indicators of Waterfall Project Management Framework
Mehtap Dursun, Nazli Goker and Hakan Mutlu
Galatasaray University, Turkey

Abstract: Project management methodologies describe the way of working and communicating, and represent the principles and processes in order to manage a project. Waterfall project management framework, which is the oldest one, is a sequential, linear process of project management consisting of several discrete phases. This study presents an intuitionistic fuzzy cognitive map (IFCM) application to evaluate the importance degrees of performance indicators of Waterfall project management methodology. The cause-and-effect relationships among concepts; uncertainty, vagueness, and hesitation in data lead to utilize an intuitionistic decision aid approach to assess the performance criteria of Waterfall project
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>University</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:45-15:00</td>
<td>SE2046</td>
<td>An empirical investigation on Big Data Analytics (BDA) and innovation performance</td>
<td>Ahad Zararavasan and Amir Ashrafi</td>
<td>Masaryk University, Czech Republic</td>
<td>Nowadays, big data analytics (BDA) have widely used in our business environment as an undeniable function for firms not only survive in turbulence but also have the opportunity to be ahead of their major competitors. One of the promising aspects of BDA relates to its influence on innovation performance. In line, the present study proposed a conceptual model in order to investigate the relationship between BDA use and innovation performance by considering the role of dynamic capability (DC) theory. In this research, we consider firm agility in terms of DC theory and decompose it into three main factors contacting sensing agility, decision making agility, and acting agility. The research model and required data were analyzed using Partial Least Squares (PLS)/Structured Equation Modelling (SEM). The outcome of this study indicates that firms would be able to increase their innovation performance from a DC theory. This study also shows that BDA use has a positive influence on sensing agility of firms.</td>
</tr>
<tr>
<td>15:00-15:15</td>
<td>SE2058</td>
<td>Open Government Maturity Measurement on Social Media’s Usage: The Ministry of Foreign Affairs in Indonesia Case Study</td>
<td>Rizky Perkasa Utama, Betty Purwandari, Riri Satria and Larastri Kumaralalita</td>
<td>Universitas Indonesia, Indonesia</td>
<td>With the active participation of people in using information and communication technology (ICT) to obtain information, government uses social media as a mean to provide information and seek public interactions and collaborations. This research conducted a case study in the Ministry of Foreign Affairs (MoFA) of the Republic of Indonesia as one of technologies in supporting the Indonesian MoFA’s strategic goals to achieve open governance, one of them is through Digital Diplomacy. This study aims to measure the maturity level for open government in Indonesian MoFA, by focusing on the application of social media and giving recommendation for further implementation. To collect the data, this study uses qualitative research with a case study of the Indonesian MoFA. Data is collected through semi-structured interviews with related staffs, observation, and collecting data in the Indonesian MoFA. The result shows that MoFA’s government maturity level in the use of social media using a combined framework of the Open Government Maturity Model (OGMM) and Open Government Implementation Model (OGIM) are at the level of maturity 1 (initial condition). It is recommended that MoFA manage a data governance as the basis to managing data hence the data is reliable and obtained effectively. By having a good data governance, the higher level of maturity will easily be obtained.</td>
</tr>
<tr>
<td>15:15-15:30</td>
<td>SE3028-A</td>
<td>Information Technology Capabilities, Open Technological Innovation, and New Venture Growth</td>
<td>Weizhi Yao</td>
<td>Southeast University, China</td>
<td>New ventures utilize information technology to overcome resource constraints and achieve sustained growth. This paper proposes a conceptual model to describe the relations among IT capability, open technological innovation, and new venture growth in an open environment. The analysis is based on survey data obtained from 256 new ventures in China. The results show that IT capabilities have a positive</td>
</tr>
</tbody>
</table>
and significant influence on both open technological innovation and new venture growth. In addition, open technological innovation exerts a mediating effect on the relation between IT capabilities and new venture growth. The results also show that new ventures should focus on open technological innovation for improving their IT capabilities in the start-up phase to solve resource constraints more effectively. Our findings provide both practical implications and theoretical reference for the growth of new ventures in China.

Analysis of Software Development Method Selection: A Case of a Private Financial Institution
Eunike Endariahna Surbakti, Betty Purwandari and Iis Solichah
Universitas Indonesia, Indonesia

Abstract: Software project failures can indicate the need of software development standard procedures within the company. It applies to a private financial institution chosen as a case of this study. The institution has a significant number of software projects completed behind schedule. Consequently, it brings domino effects and make the company financially suffer. To address this problem, a research was conducted to reveal the most suitable software development method for the company. Mixed methods were employed in this investigation. It was started with the Analytic Hierarchy Process (AHP) to rank software development method alternatives based on relevant criteria. The analysis shows that Rapid Application Development (RAD) is the most suitable software development method for the company, whilst Scrum and waterfall are in the second and third position. Then it was followed by interviews with the stakeholders to explore feasibility to apply RAD as the standard.

15:45-16:15 Coffee Break
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Author</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30-13:45</td>
<td>Opening Speech</td>
<td></td>
<td><em>The time slots assigned here are only tentative. Presenters are recommended to stay for the whole session in case of any absence.</em></td>
</tr>
<tr>
<td>13:30-13:45</td>
<td>Reshaping the Banking Sector in Europe</td>
<td>Themistokles Lazarides and Georgia Charitoudi</td>
<td>The European banking sector has been under strategic stress for a long time. The paper seeks to find the path that the banking sector in Europe has taken. Also, the paper tries to identify the causes of this significant changes. 6,683 transactions of merger and acquisitions are analyzed. Six dimensions of the data were used to give answers to six questions. To answer these questions two approaches have been used. The first approach is a simple pivot table analysis and graphs. The second approach is cluster analysis using Stata (kmeans with (Dis)similarity measure mixed and five (5) groups to be identified). The analysis show that there is a dynamic evolvement through the last two-three decades that created a new market structure. This dynamic is both market and politically driven. The stability of this new structure remains as a question due to the fact that the market is till changing. The banking sector is still consolidating with two distinct characteristics. The first one is the increase of the percentage acquired and the second is the fact that although the trend of consolidation is pan-European, in some countries this trend is even stronger. The fragmented banking system is converging (not yet converged) to a new paradigm to form a new market structure. Finally, the market for corporate control in the banking sector in E.U. seems to react to environmental stimuli.</td>
</tr>
<tr>
<td>13:45-14:00</td>
<td>The analysis of influence of the monetary policy carried out by The National Bank of Georgia on the local business entities (based on the cases of development business)</td>
<td>Giorgi Katamadze</td>
<td>The aim of the article is to study the reasons of the business entities crisis caused as a result of the monetary policy carried out by The National Bank of Georgia. The research will be conducted by applying the case-study methodology. The certain cases from the construction/development business segment will be studied. The research outcomes will have both the theoretical and the practical values. The development business entities crisis analysis from the prospective of actors is undoubtedly a new approach in economic researches.</td>
</tr>
<tr>
<td>14:00-14:15</td>
<td>Exchange Rate and Capital Flows of Thailand</td>
<td>Santi Terprasertsakul and Prin Seree-ammoui</td>
<td>The inflows and outflows of capital are important to Thailand’s economy development. Since the</td>
</tr>
</tbody>
</table>

*After the session, there will be a group photo for all presenters in this session.*
Bank of Thailand loosens the foreign exchange regulation in 2012 together with the political instability in 2013, the pattern of capital flows of Thailand has been changed from net capital inflows to net capital outflows. This paper revisits the impact of capital flows on real effective exchange rate of Thai Baht. We empirically investigate the impact of asymmetric capital flows on Thai Baht, using the Nonlinear Autoregressive Distributed Lags (NARDL) model to capture the asymmetry of capital flows. The monthly data of Thailand's net capital flows are investigated during 2005-2018 and decomposed into the period of capital inflows and capital outflows. The empirical evidence confirms that an increase in capital inflows causes Thai Baht to appreciate. Also, the NARDL model has an ability to identify the existence of long-run relationship between capital inflows and real effective exchange rate of Thai Baht. However, the long-run relationship between capital out flows and real effective exchange rate of Thai Baht does not exist. The model confirms the impact of asymmetric capital flows on exchange rate.

New Insights in Explaining the Balance Sheet Growth Phenomenon. Evidence from Europe  
Panagiotis Artikis, Georgios Papanastasopoulos and Lydia Diamantopoulou  
University of Piraeus, Greece

**Abstract:** It is well established that growth in different balance sheet items can be used to predict stocks’ cross-sectional average returns. Early studies in the field (Sloan 1996; Titman et al., 2004; Pontiff & Woodgate 2008) document a negative relation between the balance sheet items expanding activities of the company and the subsequent company’s stock price performance. However, recent studies support the view that the changes in balance sheet size and the anomalous return patterns are related to broader asset expansion and contraction phenomenon, rather than to the growth in a single variable in the balance sheet. The present paper examines the impact of interactions of the asset growth effect and equity financing activities on stock returns, for an integrated European stock market sample consisting of nonfinancial listed firms from 21 countries. We further seek to examine whether the asset growth effect reflects mispricing or it could be attributed to rational risk premia. Our work extends that of Bali et al. (2010) by examining whether equity financing activities can also provide insight about the underlying explanation of the asset growth effect. In order to assess our hypothesis of an interaction between the asset growth effect and equity financing activities, we form bivariate portfolios sorted on total assets’ growth and net equity financing. To ensure the robustness of our results, we conduct our analysis both in portfolio level as well stock individual level and we incorporate Fama-MacBeth (1973) cross-sectional regressions to assess the predictive power of total assets’ growth for future stock returns. Our evidence suggests that: a) net issuance enhances an investment strategy based on the asset growth anomaly, and b) the return difference between low asset growth purchasers and high asset growth issuers is more consistent with a rational-based explanation.

China’s capital account liberalization and asymmetric risk spillovers between Shanghai and Hong Kong stock markets  
Kun Yang  
Southeast University, China

**Abstract:** In this paper, we investigate the asymmetric risk spillovers between Shanghai and Hong Kong stock markets under the background of China’s capital account liberalization by measuring the Conditional Value-at-Risk (CoVaR) based on adjusted realized volatilities and variational mode decomposition based copula model. The empirical results show that, the asymmetric features of risk spillovers between the two markets are significant and manifest different states before and after the Shanghai-Hong Kong Stock...
<table>
<thead>
<tr>
<th>Time</th>
<th>Paper Title</th>
<th>Author(s)</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:45-15:00</td>
<td>Connect and Shenzhen-Hong Kong Stock Connect schemes. More specifically, first, the downside risk spillovers from Hong Kong to Shanghai are significantly larger than its upside risk spillovers, while the risk spillovers from Shanghai to Hong Kong is on the contrary. Second, the short-run risk spillovers are more intense than the long-run risk spillovers, except the risk spillovers from Shanghai to Hong Kong after the Shenzhen-Hong Kong Stock Connect scheme. Finally, by comparing the risk spillovers from two directions, the importance of Shanghai stock market gradually rises up with the implementations of Stock Connect schemes.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 14:45-15:00 | Decision Tree Approach for Predicting the Credit Risk of Leasing Customers in Sri Lanka | Prabath Lakmal Perera  
University of Kelaniya, Sri Lanka | **Abstract:** In this study, we present the decision tree approach to develop a model to measure the predictive accuracy of payment of leasing customers in Sri Lanka. The dataset employed in this study was obtained from one of the leading finance/leasing companies in Sri Lanka. There were 24 variables, used for the variable refining process under the demographic profiles of the customers and loan related data. The variable refining process conducted using the Statistical Package for Social Sciences software. There were nine independent variables and one dependent variable have been selected from the refining process. The data set was divided in to two different datasets, training (60%) and test (40%) data sets. The Waikato Environment for Knowledge Analysis machine learning software was the major software tool used for the entire model construction process. According to the results of the study, we can conclude that, with the classification accuracy of over 92%, kappa statistic with 6%, AUC value of 63%, F-Measure of over 95% and with low error rates, a model constructed using Decision Tree J48 algorithm can be accurately used as a prediction model to predict the credit risk of leasing customers in Sri Lanka. |  |
| 15:00-15:15 | Bonds Pricing with Default Risk in the Fractional Brownian Motion Environment | Lei Zhang, Xiaoxing Liu and Chao Wang  
Southeast University, China | **Abstract:** Assuming that the dynamic of underlying assets is given by a jump-diffusion process in a fractional Brownian motion environment, we derive the bonds pricing with default risk. According to Merton’s method, the expression of bonds pricing with default risk based on a jump-diffusion process in the fractional Brownian motion environment is obtained. Moreover, the numerical experiments are shown to analyze the influence of the Hurst parameter on bonds prices. |  |
| 15:15-15:30 | A New Approach for Mining Information about Business Cycles from Stock Prices Data | Koki Kyo  
Obihiro University of Agriculture and Veterinary Medicine, Japan | **Abstract:** In this paper, we propose a new approach for analyzing business cycles based on stock prices data. We take the Nikkei Stock Average (NSA) as a proxy of stock prices and use the Composite Index in Japan (CIJ) as an indicator for business cycles. We investigate the correlation of the CIJ with respect to a difference between two moving average series of the NSA, and introduce a lag parameter in the CIJ. Thus, we can determine an effective frequency interval for the differenced series by maximizing the correlation coefficient, and we can analyze the lead–lag relation between the NSA and the CIJ based on the estimate of the lag. Moreover, we analyze the dynamic relationship between the differenced series of the NSA with the... |
most effective frequency interval and the CIJ using a regression model that is constructed using a time-varying coefficient. As an empirical example, we analyze the daily time series of the NSA for closing values from January 1, 1991 to September 28, 2018, together with the monthly CIJ data over the same period.

Dose intelligentization in China promote intensive degree of economic growth?

Liang Liu
Southeast University, China

Abstract: With the contributions of traditional production factors weakened, the extensive economic growth mode in China which depend on massive capital accumulation and labor input is unsustainable. Therefore, it is urgent to transform into an intensive economic growth mode driven by total factor productivity. In recent years, artificial intelligence is increasingly applied to the manufacturing transformation and industrial upgrading. Then, dose the widespread application of artificial intelligence technology in China promote its intensive degree of economic growth? This paper analyzes the impacts of artificial intelligence on intensive economic growth by constructing a CES production function which includes artificial intelligence and intensive degree. Furthermore, the differential GMM and system GMM models are utilized to empirically examine the influences of artificial intelligence and its mechanism using China's provincial panel data. The research shows that, first, there is a significant U-shaped relationship between artificial intelligence and intensive economic growth from 2004 to 2015. Meanwhile, the U-shaped relationship remains robust after considering the regional heterogeneity and the endogeneity of econometric model. Second, according to the results of benchmark regression, there are seven provinces of China which have crossed the inflection point, and all these provinces are located in the economically developed eastern China. While the remaining provinces are on the left of the inflection point. Finally, the mechanism analysis manifests that artificial intelligence is beneficial to improve the intensive degree of economic growth by promoting pure technical efficiency change, scale change and technical change. This paper contributes to the previous literature in the three facets, first, a research framework including artificial intelligence and intensive degree are proposed. Next, we construct an evaluation index for the development of artificial intelligence. Finally, the influences of artificial intelligence and its mechanism are examined using China's provincial panel data. This paper confirms the positive impacts of artificial intelligence on intensive economic growth, and provides policy implications for Chinese government to promote the development of artificial intelligence and achieve high-quality economic development.

The Impact of Company Characteristics and IFRS Adoption on Audit Report Delay: Evidence from a Developing Country

Munasing Disanayaka Pubudu Kawshalya and Nishantha Srinath
University of Kelaniya, Sri Lanka

Abstract: The period from a company's fiscal year-end date to the audit report date is defined as the Audit Report Lag (ARL). The shorter the ARL in releasing audited financial statements, the greater the usefulness and benefits that users can derive from these statements. The purpose of this research is to investigate the impact of company characteristics and IFRS adoption on audit delay in Sri Lankan manufacturing companies, listed in Colombo Stock Exchange (CSE). Accordingly, the current study investigated the influence of corporate size, audit firm statues, CEO duality, ownership concentration, ownership dispersion, board size and IFRS adoption on audit report lag. The data for the study collected from annual audited
financial statements of all the listed manufacturing companies of CSE. Data for the period of nine years from 2008/2009 financial year to 2016/2017 financial year are collected. Based on the regression estimate obtained, the study concludes that the audit report delay is significantly influenced by corporate size, audit firm statues, board size and IFRS adoption while CEO duality, ownership concentration, ownership dispersion, and audit complexity have reported an insignificant impact on audit report lag.

| 15:45-16:15 | **Coffee Break** |
Session 3  
Topic: Enterprise Economy and Management  
Time: 16:00-18:45  
Venue: Salle MONCEAU 1  
Session Chair: Assoc. Prof. Kai-Li Wang  
National Taiwan Sport University, Taiwan

*The time slots assigned here are only tentative. Presenters are recommended to stay for the whole session in case of any absence.  
**After the session, there will be a group photo for all presenters in this session.

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
</tr>
</thead>
</table>
| 16:00-16:15| Opening Speech  
National Athletes? Or Social Athletes? : A study on Sports Crowd-Funding by the Public Sector in Taiwan  
Kai-Li Wang  
National Taiwan Sport University, Taiwan  
Abstract: Taiwan government enacted the law to raise the fund for athlete-training from public citizens in 2019. The name of the law is “Implementation Regulations Governing Donations Made by Individuals into Dedicated Accounts for Athletes and Listing of Income Tax Deductions (the “Regulations”), which is authorized by the law of “Sport Industry Development Act”. The author of this study has involved a lot in the process of law-making. Therefore, this study clarified three key disputes: 1. What is the property regarding the sports crowd-funding? Is it an investing? A Debt? Or just a transfer? 2. Does the government play the role of funds-manager or just the role of matchmaker? 3. If the government plays the role of funds-manager, does the donator have the right to “choose his/her own purpose of money-using” ? To answer above dispute questions, the author classified the type of crowd-funding and did some comparative studies to clarify those pros/cons. Then, the suggestions were be made based on the legal interpretation. |
| 16:15-16:30| Expert Leadership Effect on organizational Innovation  
Zicheng Pan, Hongjiang Lv and Yingtang Zhou  
Southeast University, China  
Abstract: Based on the evidence of listed companies in China, measuring expert leadership by the number of executives with technical background experience, we examine the impact of expert leadership on organizational innovation, and the moderating effect of gender diversity of expert leaders. The results show that expert leadership was positively related to organizational innovation behavior, and gender diversity of expert leaders moderates the relationship between expert leadership and organizational innovation. These findings extend our understanding of the relationship between expert leadership and innovative behavior, and guide the practice of gender composition of leaders and innovation management. |
| 16:30-16:45| Firm investment, strategy orientation, firm stability, and ownership structure: the determinants of corporate governance structure  
Niki Lukviarman, Arief Prima Johan and Rebi Fara Handika  
Andalas University, Indonesia  
Abstract: Agency theory and resource dependent theory, amongst the most cited theoretical perspective of corporate governance research, were intended to explain how companies mitigate their agency problems and resources scarcity by governing board structure and composition. However, large number of studies have been using this foundation to simply predict firm performance rather than to identify
determinant of corporate governance structure and composition – the intended purposes of the theories. We posited that such approach is inappropriate, yet commonly used in previous studies. This study attempts to discuss antecedences of board characteristics considering the firm critical contingency and agency problems. Data were gathered from annual report of listed manufacture companies in the Indonesian Stock Exchange (IDX). Results revealed the important role of investment level and firm age as the critical contingency. However, firm strategy orientation is critical to determine board characteristic. The study also suggested that particular ownership structures could influence board composition.

**Current methods for quality control in manufacturing companies in the Czech Republic**

Blanka Bartova, Vladislav Bina and Lucie Vachova
University of Economics in Prague, Czech Republic

**Abstract:** The fourth industrial revolution (Industry 4.0) fundamentally transforms modern production, thanks to new technological achievements including digitalization, robotization, artificial intelligence, etc. With the advent of the Industry 4.0 concept, many new technologies are coming into the field of production. Technologies such as the Internet of Things, autonomous robots, big data, additive manufacturing or QR codes have emerged. These modern technologies can be implemented to different areas of production but we are mainly focused on big data and following data mining application in quality management, especially product quality control. Academic literature is paying increased attention to this topic but the question arises: Are these modern methods also already deployed for quality control in the real manufacturing companies in the Czech Republic? The paper aims to respond to this and several more questions. For the purpose of this research, a structured questionnaire has been distributed to manufacturing companies from various specializations and different sizes in the Czech Republic. In the first part of this study, we made a comparison of current trends in manufacturing (mainly in quality control) according to the critical literature review and findings from the questionnaires describing the real situation of the companies. We investigated that only 7.73% of asked companies use some data mining methods for quality control. On the 5% success rate we say that used methods can probably depend on the company’s location, the Chi-square test proved it by result of 0.9153. Contrariwise we found out that used methods do not depend on company’s size based on results from the Chi-square test value (5.108e-05).

**Workplace Multiple Roles Shape Employee’s Trust Centrality**

Qiuping Zhang, Hongjiang Lv and Yingtang Zhou
Southeast University, China

**Abstract:** Individual multiple roles playing has always been a hot issue in organizational behavior research and being proved to be closely related to individual work performance. Yet, whether employee’s multiple roles playing in a reciprocal team rather than a one-dimensional relationship, contribute to occupy the center of the trust network is an important yet understudied question. From the integrated perspective of role accumulation theory and social network, we conducted an empirical survey on 488 employees from 43 teams and found that employees simultaneously committed multiple roles of formal collaborator and informal advisor (or friend) can separately enhance their cognitive-based trust centrality and affect-based trust centrality. Hence, our study provides an important new perspective on the multiple roles in the workplace and expands previous understanding of the one-dimensional role of workplace friendship and advisory.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:15-17:30</td>
<td>SE3037</td>
<td>Statistical Analysis of Time Series and Investigation of Seasonal Fluctuations on Beer Production</td>
<td>Rita Gevorgyan Armenian State Pedagogical University after Kh. Abovian, Armenia</td>
<td>In the presented paper time series modeling on the basis of collected data is used to study the past observations of a time series. Also on the basis of findings, an appropriate model is developed which describes the inherent structure of the series. Afterwards, this model is used to generate future values for the series to make forecasts. A few of the many applications of statistics for analysis of the time series of production of “Yerevan Beer” CJSC are presented in the context of beer production. Based on the obtained results, the optimized function of the program for the production is proposed, considering the seasonal demand for beer production. It will make possible to predict the further developments of production and enhance the accuracy of the forecasted results for the beer market.</td>
</tr>
<tr>
<td>17:30-17:45</td>
<td>SE2005</td>
<td>Trust Brokerage Drives Manager’s Exploration and Exploitation</td>
<td>Jingjing Ding, Hongjiang Lv and Yingfang Zhou Southeast University, China</td>
<td>Manager’s pursuit of exploration and exploitation has been raising interests recently and constantly being proved to be a critical factor for organization’s success. Yet, insights are absent about whether and how manager’s interpersonal trust relations within their team may enhance manager’s exploration and exploitation. Drawing from the perspective of social network theory, our investigation of 101 managers from 45 organizations empirically proved that managers who bridge trust relations among employees presents more exploration exploitation. With that, our study provides important new insights into the interpersonal trust relations of managers in facilitating their exploration and exploitation.</td>
</tr>
<tr>
<td>17:45-18:00</td>
<td>SE3038</td>
<td>Application of Wavelet Transform Method for Beer Production Forecasting</td>
<td>Rita Gevorgyan Armenian State Pedagogical University after Kh. Abovian, Armenia</td>
<td>By wavelet transform (WT) a time series can be decomposed into a time-dependent sum of frequency components. As a result, we are able to capture seasonality with time-varying period and intensity, which nourishes the belief that incorporation of the wavelet transform into existing forecasting methods can improve their quality. The paper aims to verify this thorough application of the WT to analyze and forecast “Yerevan Beer” CJSC production. In order to implement wavelet-based techniques on the basis of time series, we suggested algorithm. Based on findings we can state that wavelets improve the forecasting quality.</td>
</tr>
<tr>
<td>18:00-18:15</td>
<td>SE3018-A</td>
<td>Gen Y Engagement and Branding: An Integrated SEM-AHP Approach</td>
<td>Binita Tiwari National Institute of Technology (NIT), India</td>
<td>Multigenerational nature of the workforce makes engagement more captivating as each generation has distinctive engagement drivers. However, Gen Y is found to be the least engaged segment of the workforce worldwide. Therefore, the purpose of this paper is to identify the factors which affect the engagement level of Gen Y and to develop a model of employer branding for Gen Y. The paper also prioritizes the identified factors and sub-factors relating to the different aspects of employee engagement</td>
</tr>
</tbody>
</table>
for implementation purpose. SEM was used to develop and define factors of employee engagement for Gen Y using a questionnaire designed to gather data from 220 middle managers working in Indian IT/ITES companies. Thereafter, a fuzzy analytic hierarchy approach was employed to prioritize these factors using a questionnaire to interview 5 experts from industries and academics regarding the different aspects of employee engagement. Results indicate that strategic learning capability (SLC), intrapreneurial orientation (IO), and ambidextrous leadership (AL) have a positive and significant effect on employee engagement. FAHP results illustrate that knowledge interpretation, knowledge implementation, innovation, risk-taking, and opening behaviour of ambidextrous leaders are most important in engaging millennials in IT/ITES sector.

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>18:15-18:30</td>
<td>Does Culture Affect Why We Work: a Comparative Study between Ghana and Turkey</td>
<td>Mehmet Çetin and Harun Adams Babangida</td>
<td>Istanbul Sabahattin Zaim University, Turkey. Abstract: This paper aims to investigate the link between culture and work values. Using questionnaires measuring collectivism and individualism dimensions of culture and work values, study analyzed the effects of culture on work values in Turkish and Ghanaian samples. Results indicated significant links between variables and significant differences between two countries on culture and work values. Results of the Structural Equation Modeling (SEM) demonstrated that individualism scores positively affected normative and self-oriented work values, while collectivism showed a positive effect on normative work values but no significant effect on self-oriented work values. Ghanaian participants were significantly higher on both normative and self-oriented work values. Turkish participants were significantly higher on collectivism.</td>
</tr>
<tr>
<td>18:30-18:45</td>
<td>The Inverted U-Shaped Relationship between Advice Seeking and Innovative Capability: The Moderating Role of Task Complexity</td>
<td>Daojin Wang, Hongjiang Lv and Yingtang Zhou</td>
<td>Southeast University, China. Abstract: This study conducts an empirical analysis aims to analyses how advice seeking influenced innovative capabilities in innovative organizations. In order to solve this question, we analyzed the survey data collected form 82 innovative organizations in China. As anticipated, the results of the analysis showed that advice seeking have an inverted U-shaped relationship with innovative capability; task complexity moderate the inverted U-shaped relationship between advice seeking and innovative capability. Specifically, the curvilinear relationship is more significant when task complexity is high, while the inverted U-shaped relationship becomes weaker when task complexity is low.</td>
</tr>
<tr>
<td>19:00-21:00</td>
<td></td>
<td></td>
<td>Dinner</td>
</tr>
<tr>
<td>Time</td>
<td>Session Title</td>
<td>Presenters</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>---------------</td>
<td>------------</td>
<td></td>
</tr>
</tbody>
</table>
| 16:15-16:45 | Forecasting Customer Purchase with Maximization of Prediction Probability | Noriyuki Suyama  
Bunka Gakuen University, Japan |
| 16:45-17:00 | A Review of Social Media Posts for Sentiment Analysis and Topic Modeling: Perspective of Czech-Slovak Unicredit Bank | Abdul Bashiru Jibril, Raphael Kwaku Botchway, Michael Adu Kwarteng, Miloslava Chovancova, Zuzana Kominková Oplatková  
Tomas Bata University, Czech Republic |

**Forecasting Customer Purchase with Maximization of Prediction Probability**

Noriyuki Suyama  
Bunka Gakuen University, Japan

**Abstract:** Customer base analysis that is crucial for CRM in retailing is concerned with distinguishing active customers from defected ones, and predicting their future level of transactions, considering their past purchase behavior. However, there are not enough empirical applications reported in the literature to prove the applicability and validity of these models in different purchasing settings. In this paper, several methodologies of customer retention analysis are described, exploring which model or with which variable contributes to a higher performance with analyzing POS data. Since the Abe [2004] model was described in the paper that the model could estimate each parameter more efficiently and simply than other models, adopted models for highest prediction rates are Abe [2004] and an artificial neural network models with data [2005] to investigate the prediction accuracy of each models. With different independent variables, an artificial neural network and a logistic regression model are adopted for estimating prediction efficiency. The odds ratio of logistic regression model is used to check the impact of each independent variable on the dependent variable.

**A Review of Social Media Posts for Sentiment Analysis and Topic Modeling: Perspective of Czech-Slovak Unicredit Bank**

Abdul Bashiru Jibril, Raphael Kwaku Botchway, Michael Adu Kwarteng, Miloslava Chovancova, Zuzana Kominková Oplatková  
Tomas Bata University, Czech Republic

**Abstract:** In recent times, the increasing popularity of social media websites has provided a major source of data for mining public opinion on a variety of subjects. The opinions expressed on social media enables firms to discover individual perceived strengths and weaknesses regarding their operations as well as the products/services they offer. Twitter is one platform that gives us the opportunity to evaluate the opinions expressed by users as well as identify various topics contained in tweets. In this study, a dataset of tweets is downloaded from the official twitter account associated with Unicredit bank’s main public relations outfit using the Twitter API. Text mining techniques such as sentiment analysis and topic modeling are then used to analyze the tweets. Valence Aware Dictionary and sEntiment Reasoner (VADER), a lexicon and rule-based sentiment analysis tool that is specifically attuned to sentiments expressed on social media (e.g. Twitter), was used in conducting sentiment analysis on the tweets to examine the attitudes and feelings expressed. To infer the various topics discussed in the tweets, the Latent Dirichlet Allocation was applied for topic modeling. After applying VADER to conduct sentiment analysis of the tweets, it was
observed that the overall discussion was positive especially considering tweets describing UniCredit’s strong belief in diversity and inclusion at the workplace, financial support for small and medium scale enterprises, business innovation and research. The topic model revealed topics related to UniCredit’s interventions for businesses and research. Our approach will enable the bank to gain insights and feedback on how to shape their online products and address customer and stakeholder expectations. In theory, the study adds up to broaden the scope of online banking given the interplay of consumer sentiments via the social media channel.

Understanding Consumer decision-making in selecting Hotel Online: Impact of 360-degree virtual content
Pankaj Vishwakarma and Srabanti Mukherjee
Indian Institute of Technology, India

Abstract: Due to the enormous growth in the Information and Communication Technologies (ICT) infrastructure, the smartphones and the internet data packs have become very cheap and highly affordable in India. India has become the second largest smartphone users in the world. Now marketers and businesses have started making their digital presence across all platforms, especially mobile platforms, due to more smartphone users compared to laptop/PC users. The consumers are looking for information before booking a hotel. They fetch this information possibly from social media platforms, customer online reviews and images/videos of the hotel (e.g., room, reception, bathroom), etc. Nowadays, the most influencing form of information is rich media content. This research addresses the impact of 360-degree virtual content of the hotel in consumer decision making of a particular hotel. Since 360-degree virtual contents are technological innovation, we have utilized the well-known Technology Acceptance Model (TAM) as the base model to understand consumers’ behavior. As per TAM, perceived ease of use and perceived usefulness of 360-degree content will determine the intention to choose. Additionally, this study also incorporated the element of perceived enjoyment and perceived immersion in experiencing 360-degree content. The result of the study will provide marketers an opportunity to attract more customers by integrating 360-degree content on their booking platforms. Since 360-degree contents are more vibrant in information, so a smaller number of images are required, which could reduce the online storage. The hotel service providers in India, including Online travel agencies (OTAs) have not adopted 360-degree content on their platforms. This study results also explore the opportunity for hotel service providers and OTAs to attract customers by the inclusion of 360-degree content.

Community-based Businesses Cooperate with Agriculture and Commerce via Online Ordering
Chika Yoshida
Bunkyo University, Japan

Abstract: Even with technology's rapid development, food purchasing opportunities are still limited to nearby supermarkets and the like, especially for elderly people. Therefore, production farmers in Kobe City considered constructing a new sales channel for agricultural products by cooperating with a community-based appliance store and online corporation sales. During the research stage, a prototype was completed, but this paper discusses whether differentiating it from existing services, such as supermarket delivery, is possible. This paper also reports on the results of an analysis on “meals,” in which the electric appliance shop surveyed customers and considered the possibility of new sales channel development for community business innovation.
<table>
<thead>
<tr>
<th>Time</th>
<th>SE0006-A</th>
<th>Title</th>
<th>Authors</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>17:30-17:45</td>
<td></td>
<td>Import Technology Spillover, Industrial Correlation and its Influence on Productivity: An Analysis Based on Structural Decomposition</td>
<td>Zhao Di and Chen Jian, Southeast University, China</td>
<td>With rapid progress of servitization in manufacture and deep opening-up of more sectors in China, re-exam technology spillover within import and its influence on productivity becomes an important aspect for China’s high quality growth. In consideration of R&amp;D heterogeneity and expanded industrial correlation between manufacture and service sectors, this paper firstly focuses on decomposition characteristics of import technology spillover and constructs improved measurements of them. Based on OECD-STAN and UNcomtrade database, following empirical research mainly confirmed a positive influence of import technology spillover, which is especially enhanced in consideration of industrial correlation. Compared with intra-industrial technology spillover, findings showed that inter-industrial technology spillover played a more prominent role, typically the kind through reverse-requirement correlation and forward-input correlation between manufacture and service sectors.</td>
</tr>
<tr>
<td>17:45-18:00</td>
<td>SE3036</td>
<td>Assessing pre-purchase risk attributes towards used-products: Evidence from e-Shoppers in the Czech Republic</td>
<td>Michael Adu Kwarteng, Abdul Bashiru Jibril, Raphael Kwaku Botchway, Owusu Victor Kwarteng, Michal Pilik and Miloslava Chovancova, Tomas Bata University, Czech Republic</td>
<td>Recent years have witnessed a marked increase in research focusing on risk in online transactions. Partly, these research efforts have been situated within the context of risk in online transactions in general with scant evidence considering the risk in the online used goods market in the Czech Republic. Less is also known about the level of risk associated with the customer to embark on online transactions of second-hand goods. Against this background, this paper is aimed at eliciting the magnitude of risky components aligned with the tendency to connect via online in search of second-hand goods. To achieve this, the research proposes a Non-Hierarchical (K-means) algorithm to glean relevant patterns in the data accrued from the Czech Republic. Hence, a simple random technique geared towards demographic variables was adopted to gather data; with 329 out of 411 respondents eligible for our analysis. Consequently, the research revealed through the K-means clustering algorithm that, consumers or respondents in these regions, namely, Pardubicky, Vysochina, and Kralovehradecky regions in the Czech Republic are more circumspect concerning the zeal to connect via online specifically second-hand goods. The findings from this shed light on a significantly ignored research area for researchers and provide a managerial strategy for online used goods vendors.</td>
</tr>
<tr>
<td>18:00-18:15</td>
<td>SE0004-A</td>
<td>Impacts of High-Speed Railway on the Emission of Industrial Pollution in China</td>
<td>Xiaomin Fan and Yingzhi Xu, Southeast University, China</td>
<td>Previous studies have paid more attention to the evaluation of economic effects of high-speed railway (HSR), but neglected its possible environmental effects. This paper aims to investigate the impacts of HSR on industrial pollution emission measured by industrial SO2 emission, using the multi-period difference-in-difference (DID) model, and the data for 285 cities in China during 2004-2016. The results</td>
</tr>
</tbody>
</table>
show that the opening of HSR has significantly reduced industrial SO2 emission, and several robustness
tests support the conclusion. Heterogeneous tests suggest that the impact is larger in central cities.
Mechanism analysis shows that the reduction in emissions due to HSR opening is driven by optimising the
industrial structure through increasing productive service resources and reducing the manufacturing
resources of central cities, especially for cities within 5 km of their nearest HSR station, and by reducing
the manufacturing resources of peripheral cities far from the market, especially for cities 120 km away from
their nearest HSR station. However, for peripheral cities within 15 km of their nearest HSR station, the
impact of HSR opening on industrial SO2 emissions is significantly positive due to undertaking the transfer
of inefficient production resources.

Service Marketing Mix and Service Value: A Way to Increase Customer Satisfaction

Kittisak Jermsittiparsert
Chulalongkorn University, Thailand

Abstract: The contribution of service sector becomes most significant worldwide to human life and made
the major contribution to economic practices. However, Thailand courier service companies are facing
different challenges to provide various services. Issues in services lead to dissatisfaction of customers
which effect negatively on the company performance. Therefore, aim of this study is to develop a service
marketing mix framework to boost service value and customer satisfaction (CS). This study considered
four important elements of service marketing mix which include; service place, service promotion, service
product and service pricing. For this purpose, data were collected from courier services companies of
Thailand with the help of survey questionnaire. Collected data were analysed with the help of statistical
tool, Partial Least Square (PLS). Results revealed that service marketing mix has important contribution to
service value and CS. Service place, service promotion, service product, service pricing and service value
are the key elements to enhance CS.

Virtual Customer Service: Building your Chatbot

David Nunes Sousa, Miguel Abrunhosa Brito and Carlos Argainha
University of Minho, Portugal

Abstract: Nowadays, there is a significant evolution in the simulation of conversations with humans
through chats. These chatbots provide an improvement in organizational efficiency and enhance the
performance in supporting customers and partners. That is why they are increasingly a trend on the web.
There are several solutions to conversational virtual agents and chatbots at this time. Many of these
solutions have built-in artificial intelligence, natural language processing, and understanding systems. This
research aims to build a roadmap for those who want to develop a virtual assistant using a framework or a
pre-built solution. This work compares the several products related to chatbots providing information that
helps one to find the best solution for each case.

19:00-21:00  Dinner
## Poster Presentations

| SE1013 | Exploration and Research on the Construction and Implementation of Financial Sharing Center  
Li-Hua XIA  
Taizhou University, China  
**Abstract:** Financial sharing service is not only a technological revolution, but also a technological change of traditional accounting and financial management mode brought by "Internet +". Taking the financial sharing model as the research object, this paper expounds the goal and effect of establishing financial sharing center. It also summarizes the principles and concrete implementation steps of applying financial sharing model. In order to provide experience reference for enterprises which are building or preparing to build financial sharing service center, and explore the path for the future practice development of Financial Sharing service. |
| SE2043 | Using the Servqual Model to Assess Service Quality and Students’ Satisfaction (An Empirical Study of the Online Registration System at the University of Tripoli)  
Tareq Almigheerbi, David Ramsey and Anna Lamek  
University of Tripoli, Libya  
**Abstract:** This paper comes as a part of an exploratory study with a goal to investigate the applicability of Collaboratively-Developed, Enterprise Resource Planning [ERP] (a CD-ERP Approach) within Libyan public universities. The purpose of the research presented was to evaluate the new online system launched recently at the University of Tripoli (UOT) in order to investigate 1) what students expect from such a service, 2) whether or not they are satisfied with the service offered, 3) how important security issues are to the users. To answer these questions, quantitative data was collected using questionnaires based on the instruments of the SERVQUAL model via online questionnaires. Based on our results, students’ expectations were higher than their perceptions of the quality of the services (QoS). The results indicate that students are obviously unsatisfied with the services provided by UOT’s new online system. We conclude that the new online system should be frequently evaluated, and then improved. In addition, security should be considered in the evaluation of an online system. |
| SE2021 | Research on Evaluation Index System of Project Cost Control Effect in Construction Enterprises  
TAN Zhenmei, JIANG Dawei and LI Bei  
Shan dong Women’s University, China  
**Abstract:** With the intensification of competition among construction enterprises, more and more construction companies have paid attention to and adopted different cost control measures, but the effect of cost control is lacking. At present, enterprises lack evaluation index system that can be used or can be referenced. Combining with the theory of value chain, this paper first analyzes the value chain of construction enterprises, and then designs a set of project cost control evaluation index system, which includes 6 first-level indicators and 21 second-level indicators. It includes not only indicators that are easy to quantify, but also indicators that are not easily quantifiable. The analytic hierarchy process is used to weight the indicators, and the fuzzy comprehensive evaluation method is used for evaluation. This method is suitable for the construction enterprise to evaluate the project cost control effect. |
<table>
<thead>
<tr>
<th>Session Code</th>
<th>Title</th>
<th>Authors</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE2004</td>
<td>Research on Innovation of Cross-Border e-Commerce Business Model Based on Big Data</td>
<td>Dekassan Alberic Minno, YEZHENG LIU, Vuyolwethu Vellerm and Dibonji Ndjansse Stephane Rodrigue, Hefei University of Technology, China</td>
<td>With the rapid development of the economy and the continuous deepening of the application of Internet technology, today's social economy has gradually entered the era of big data, which provides a good social environment for the development of e-commerce. This paper first introduces the background and significance of big data, and analyzes the connotation and advantages of e-commerce in the era of big data. On the basis of analyzing the development status of e-commerce industry under the background of big data, it summarizes the opportunities and challenges faced by e-commerce enterprises in the context of big data, and discusses the e-commerce service model under the era of big data. The main purpose of this research is to contribute to the improvement of e-commerce service level in the era of big data and promote the rapid development of e-commerce.</td>
</tr>
<tr>
<td>SE3003</td>
<td>Marketing Mix of Non-Profit Organizations (NPO) Affecting the Willingness-To-Donate (WTD) In Malaysia</td>
<td>Chong Li Hung, May Myo Set Htwe and Quah Kheng Siong, UCSI University, Malaysia</td>
<td>Marketing mix has been used by profit organizations in planning in order to develop effective marketing strategies to achieve organizational goals. Due to different organizational nature, non-profit organizations find marketing mix in commercial setting less applicable in non-profit context. Therefore, this study aimed to contribute to the existing body of marketing mix in the perspectives of non-profit organization by determining the relationship of the factors in marketing mix, which are purpose, presence, proximity and partnership and willingness-to-donate towards non-profit organization. For research methodologies, Pearson's Correlation Coefficient was used with Statistical Package for Social Science (SPSS) software to determine the relationship between marketing mix and willingness-to-donate. Questionnaires were distributed around high traffic shopping malls in Kuala Lumpur and 109 responses were collected. The marketing mix in this study is found to have significant relationship with the willingness-to-donate. This paper allows the non-profit organizations to understand the influential marketing factors upon willingness-to-donate which can be included in marketing related planning for effective fundraising strategies.</td>
</tr>
<tr>
<td>SE3001</td>
<td>Purchase Intention Towards Islamic Branding</td>
<td>Shujaat Pasha, Siti Norida Wahab and Dazmin Daud, UCSI University, Malaysia</td>
<td>Purchasing and consuming halal products have been a huge concern among many Muslims especially in countries where Islam populations is the minority. With the rising concern of consumers, this study intended to investigate the factors behind the consumers’ intentions towards buying Islamic brands particularly in the food industry. The data was collected through survey strategy from 200 respondents, out of which only 192 were usable for data analysis. These respondents were based in Karachi, a city of Pakistan. The data was analysed further through SPSS software for correlation and regression analysis. All the factors had a positive relationship towards purchase intention with r=0.63, r= 0.60, r=0.63, r=0.50 and r=0.49 for halal awareness, religious belief, attitude, subjective norms and halal certification respectively. Most of the variables including halal awareness, religious belief, and attitude were found to be</td>
</tr>
</tbody>
</table>
significant whereas the variables subjective norms and halal certification were insignificant based on the probability value that was lesser than the threshold. Since this was a survey based investigation, this study provides knowledge for business managers who are working under the slogan of halal food, as it may help them to understand that the consumers are not much pressurized to consume halal food based on the social pressure or number of halal certifications but it is the halal awareness, religious belief, and attitude that is important that can be useful to attract the consumers.

The empirical analysis of convenience store sales forecast based on multidimensional data in emerging markets
Na Li, Ying Cai and De Bi
Tsinghua University, China

**Abstract:** The analysis of the relationship between historical operation data and future sales data is helpful for enterprises to develop sales strategies. In order to make full use of the historical sales data of retail stores to forecast the future sales. In this paper, ARIMA model is used to analyze and forecast the sales volume, traffic volume and unit price data of three some brand convenience stores in Inner Mongolia, and combined with geographical location. The results show that the model can predict the sales of convenience stores.

The Impact of Purchase Decision of Female Clothing towards Generation Y on Facebook and Instagram
Ong Zong Jing, Meta Koosneila Suryandari and Ganesh Ramasamy
UCSI University, Malaysia

**Abstract:** This research study is to determine the factors that the effect of generation Y females to purchase female clothing on Facebook and Instagram. The three factors or independent variables studied are brand awareness, electronic word of mouth and perceived product quality whereas the dependent variable is purchase decision, particularly in female clothing towards generation Y women on Facebook and Instagram. The research is conducted among generation Y female in Kuala Lumpur and 384 responses are collected to perform data analysis. The questionnaire used consisted of question to test the degree of satisfaction thus the usage of 5-point Likert scale which is Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), and Strongly Agree (5). To analysis the result, the analysis is done using IBM SPSS Version 24 by the means of Correlation-Coefficient analysis and Multiple Regression analysis. The analysis on the relationship between the independent variables, showed that brand awareness, electronic word of mouth, and perceived product quality with purchase decision as the dependent variable, has shown that all the independent variable do affect the purchase decision of female clothing towards generation Y on Facebook and Instagram around Kuala Lumpur.”

Evaluating University Logistics Talent Cultivation Curriculum Base on MEDM Methods
Shih-Hsiung Cheng and Su Mei Lin
China University of Technology, Taiwan

**Abstract:** According to statistics by the International Trade Bureau of Taiwan’s Ministry of Economy, Taiwan's total trade value in 105 years was US $510.8 billion, and in 107 years it reached US $620.12 billion [1]. As the amount of trade has increased year by year, logistics-related talents are especially important to meet the market demand. Universities have also set up related departments to meet the demand for talents. At present, there are 140 universities in Taiwan, 36 of which have established
logistics-related departments to meet the demand for talents [2]. According to the statistics of the National Development Committee for 104 years, there are currently 437,000 people engaged in logistics-related industries in Taiwan [3], while the number of graduates from logistics-related departments in 107 is about 3700. However, there are still 7661 vacancies in 104 human resources banks. In order to explore the reasons and differences, this study according to Poist, R. F., 1984[4], Murphy, P. R., Poist, R. F., 1991a,b[5,6], Gibson, B., Marcia Gibson and Steve Rutner., 1998[7], Presutti, William D., 1999[8], Closs, David J., 2000[9] Consolidated which includes four major aspects and 16 criteria. For graduates who have more than four years of work experience in logistics-related industries and teachers who are currently teaching logistics-related courses and have more than five years of experience, the decision making trial and evaluation laboratory (Dematel) is used to find out the correlation between the four dimensions and the importance of the 16 criteria of the four dimensions is calculated by combining with DANP(DEMATEL-Based ANP).

**SE3041**

The Study of Style Rotation in Chinese Stock Market
Yajie XU
Hubei University, China

**Abstract:** Any academic studies on stock markets provide evidence of style rotation and methods of style investing. However, most of the researches are based on U.S. domestic equity mutual funds. In this paper, we present that the existence of this phenomenon in Chinese stock markets and propose a new index, named Stock Market Characteristics Index (SMCI) to investigate style rotation, which is also the fundamental of style investing strategies. For a large sample of data, our backtesting results suggest that, compared to the benchmark, these strategies can achieve superior performance, which are still robust when investing in different stock indexes between the two equity segments. Hence, it is important for delegated portfolio management to consider style rotation when investing in Chinese stock market.

**SE3039**

Research on the Courses of Competence Cultivation of Basic Logistics Management Talents
Su Mei Lin and Shih-Hsiung Cheng
China University of Technology, Taiwan

**Abstract:** The purpose of this study is to explore the courses of competence cultivation of basic logistics management talents, and to analyze the importance of competence cultivation of basic logistics management talents. First of all, the Fuzzy Delphi Method is adopted to screen out the key dimensions and criteria for the courses of competence cultivation of basic logistics management talents. Second, a quantitative method is used to further investigate the opinions of experts in the industry, officials and scholars, and the Fuzzy method is used to resolve the ambiguity between dimensions and criteria. Then, the DANP method is adopted to clarify the causal relationship of key factors. In this study, the dimensions and criteria for the courses of competence cultivation of basic logistics management talents are screened and identified by means of literature and expert questionnaire, and then the DEMATEL method is used to explore the correlation between the dimensions and their related criteria. Finally, the weights of key dimensions and criteria are calculated by means of the DANP method, so as to provide some references for the logistics-related disciplines to arrange and design the courses of competence cultivation of basic logistics management talents.
Mobile Cloud-Based e-Payment Systems in Saudi Arabia: a Case Study
Marwah Almasri and Hazzaa Alshareef
Saudi Electronic University, Saudi Arabia

Abstract: The rapid revolution of e-commerce has attracted most researchers' attention due to its encountered benefits and conveniences. Numerous e-payment systems have been proposed and applied to cope with current technological development. Mobile payment (also called m-payment) has become one of the most significant e-payment systems available worldwide. m-payment platforms have been widely used owing to their ease of use, high accessibility, and lower transaction costs. However, utilizing mobile devices for m-payment systems has its limitations. In order to overcome these limitations, mobile cloud computing can be an optimal solution to achieve reliability and availability. This paper will highlight the state-of-the-art of m-payment systems and discuss the technological tools involved. It will also identify the research questions based on the purpose of the research. In addition, it will explore various factors affecting m-payment platforms, such as scalability, reliability, usability, and trust. A case study of m-payment in Saudi Arabia was conducted to measure the identified factors. Based on the findings, this paper summarizes the challenges of m-payment systems. Finally, a detailed design of our proposed framework is represented, which reflects the objective of this paper. The aim of this paper is to investigate the ability of introducing the mobile cloud concept into m-payment systems to overcome notable shortcomings that hinder its spreading.
# Listeners’ List

<table>
<thead>
<tr>
<th>Listener</th>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listener 1</td>
<td>Johnson Joseph Olumuyiwa</td>
<td>Malaysia University of Science and Technology, Malaysia</td>
</tr>
<tr>
<td>Listener 2</td>
<td>Vrishali Jadhav</td>
<td>Rakuten Inc., Japan</td>
</tr>
<tr>
<td>Listener 3</td>
<td>Atsuo Amano</td>
<td>INTL UNIV. OF OKINAWA, JAPAN</td>
</tr>
<tr>
<td>Listener 4</td>
<td>Ali Fahad Binjulayyil</td>
<td>The Saudi Fund for Development, Saudi Arabia</td>
</tr>
</tbody>
</table>
Upcoming Conferences

2019 The 3rd International Conference on Software and e-Business (ICSEB 2019) will be held in Waseda University (Nishi-Waseda campus), Tokyo, Japan during December 09-11, 2019. ICSEB 2019 is sponsored by Faculty of Science and Engineering, Waseda University. The event falls within the scope of the continuation of initiatives carried out by the IEDRC, its support for research and its efforts to facilitate networking opportunities among software and e-business researchers.

Publication

The accepted papers by ICSEB 2019 published in conference proceeding by ACM, which will be archived in the ACM Digital Library, and sent to be indexed by EI Compendex and Scopus and submitted to be reviewed by Thomson Reuters Conference Proceedings Citation Index (ISI Web of Science). ISBN: 978-1-4503-7649-5

Topics

Topics of interest for submission include, but are not limited to:

Methods and Techniques for Software Development
Software Maintenance
Requirements Engineering
Software Project Management
Software Evaluation

Online credit and reputation evaluation
Electronic contract
Electronic invoice
Ecommerce laws and standards
Blockchain Security models

Submission Methods

1. Email: icseb@iedrc.net

Important Dates

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submission Deadline</td>
<td>October 10, 2019</td>
</tr>
<tr>
<td>Notification Deadline</td>
<td>October 30, 2019</td>
</tr>
<tr>
<td>Registration Deadline</td>
<td>November 25, 2019</td>
</tr>
<tr>
<td>Conference Dates</td>
<td>December 09-11, 2019</td>
</tr>
</tbody>
</table>

www.icseb.org
2020 the 11th International Conference on E-Education, E-Business, E-Management, and E-Learning (IC4E 2020) in Ritsumeikan University, Osaka, Japan from January 10 to 12, 2020. It is conferences like this which brings us closer as researchers and friends worldwide. My hope for this conference is, regardless of our differences, that we can learn from each other and build a more globalized scholastic platform. As researchers we should find the links between different disciplines and backgrounds. With passion and collaboration, we can reach a broader realm of understanding and benefit our societies from more holistic research results.

Publication

The accepted papers by IC4E 2020 published in conference proceeding by ACM, which will be archived in the ACM Digital Library, and sent to be indexed by EI Compendex and Scopus and submitted to be reviewed by Thomson Reuters Conference Proceedings Citation Index (ISI Web of Science).

Topics

Topics of interest for submission include, but are not limited to:

| Systems, Design and Technologies | E-government, policy and law |
| Practices and cases in e-education | e-Learning platforms |
| Systems and technologies in e-education | portals and Virtual learning |
| Applications and integration of e-education | environments |
| e-learning evaluation and content | Course design |
| Business-to-business e-commerce | Innovative business models |
| Business-to-consumer e-commerce | Enterprise application integration |

Submission Methods

3. Email: ic4e@iedrc.org


Important Dates

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Submission Deadline</td>
<td>October 10, 2019</td>
</tr>
<tr>
<td>Notification Deadline</td>
<td>November 05, 2019</td>
</tr>
<tr>
<td>Registration Deadline</td>
<td>November 25, 2019</td>
</tr>
<tr>
<td>Conference Dates</td>
<td>January 10-12, 2020</td>
</tr>
</tbody>
</table>

www.ic4e.net

ICEBA 2020 aims at bringing together researchers and practitioners who are interested in e-Business technology and its current applications. The scope of the conference covers low-level technological issues, such as technology platforms, internet of things and web services, but also higher-level issues, such as business processes, business intelligence, value setting and business strategy.

Publication

The accepted paper will be published into ICEBA 2020 Conference Proceedings, which will be published in the International Conference Proceedings Series and archived in the Online Digital Library. The paper will be indexed by EI Compendex and Scopus.

Topics

Topics of interest for submission include, but are not limited to:

- Interoperability and Integration
- Agent-oriented Information Systems
- Multi-agent Systems and Information Integration
- Open Source Technologies in e-Business
- VPN Technology and Services
- Model Driven Development
- Green Computing for e-Commerce
- Internationalization and Social, Ethical and Cultural Factors
- Internet of Things and Sensing Enterprise
- Business Intelligence
- Innovation/Migration/Change Management
- XML and Domain Mark-up Languages

Submission Methods

5. Email: iceba@academic.net

Important Dates

<table>
<thead>
<tr>
<th>Important Dates</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submission Deadline</td>
<td>October 25, 2019</td>
</tr>
<tr>
<td>Notification Deadline</td>
<td>November 20, 2019</td>
</tr>
<tr>
<td>Registration Deadline</td>
<td>December 05, 2019</td>
</tr>
<tr>
<td>Conference Dates</td>
<td>February 25-27, 2020</td>
</tr>
</tbody>
</table>

www.iceba.org